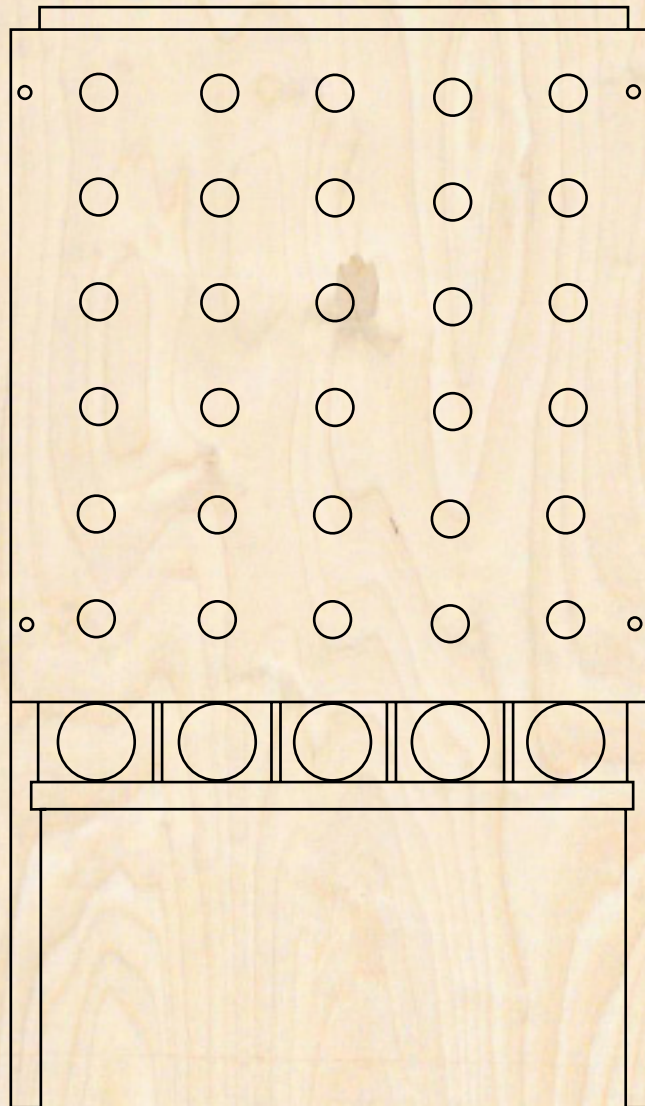


# CANS

*- A circular prepping system for single households.*



Degree Project for Bachelor of Fine Arts in Design

Main field of study: Industrial Design

**BY SARA EGGIMANN**



**LUNDS**  
UNIVERSITET

# CANS

When it comes to crisis management, there are many guidelines. Were you as an individual receive calls from the authorities to and make a plan for how you will be able to support yourself with food and water if the systems we rely on suddenly do not work. But this is easier said than done. When it comes to crisis management, there is a kind of responsibility, for me as a designer, to ethically create the conditions for as many people as possible to survive a sudden disaster.



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Degree Project for Bachelor of Fine Arts in Design

Main field of study: Industrial Design

By Sara Eggimann

From Lund University School of Industrial Design,

Department of Design Sciences

Project Supervisor: Senior Lecturer Charlotte Sjödell

Examiner: Professor Claus-Christian Eckhardt

Course Supervisors: Professor Claus-Christian Eckhardt,

Senior Lecturer Charlotte Sjödell, Lecturer Anna Persson,

Senior Lecturer Jasjit Singh

ISRN: LUT-DVIDE/EX--23/50640-SE

2023

# ABSTRACT:

This design project proposes an innovative solution aimed at facilitating organized and democratic preparation for future crises, specifically targeting students and individuals residing in confined living spaces. The proposed solution consists of two stackable storage units designed to address this challenge. The first unit, referred to as the “can storage,” is capable of accommodating up to 35 cans, thereby ensuring self-sufficiency in the event of sudden disruptions to food supply chains. The second storage unit, named the “other things storage,” incorporates a versatile peg board and shelving system, allowing for customization based on individual needs.

Together, these storage units offer a storage solution suitable for individuals with irregular food consumption habits and limited storage capacities. The collaborative effort between the design project and the food brand Eldorado has resulted in the selection of specific food items for storage, namely canned tomatoes, cherry tomatoes, chickpeas, red beans, and white beans in tomato sauce. The partnership with Eldorado is attributed to their provision of affordable and high-quality staple foods. Notably, the cost of filling the storage units amounts to a mere 350 Swedish Krona, enhancing the democratic nature of the prepping furniture by making it accessible to a wide range of individuals.

By providing an efficient and customizable storage solution, this design project seeks to empower individuals living in small spaces to prepare for future crises in an organized and unconscious manner.

**Keywords: Crisis preparedness, organization, multifunctional, communicating, re-arrangeable, prepping, circular, cans.**



# ACKNOWLEDGEMENTS:

## **Special thanks to:**

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Elias Mellander

Simon Graner

Emma Töpel Hanson

Redgert Comms

Eskil Sverresson.





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# **PERSONAL MOTIVATION**



**WHY IS THIS IMPORTANT/  
INTERESTING FOR ME?**

The majority of individuals lead their lives without significant consideration for potential future crises. They engage in daily activities such as work, watching television, and meeting financial obligations. In the event of hunger, they typically resort to visiting their nearest grocery store and purchasing food items based on their immediate needs. The lack of a substantial food storage reserve can be attributed to the ease of accessibility to food at any given time, almost rendering the food supply in Sweden excessively accessible. Consequently, citizens may not perceive the need for advanced planning of their food purchases.



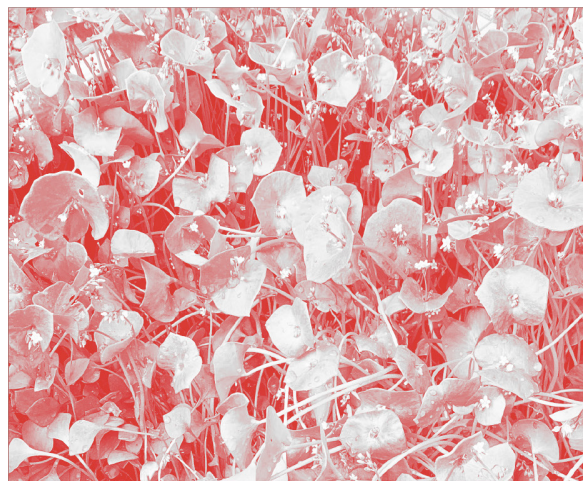
A different lifestyle in relationship to my Swiss Grandfather Jörg Eggimann. When growing up, he only ate what they grew, and bunkered homemade preserves from the food they grew or raised on the farm. In his world, it was obvious that you always had some extra food at home. Both for flexibility but also to be able to feel independent.





Ever since I was young, my mother Louise Eggimann, has instilled in me the significance of food preparation and taught me valuable skills such as canning and meal planning.

Cultivating vegetables has been an integral part of my upbringing, and it was customary for us to consume only homemade jam that we had grown, harvested, and made ourselves.



At the onset of the Covid-19 pandemic, I contemplated the prospect of a potential societal collapse and explored ways to apply the mindset of my inspirational grandfather Jörg to industrial design.

Following extensive research into prepper communities and the work of the Swedish Civil Contingencies Agency (MSB), I designed a piece of furniture to store enough food to sustain me for one week in my home.

However, upon completion of the project, I realized that it lacked circularity, and the food storage solution was of little purpose, ultimately wasting resources. Furthermore, it did not alter individuals' consumption behavior concerning food; rather, it merely served as a means to purchase one's way out of the problem without taking responsibility.



# INTRODUCTION

# WHAT IS CRISIS PREPAREDNESS?

# PURPOSE

The purpose of this study is to address the issue of unpreparedness for societal crises prevalent in modern society. The project strives to create a circular system similar to the practices of my grandfather during his upbringing but in a contemporary and democratic manner. The objective is to encourage individuals to take responsibility for adhering to the guidelines stipulated by the Swedish Civil Contingencies Agency (MSB). If the authorities deem the issue significant, it begs the question of why more designers have not proffered solutions that promote social responsibility.

# QUESTIONS:

How can I make people have the same prepper and food preparedness as our older generations had without being able to grow their food?

How can I make people living in cities to have home preparedness and start to think about their consumer habits?



# BACKGROUND:

The year 2018 published The Swedish Civil Contingencies Agency: MSB a brochure named If the war comes. In the brochure, the agency urges every Swedish citizen to have crisis preparedness and published a list of food that you at all times should have at home.

The problems with these guidelines are that they are too abstract and that they make it hard to create your own crisis preparedness food box. The guidelines also suggest that the containing food in your crisis preparedness box should be stored in a box and for example be placed under your bed. Until the crisis comes.

The system of this non-circular prepper food is not the most sustainable alternative, where the food needs to be thrown out or discarded every two years





In an interview with Elias Mellander, Researcher at The Swedish Civil Contingencies Agency: MSB his advice was to:

***“Prepp what you eat,  
eat what you prepp”.***

His vision regarding crisis management food was, in contrast to the agencies, to have a circular system of food that you always have at home, instead of a dusty crisis box under your bed.



### **History of food prepping:**

According to the article *History of the Prepper Movement: From Paranoid Radicals to Mainstream* written in the History Cooperative, you will be quickly reminded that preparedness used to be a normal activity. They will remind you of your older generations' canned vegetables and self-build can storage solutions.

But in relation to your lifestyle, the article discusses that preparedness was a bigger part of their daily life.

In today's societies, with conveniences such as supermarkets, preparation was not as needed as before. Society did not, as before, need to be prepared. History cooperative describes this scenario as "*The society needed to be unprepared for a preparedness movement to take place*".

### **Recent society crisis:**

In the article *Doomsday preppers and the architecture of dread* written by Bradley Garrett he describes that the recent Covid-19 pandemic in 2020 shows that the prepper's motives and methods should be seen, on an academic level, as something that should be more noticed. He further describes that their methods should be seen as more timely and valuable.



### **The internet community:**

Forums like *The survival moms* with the purpose of "*prepp more and worry less*" has also started to appear after the Covid-19 pandemic. More and more Youtube accounts have also started to focus on

*"How to build your own prepper pantry"*.

# **BRIEF AND METHOD**

# METHOD PLAN

# **BRIEF:**

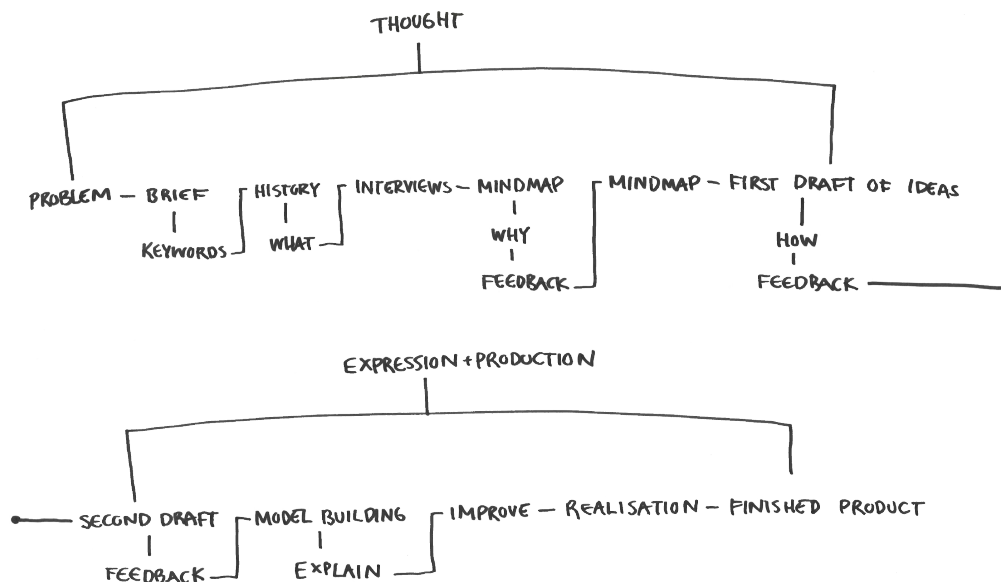
**Design a product(s)/  
system that improves private  
people's ability to manage  
MSB:s guidelines in the near-  
by society before a national  
crisis.**



# METHOD:

The procedure in this project follows a typical design process and the report comprises five parts: motivation, analysis, synthesis, evaluation, and realization.

The method I have used also divides up thought and expression/production, to merge both areas together to the final product. Therefore I have added two more supervisors to the project.



## **SUPERVISORS IN THOUGHT:**

Psychological Institute of Lunds university, Simon Granér  
Researcher at The Swedish Civil Contingencies Agency: MSB,  
Elias Mellander

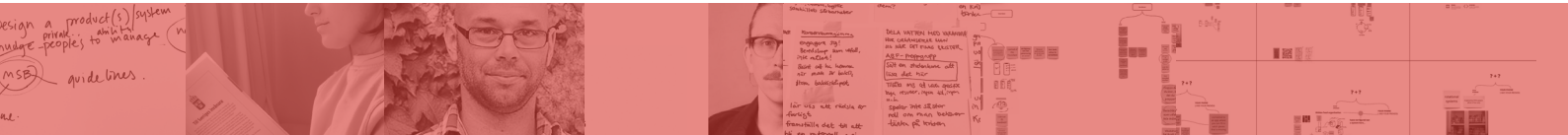
## **SUPERVISOR IN DESIGN/EXPRESSION/PRODUCTION:**

Lund University School of Industrial Design, Charlotte Sjödel

# TIME-LINE

# Design process and time-line

# PROJECT TIME-LINE:



**PROBLEM**  
BRIEF SUGGESTION  
BRIEF RE-MODELING

**HISTORY**

**MEETING WITH  
SIMON GRANER**  
UNIVERSITY LECTURER, DEPART-  
MENT OF PSYCHOLOGY

**INTERVIEW ELIAS  
MELLANDER**  
RESEARCHER AT MSB

**INTERVIEW  
SUMMARY**

**MIND MAP**



**TARGET GROUP  
PERSONA**

**SCENARIO  
SKETCHES**

**FEEDBACK  
CONCEPT  
DEVELOPMENT**

**CONCEPT  
PRESENTATION**

**SECOND DRAFT  
OF IDEAS**

**COLLABORATION  
PARTNER**

**CONCEPT PITCH  
AND DEVELOPMENT**

**THIRD DRAFT  
OF IDEAS**



**IDEATION**

**KICK OFF**

**CAD, 3D MODELLING**

**BUILDING**

**ASSEMBLY**

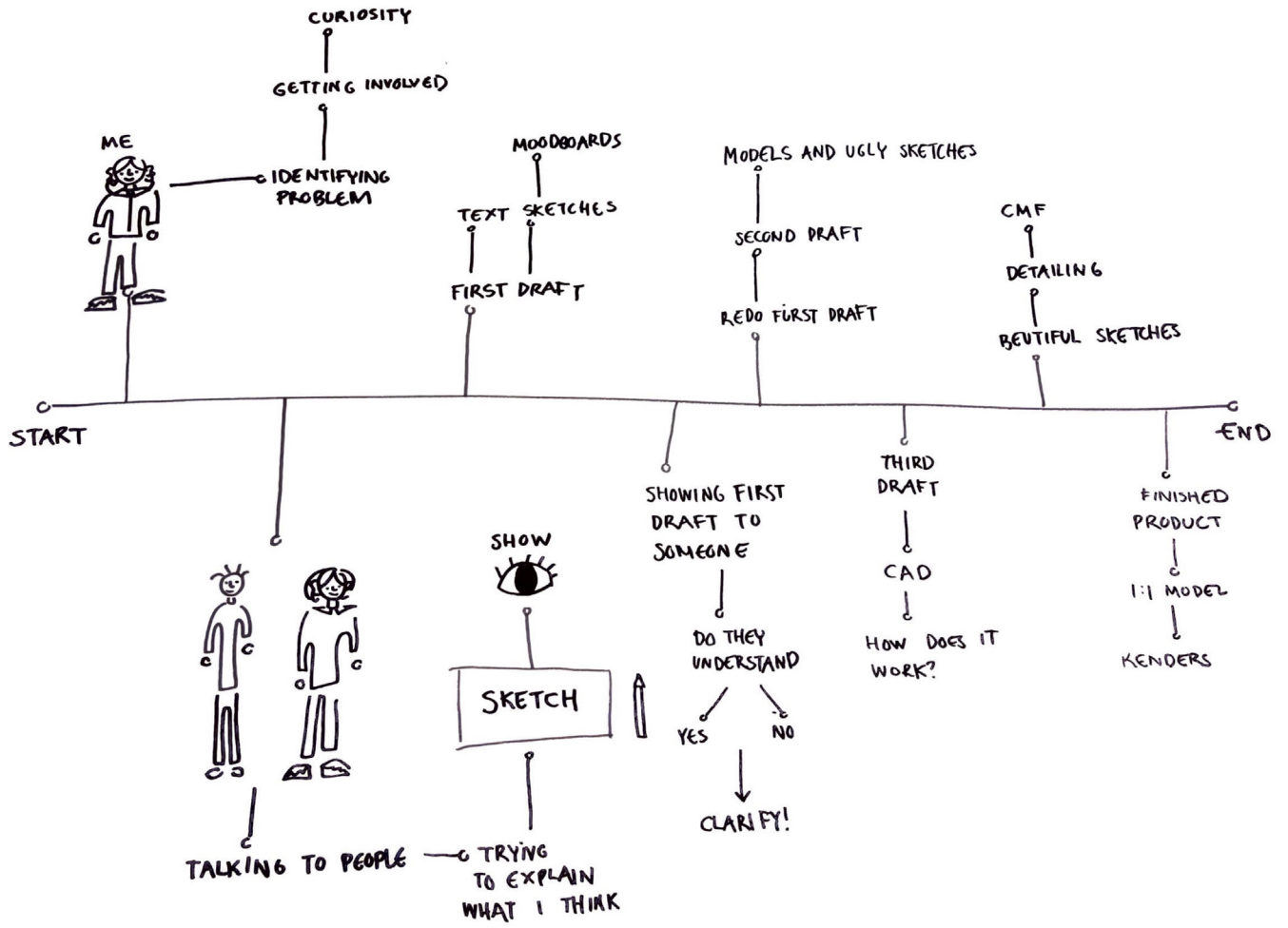
**FINAL PRODUCT**

JANUARY

MAY



DESIGN PROCESS OF SARA EGGIMANN



# SURVEY:

**“ I don’t really want to realize  
that a crisis could happen.”**

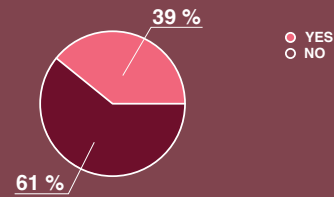
**But who prepps? In a survey answered by 173 people  
living in Sweden, I investigated how much people on my  
social platforms knew about crisis preparedness.**

## THE QUESTIONS ASKED:

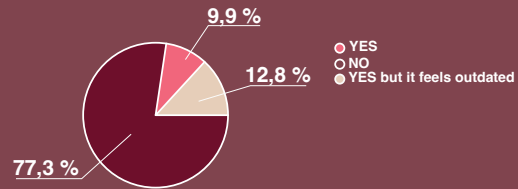
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- Do you know what the Swedish Civil Contingencies Agency: MSB has as a role in Swedish society?
  - > *If yes, describe shortly what they do*
- Have you heard that there is a brochure called “When the crisis/war comes”?
- Do you know that every Swedish citizen is prompted by MSB to have crisis food preparedness?
- Are you today prepared for a national crisis?
  - > *If yes, how are you prepared?*
  - > *If no, describe why you are not prepared.*
- Do you feel worry that there will be a crisis in the coming future?
  - > *If yes, describe why*
  - > *If no, describe why.*
- What is it that today stops you or motivates you to prepare for a national crisis?
- What would motivate you to start to prepare for a crisis?

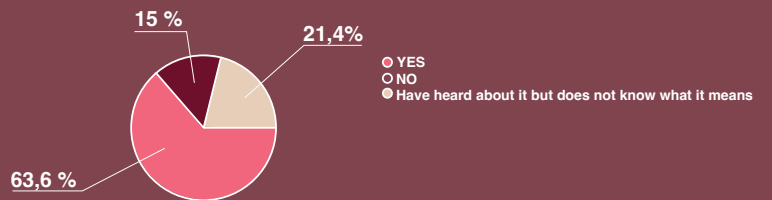
- Do you know what the Swedish Civil Contingencies Agency: MSB has as a role in Swedish society?



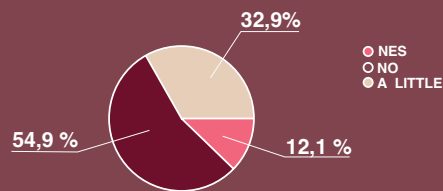
- Have you heard that there is a brochure called "When the crisis/war comes"?



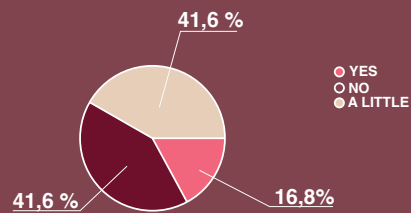
- Do you know that every Swedish citizen is prompted by MSB to have crisis food preparedness?



- Are you today prepared for a national crisis?



- Do you feel worry that there will be a crisis in the coming future?



# ***“Briefly describe what you think the authority's role in society is”***

## **INFORMATION**

“ Inform residents about what they need to do and be prepared for”

“Inform and prepare society for how to act in the event of a crisis and give tips”

“Inform what to do if the crisis comes, where to find shelters, what you should have at home for preparatory purposes, etc.”

“When various crises or the like occur, it is MSB’s task to inform the people about how they should act”

“To spread information regarding preparedness and ensure that various community functions that support increased preparedness are implemented and followed up.”

“To inform the public about what is important in a crisis and how to prepare, and during a crisis to coordinate efforts”

## **PREPAREDNESS**

“To oversee total defense in Sweden. Make sure that Sweden is prepared when the crisis/war comes.”

“Community protection and preparedness: for different types of crises and accidents in society”

“Prepare and inform the population about how to act in crisis situations”

“The role of the authority is responsibility for social protection and preparedness!”

“Community protection and preparedness: for different types of crises and accidents in society”

“Prepare and inform the population about how to act in crisis situations”

## **RESPONSIBILITY**

“MSB is the authority responsible for society’s preparedness in the face of major accidents, crises and the civil defense in situations like these. They inform & train in crisis management etc.”

“Dedicated to preventive work.”



## ***“Briefly describe how you are currently prepared for a crisis”***

I have a lot of dry goods, food with a long shelf life at home, storm kitchen, water purifier, stove in the home, crank radio, a lot of medicines etc, but nothing ultra serious.

I have a flashlight, extra blankets, know where the shelter is, have light and a lantern to hand, and water cans filled/renewed every month.

I have a crisis box, storm kitchen, gas and knowledge of preparedness in a crisis.

I have provisions for a week in the form of food and solar batteries.

I have food, water, crank radio, tent, etc...

I have a water canister, storm kitchen, canned goods and dry goods in stock

Have enough canned food/tetrapak at home. Also camping equipment that is useful in the event of a power outage.

I have cash so I can get by for a while and try to make sure I always have food for a while.

We have a box of what is in the brochure stored at home.

# *“Describe why you have not prepared for a crisis”*

## IGNORANT

“It seems unreal that it should be needed”

“You have probably become comfortable and think that it won’t happen and that you think that if it does happen, you can be quick to the business. Stupid way to look at it, because that’s what everyone thinks, but you’re not always that smart”

“Mainly it’s probably because I couldn’t take it anymore, it’s probably also because you think “there won’t be a crisis in Sweden” even though you’ve had a few reality checks lately so you should maybe have some water cans, canned food, etc.”

“It works out, the Foodora bids don’t stop working for that do they?”

“Probably because I live a bit in denial. You see the news about everything that’s going on, but somehow you hope it doesn’t get here.”

“Don’t really want to realize that a crisis could happen.”

## LACK OF KNOWLEDGE

“Don’t know what is good to have at home and since I’ve never had it in my home before, it’s not a priority”

“I think the main reason is that I don’t really understand that there could be such a serious crisis in Sweden.”

“I don’t have enough knowledge about what you should have at home/didn’t take the time”

## NO TIME

“I haven’t spent any time preparing myself, nor did I think it was necessary. Also, I don’t know what I would have to do to prepare”

“My crisis food has expired. Have “thought” of buying a new one but haven’t had time”

## MONEY

“Economy and laziness”

“Feels expensive and unnecessary if it never happens”

“Student = poor, little storage space. forgetful and probably lazy :-)”

“CSN is barely enough for food for the day, much less for crisis supplies”

## THE COMPLEXITY REASON

“You should probably have collected some water and canned goods and such, but when you study you have neither space nor money to have home preparations”

“Feels expensive and complicated, difficult with storage if you live small”

“I’m a bit lazy, no one has told me and it doesn’t feel super current.”

“Just haven’t gotten around to it. I don’t know where to start”

## NO STORAGE SPACE REASON

“Never thought that it might be needed and therefore never thought about it. Also live small, don’t have space for other food and preparedness”

“Currently living in a small space, if I were to prepare, my interior would only consist of water dubs, canned goods and crank radios”

“I don’t think I would have to do that in my student apartment. Feels like something you do at home.”

“It feels difficult to start, certainly you can have extra dry goods and canned goods at home, but storing water that also has to be constantly replaced is not something I can bear or have space for”

“Student moving around”

“Don’t have room for canned goods and water and don’t want to spend money on batteries, radio, fuel, etc.”

“No, in the form of temporarily bad finances, but mostly due to a lack of space in the apartment. They are difficult to accommodate with storage of water and extra food”

“Hard to know how and how much. Also live in a cramped student apartment so don’t have room to have an emergency box right away.”

“Didn’t have time, didn’t have space”

“I’m a student who lives at csu and lives very small, but I know that I should crisis prepare, but where should I have everything and what should I buy?”

“Living in a small student apartment, there’s no room for it anyway. But mom and dad have an emergency box!”

# WHAT IS IT TODAY THAT STOPS YOU/MOTIVATES YOU TO PREPARE FOR A CURRENT CRISIS?

I'm naive

I live in on a small area

It is expensive and complicated

I'd rather pretend it's impossible for a crisis to happen

I work and manage a household myself, when will I have time?

You don't want to buy too many things that just lie around and litter.

But I want to..

To take my responsibility.

Contribute to the benefit of society

I want to prepare myself so I can take care of my family.

What motivates me to fix is that it just feels safe and nice to have.

# A NEW CRISIS/WAR

“More serious threat to Sweden. Doesn't feel like it's that close to a crisis right now, more than inflation and electricity shortages.”

“A war”

“If I knew the apocalypse was coming”

“Active physical attacks against Sweden”

# THE STATE/SOCIETY

“If the Riksdag/authority for public preparedness/homepreparedness sent out a list or directive for what everyone should have at home. A letter or published in the newspaper that clarifies the risk of a crisis and what EVERYONE should do in the event that it occurs.”

“If the crisis came! But otherwise a bit more easily accessible information from higher authorities. Slightly better contingency plans for various crises and that these are published in more easily accessible forms than a digital brochure”

# THAT IT IS SIMPLER

” Something that does not take up too much thinking power in everyday life or space in the home”

“Smart, economical solutions for different sizes of households (single, couple, family with several children).”

“Perhaps multifunctional products?”

“A ready-made kit like the first aid box is, which is not too expensive and which comes with a clear and easy-to-understand information sheet”

“That the product should be more appealing, also that it is easier to buy a product together with everything instead of having to buy everything separately. The price for this shouldn't be high either. One perspective is also that it should be taken more seriously, right now sees it as a situation that “could” happen but is then not enough motivation to prepare.”

“If there was a smooth and stylish solution for my home <3”

“If it had been more accessible to prepare and if it was cheaper”

# ANALYSIS:



**"We often forget that all choices have consequences, desired or undesired, for our environment".**

***"We all have choices, and we must take responsibility for the choices we make."***

To quote from Heberlein's book *It Was Not My Fault: On the Art of Taking Responsibility*, she writes :

**"To pity, excuse, and feel sorry is not to be kind-hearted. It is to fail." She further describes that "All people have the opportunity to influence their lives and their choices, albeit to a limited extent."**

In my research, I understood that it was very easy for students to blame their small living spaces, lack of money, or difficulty in handling a crisis.

To blame their lack of responsibility on various factors. Something that Heberlein would probably consider an unkind-hearted action. According to her, even the most limited person has the opportunity to influence their life. Even the poor student who lives in a small space and is supported by student loans and drinks beer with the money left over.

In a conversation between prepper **Kalle Zackari Wahlström** and **Mauri Hermundsson**, Zackari Wahlström describes the following regarding responsibility to Hermundsson:

***“You are supposed to help others! You are not supposed to be a burden! The state should focus on the weak, sick, elderly or children. It's like you've let everyone down by not being prepared.”***

What Heberlein and Wahlström have in common is that they both see this action, choosing not to take societal responsibility, as a unkind-hearted action. According to Heberlein, we:

**“Often forget that all choices have consequences, desired or undesired, for our environment”.**

How is it then that most students in my study still choose to blame various factors instead of preparing themselves for a crisis?

But what happens to this cohort when a crisis emerges? When an entire group abdicates its societal responsibility due to “insufficient space, energy, and financial resources”? According to Heberlein, individuals are only accountable for their voluntary choices, decisions they make, and situations they could have managed differently.

If individuals decide not to prepare for a crisis and, instead, spend their money on beer, what rights do they genuinely possess when the crisis materializes? When, as per Zackari Wahlström, they have disappointed everyone by not being ready?

# ***Whose responsibility is crisis preparedness, as perceived by students?***

As students, we are entitled to various rights, such as the right to free education, the right to challenge our grades, and the right to receive student loans to support our living expenses during our academic pursuits. However, most of us tend to neglect our obligations, including submitting assignments on time, repaying our loans, and preparing ourselves for potential crises.

In the article, "Design Ethics and the Limits of the Ethical Designer," Curt Arlidge deliberates on the true impact that designers have on our world. The article contends that designers are frequently held accountable, whereas the real issue lies in the infrastructure of our society. For instance, if MSB (the Swedish Civil Contingencies Agency) had on a structural level rearranged our tax money to make it able to send home preparedness kits to every citizen, I would have never faced this dilemma. It would have been resolved structurally. Nevertheless, as a designer, it is my responsibility to find a solution, and I will be the one to blame if it fails, rather than the state, which bears the actual responsibility.



***"Design tends to embody social meanings, or serve to make certain social meanings acceptable, unlike a painting or a sculpture."***



# SCENARIO

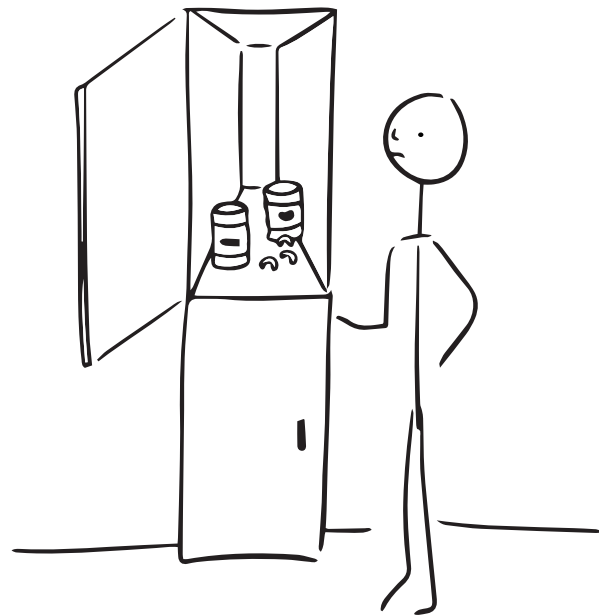




Current storage solution



pantry situation.....



# CONCEPTS FROM SURVEY

*“Crisis management as the outcome, not the goal”*

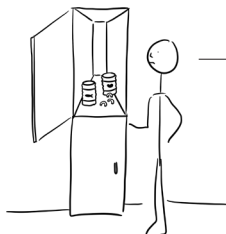
- Elias Mellander, researcher at MSB

## TARGET GROUP

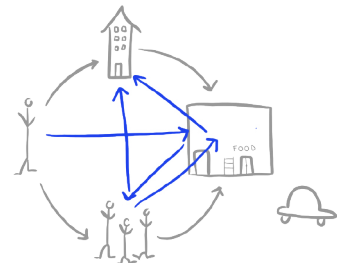
STUDENT living in Lund



Never have spare food at home



But like to eat with their friends



LIVING ALONE IN A SMALL ONE ROOM APARTMENT



LIVING IN A COLLECTIVE OF FOUR PEOPLE



LIVING IN CORRIDOR WITH 8-12 PEOPLE.

**COMMUNAL**

**COMMUNAL STORAGE FOR  
CORRIDORS**

**SHARE YOUR STORAGE WITH YOUR SOCIAL NET-  
WORK**

**STORAGE SYSTEM AND AN APP CONNECTED TO  
IT**

**INDIVIDUAL**

**A MODULAR CAN STORAGE FOR SMALL SPACES**

**COLLECTIVE**

**A MODULAR CAN STORAGE FOR SMALL SPACES  
THAT YOU CAN STACK ON TOP OF EACH OTHER IF  
YOU ARE MORE THAN ONE**

**A MODULAR CAN STORAGE FOR SMALL SPACES  
THAT YOU CAN STACK ON TOP OF EACH OTHER  
IF YOU ARE MORE THAN ONE PERSON WITH AN  
EASY REFILL AND RECYCLE SYSTEM.**

## **Improve the odds**

The ethical objective of this study is to design a tool that encourages individuals to consider their preparedness and improve their ability to cope with sudden disasters. The tool will utilize design strategies to promote greater home preparedness for students, while avoiding any negative associations with prepper mentalities. The goal is to increase the likelihood that individuals and society can cope better during unexpected disasters.

## **For whom?**

The individual who purchases the product is assumed to be a student who has acquired a student loan and currently resides in a small apartment or a dormitory. The furniture utilized by this target demographic is typically obtained from IKEA, while food expenses tend to be relatively inexpensive. This population segment generally displays sub-optimal consumption patterns and exhibits a preference for last-minute decision-making in alignment with the norms of an “on-demand” society. Consequently, the target group tends to rely heavily on the availability of food chains and expects to obtain food items even in the event of last-minute actions.



## Extra food

A more adaptable and efficient storage system for canned goods at home, along with the availability of attractive and affordable products, could potentially increase the likelihood of the target demographic having extra food supplies on hand. While the product may appear unremarkable in everyday life, it functions as an organizational furniture piece that facilitates the storage of canned goods and other items. However, in times of crisis, such features may prove critical in preventing societal destabilization. The limited living space and lack of motivation among students to engage in crisis management render them an intriguing population segment for this initiative.



## To prevent

In the event of a crisis, the proximity of grocery stores cannot be guaranteed. Therefore, my product serves as a preventive measure in case society collapses and the existing systems become unreliable. The product is inspired by the food pantries and extra dry goods of previous generations, and aims to provide people with a week's worth of food without their explicit awareness through automatic processes.

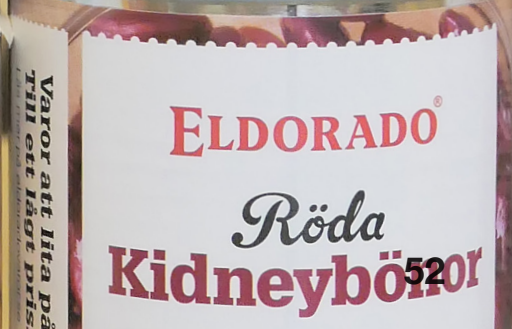
The design of my products is contingent on the availability of food chains where consumers can purchase necessary food items. However, this may not be feasible in all locations, thereby limiting the reach of the product. Moreover, the design is based on the assumption that consumers have the financial capacity to buy extra food items. Unfortunately, not all members of society possess the necessary financial means to make such purchases. These limitations have a bearing on the practicality and effectiveness of my product design.



# **COLLAB- PARTNER**

**Goods to trust. At a low price.**







# ***“A cheap price that most of us are able to afford even though you don’t have much income”***

This study aims to create a tool using Eldorado brand to promote disaster preparedness, with design strategies enhancing individual and societal coping capabilities. Ethical considerations aim to avoid prepper associations. The specific goal is to increase student preparedness at home without stigma. The overall purpose is to improve disaster resilience, encouraging preparedness and equipping individuals and communities to handle unforeseen disasters.

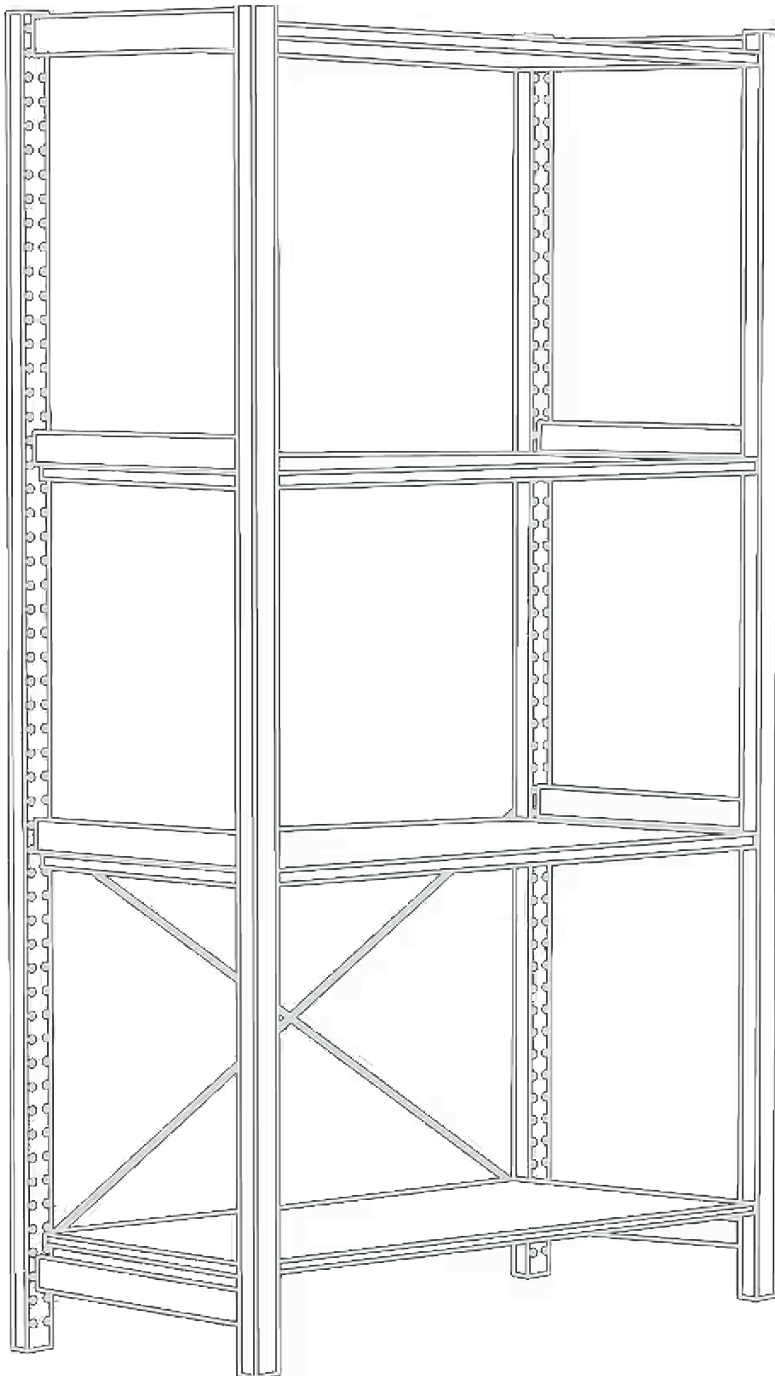
In order to sustain oneself with a week's worth of food supply in one's own home, it has been suggested that 35 cans are needed.

Eldorado's goods have been proposed as a potential solution for affordable emergency food supplies, with a cost of approximately 360 kr for 35 cans.



# FUNCTION AND AESTHETICS

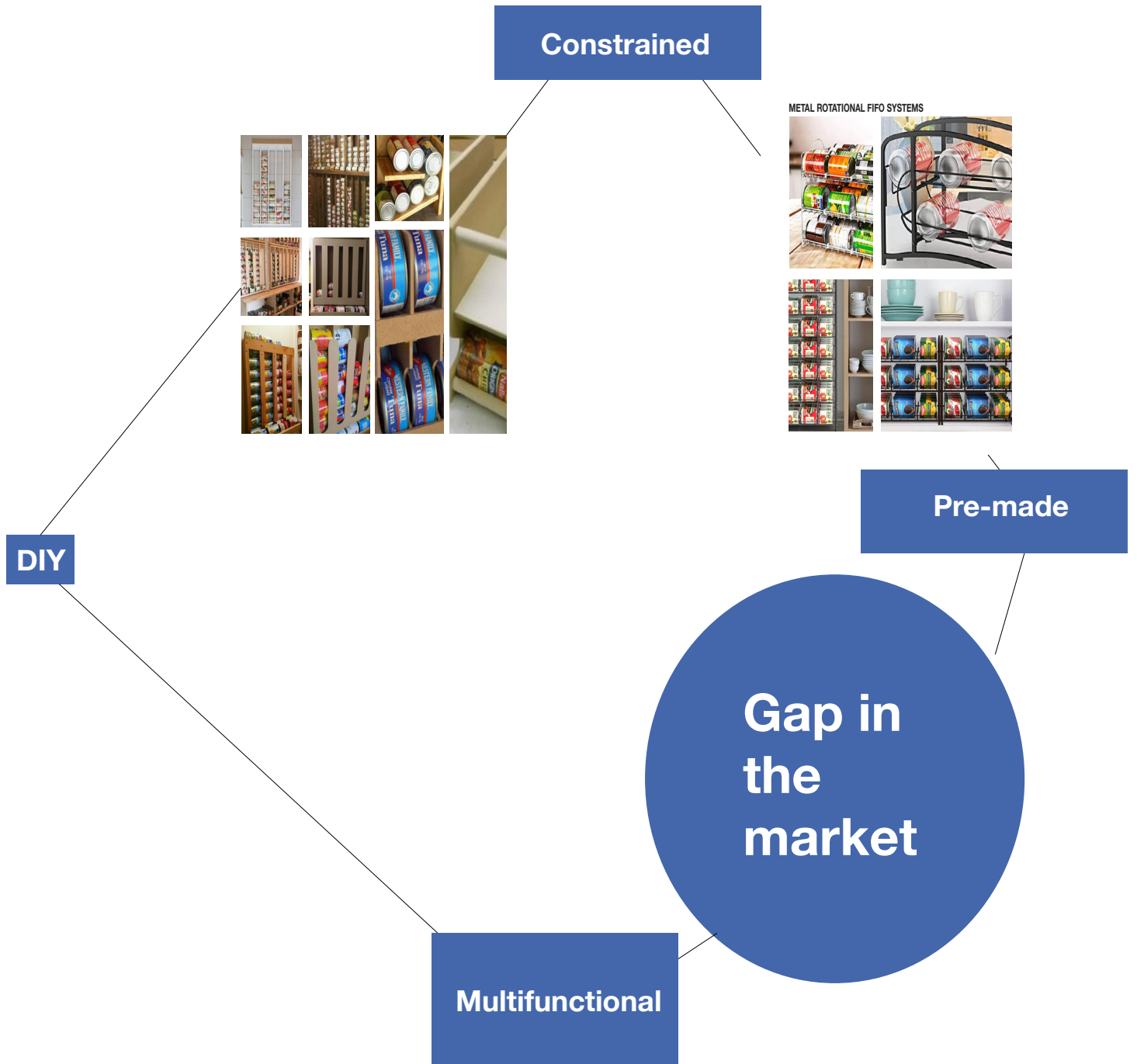
An important part of my work are also that the aesthetics of my organization's furniture become as versatile as possible.

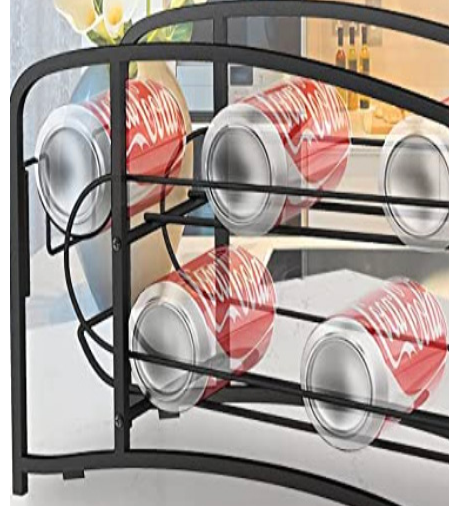
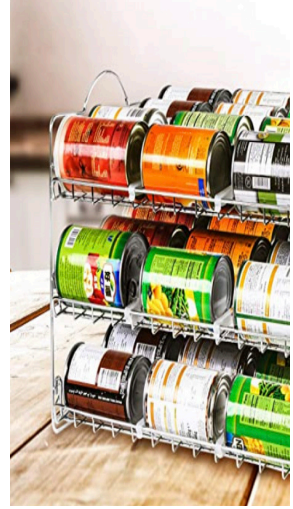
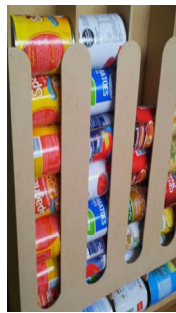
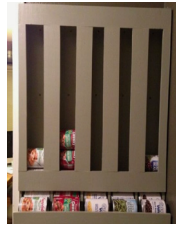
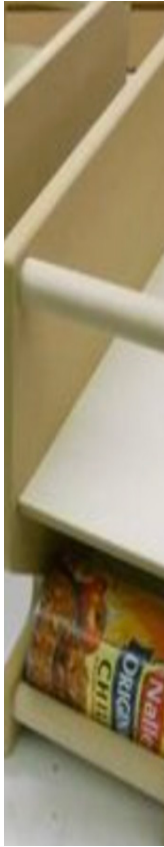


Taking inspiration from IKEA's Ivar shelf, the objective is to make the proposed furniture design blend seamlessly into various households. The furniture is manufactured by Eldorado, with the intention of making it accessible and affordable to a wide range of consumers, and hence, promoting democratic principles.

Incorporating Eldorado's message of affordable food, the concept prioritizes functionality while also appealing to those interested in aesthetics. The aim is for the product to blend seamlessly into a variety of homes, drawing on the design of IKEA's Ivar shelf to achieve this.

# MARKET ANALYSIS



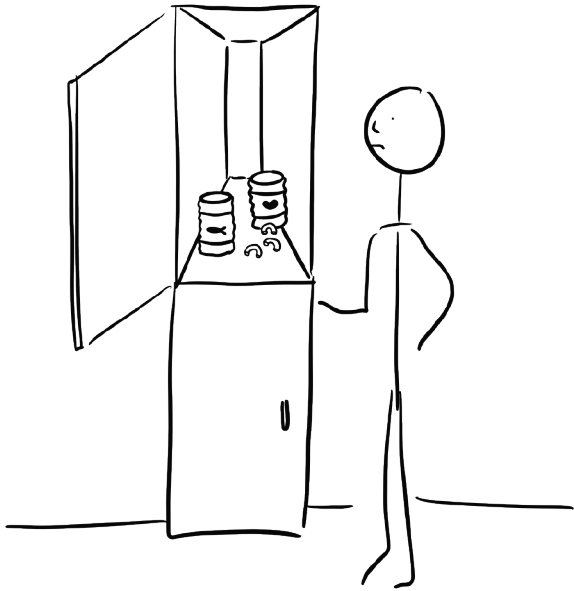


# SYNTHESIS



**More food at home leads to??**

# CURRENT FOOD SITUATION



## WHAT I DON'T HAVE

THE ORGANIZATIONAL SKILLS

MOTIVATION TO PLAN FOOD

A CAR SO I CAN GO ON BIG SHOPPING TRIPS

SPACE

EXTRA FOOD AT HOME



## WHY I DON'T HAVE SPARE FOOD

WHY SHOULD I HAVE SPARE FOOD AT HOME WHEN I CAN RUN TO THE STORE WHEN I NEED FOOD?

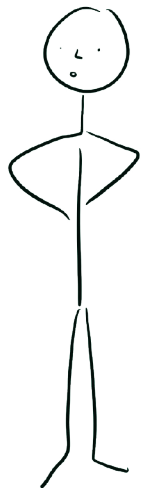
“ I LIVE IN A ON DEMAND SOCIETY”

## WHAT MOTIVATES ME



**EASY**

**THAT IT IMPROVES  
MY LIFE IN  
SOME WAY**



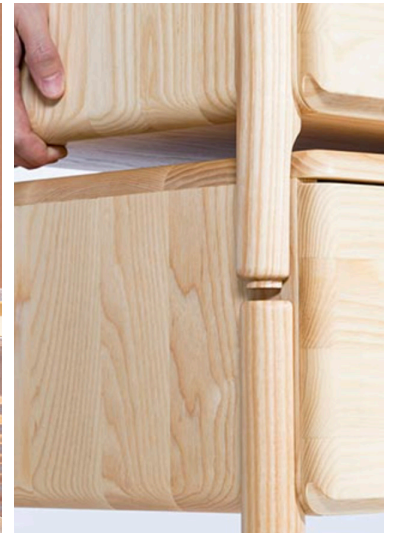
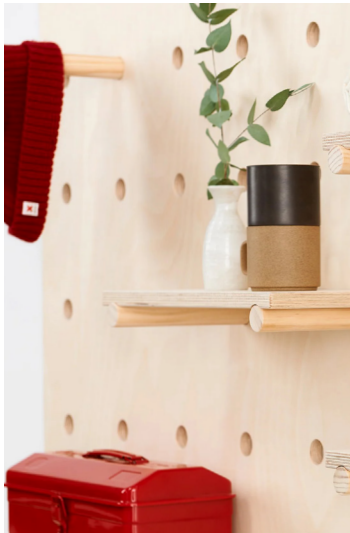
**BECOMING  
BETTER TO  
HAVE BASIC  
FOOD AT  
HOME**

**GETTING TO  
KNOW MY FOOD  
CONSUMPTION  
HABITS BETTER**

**IF I GET BETTER  
AT PLANING MY  
FOOD I GET MORE  
TIME TO DO FUN  
STUFF**



After presenting my synthesis to Eldorado, I proceeded to create a mood-board to depict the desired emotional response the product should evoke. The mood-board was centred on geometric shapes, which I believed would create a modern and edgy look that would appeal to the target market. The use of angles and straight lines was meant to showcase the cans while still conveying that they contained Eldorado's high-quality goods.



## MAIN FUNCTIONS

In the process of designing a functional product for Eldorado, I created a mood-board that focused on the various attributes of the product. The functionality mood-board aimed to showcase innovative ways of storing cans, products that occupy minimal space, as well as alternative storage options. The mood-board also emphasized products with pegboards and furniture that could be easily assembled.

# IDEATION

**From head into reality.**



# STACKABLE

STABILITY IS CREATED BY ONE LEG JOINING THE OTHER

INTERESTING HOW LEG HUGS BODY



STABILITY IS CREATED BY THE 5MM IMMERSION OF THE LEG

BOTH STACKABLE IN LONGITUDE AND LATITUDE

# MORE THAN A STORAGE FOR CANS

MAKES FUNCTION ON SURFACES

KITCHEN + STORAGE



SAME MODULE, DIFFERENT FUNCTIONS

STORAGE + NIGHT TABLE

**INTERSECTING PROFILES**



FLATPACK

EASY ASSEMBLY

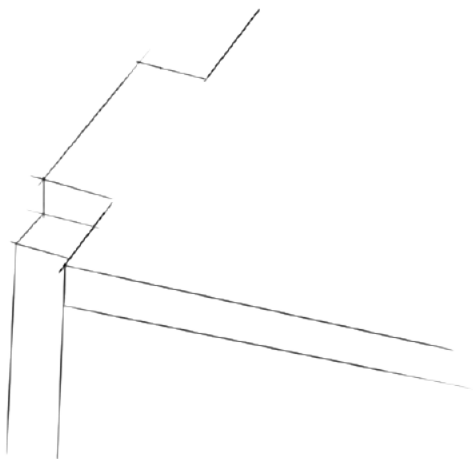
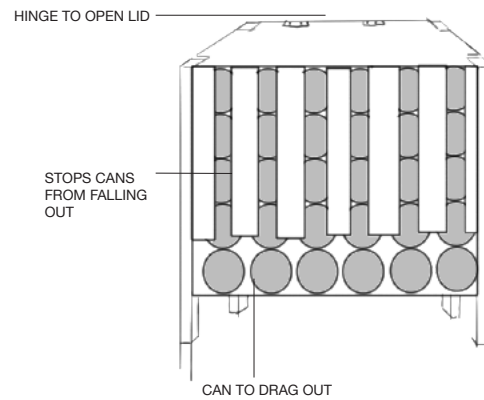
**JOINING**



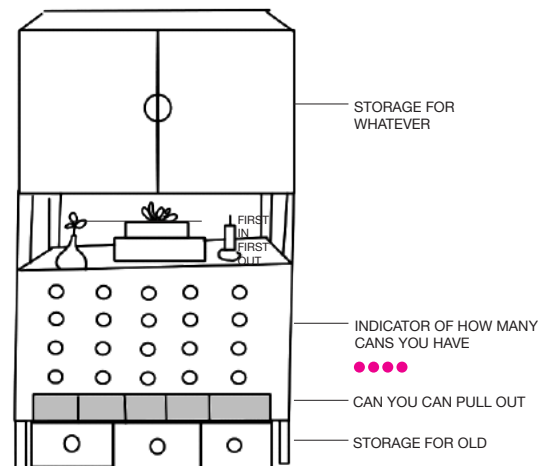
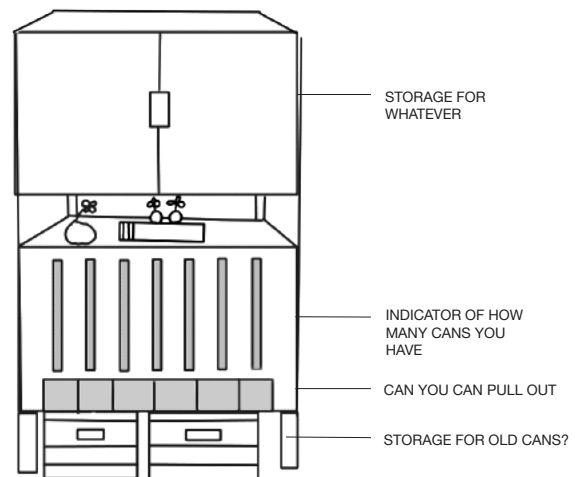
RAW HONEST HINGES

CONSTRUCTION ON OUTSIDE

# CONCEPT I:

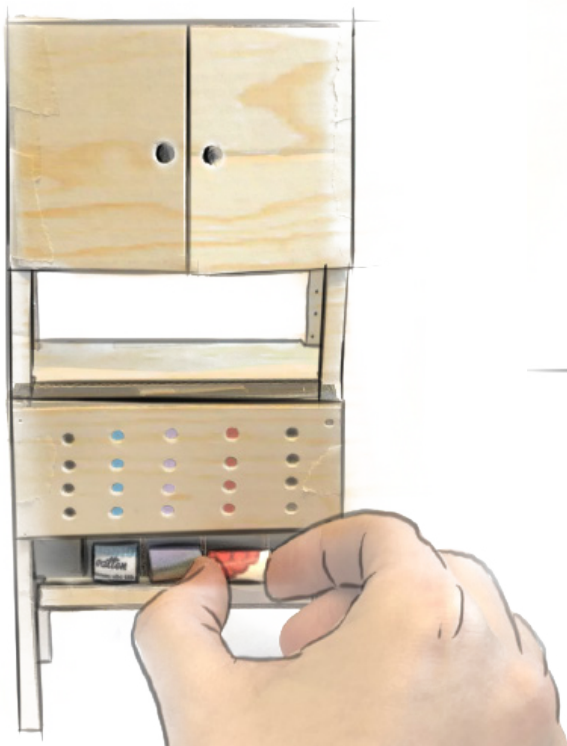


## PROPOSALS

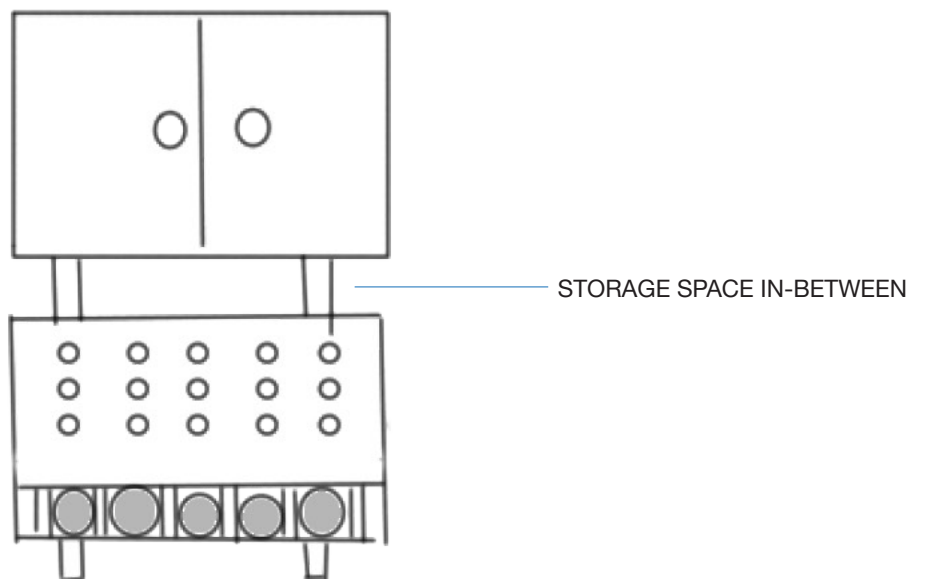
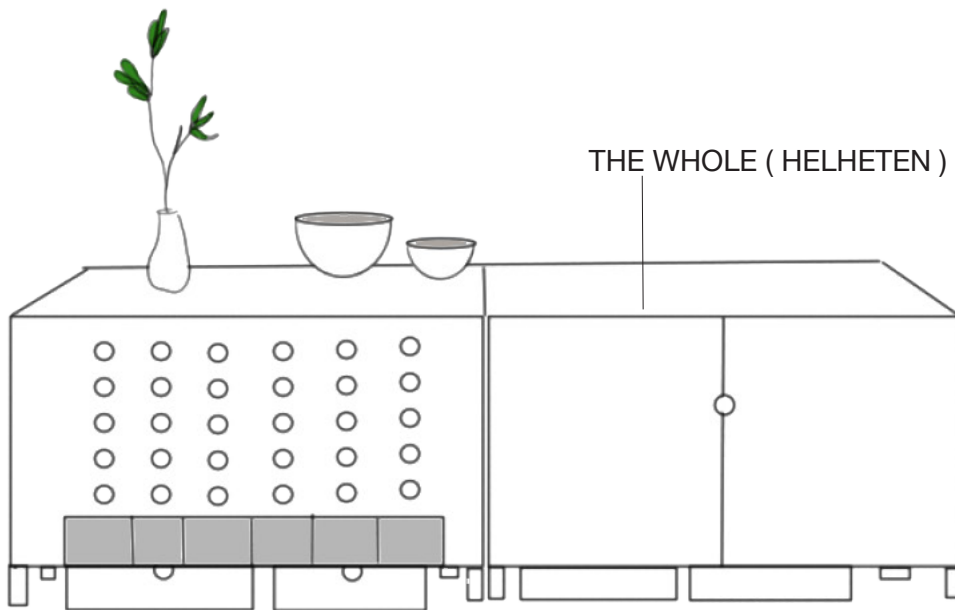
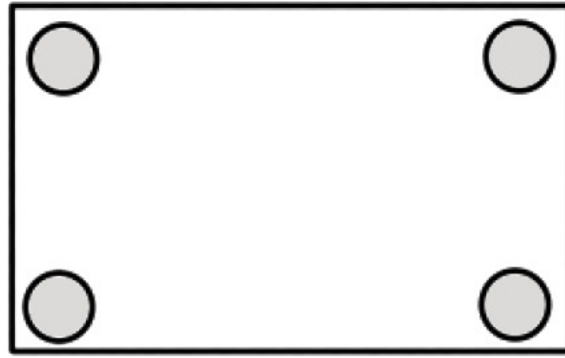
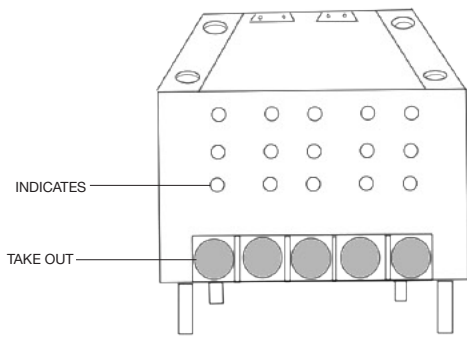




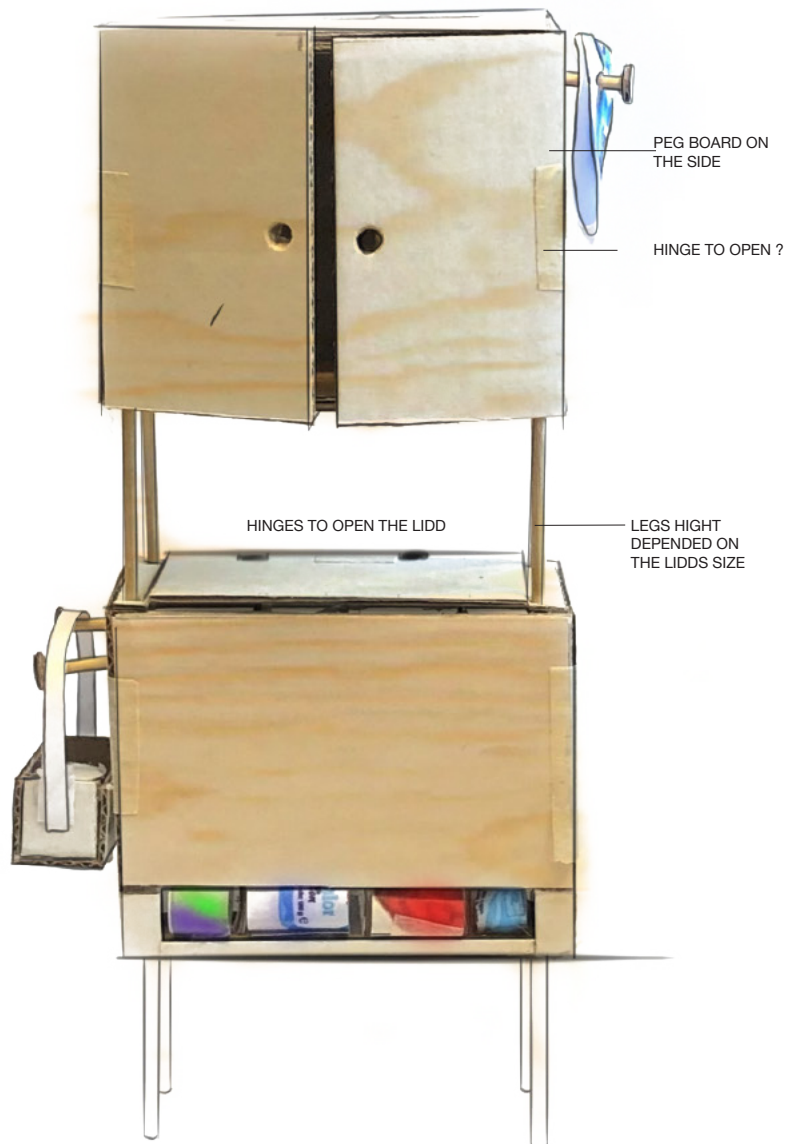
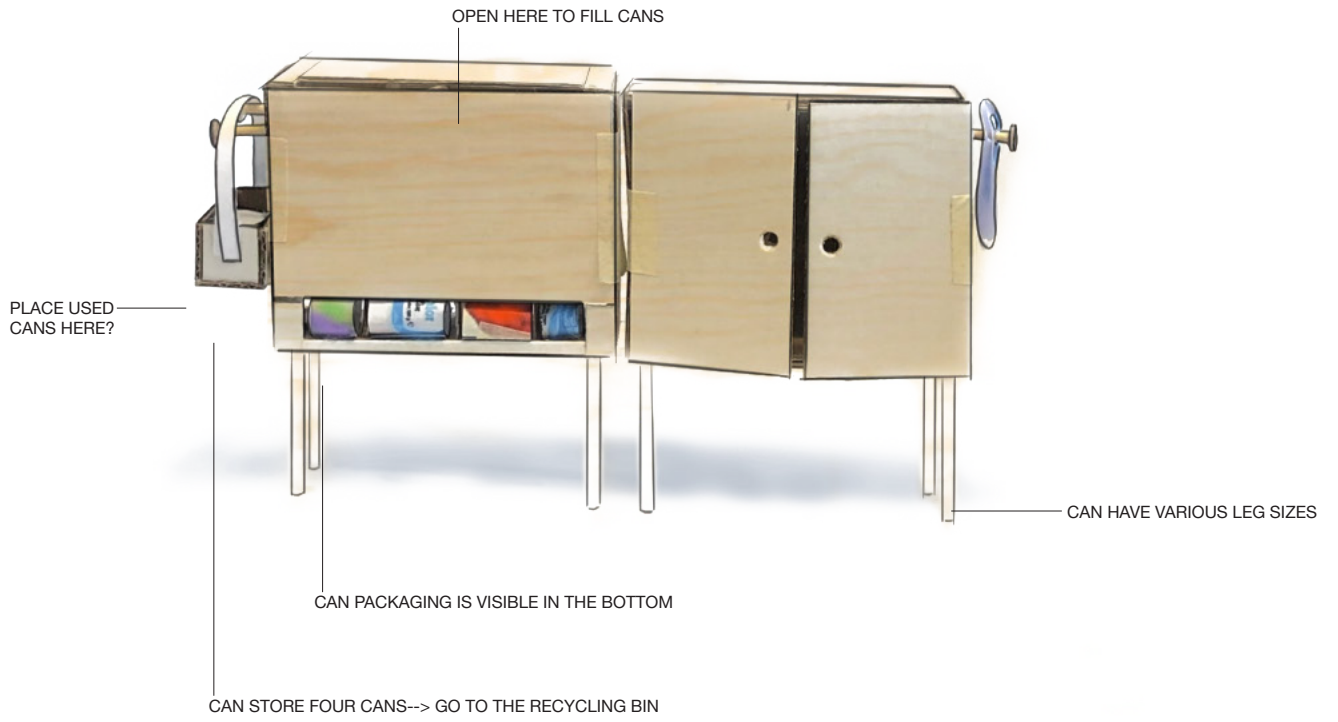
SOENARIO STACKED



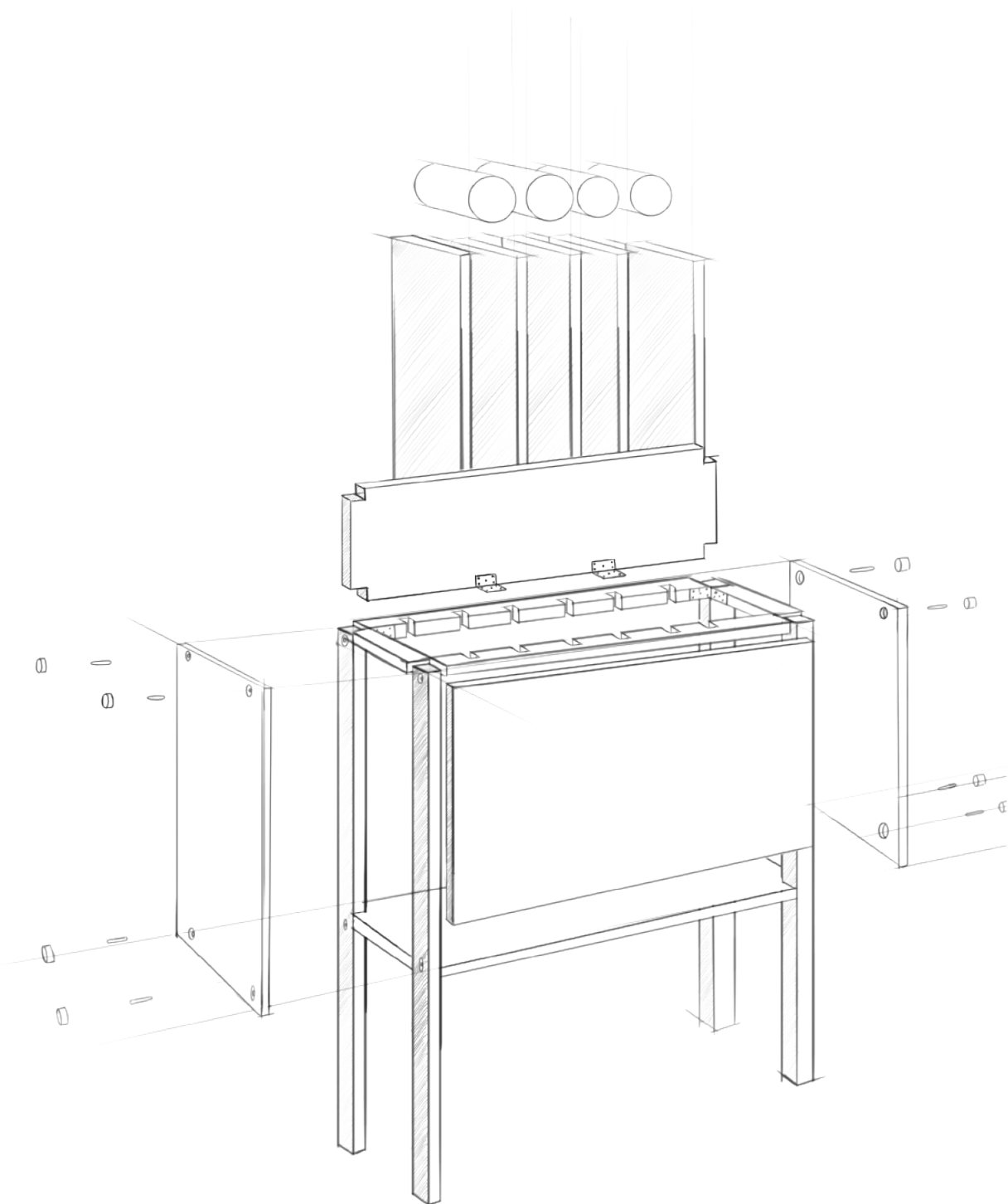
# CONCEPT II







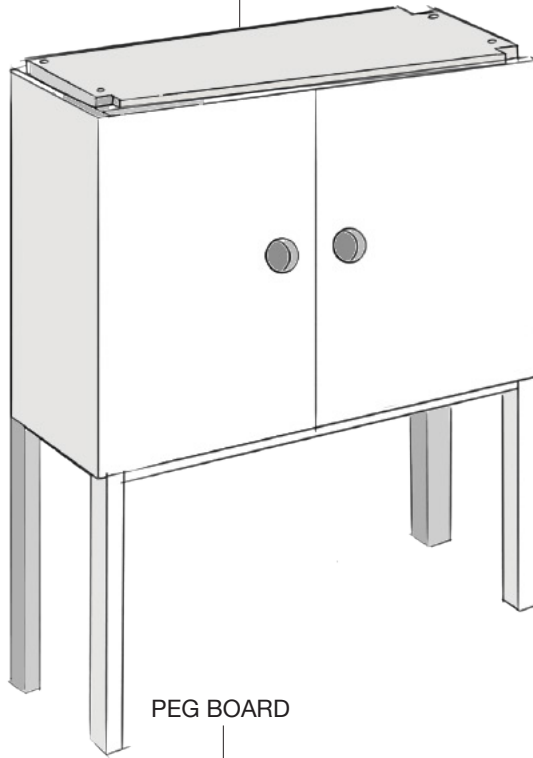
# CONCEPT III



CAN STORAGE

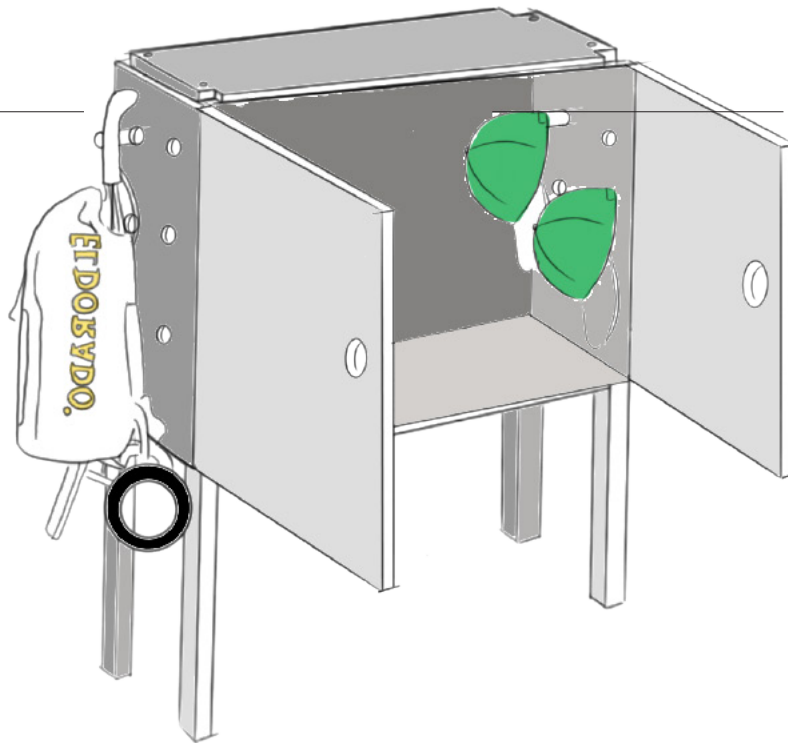


WITHOUT PEG BOARD



PEG BOARD

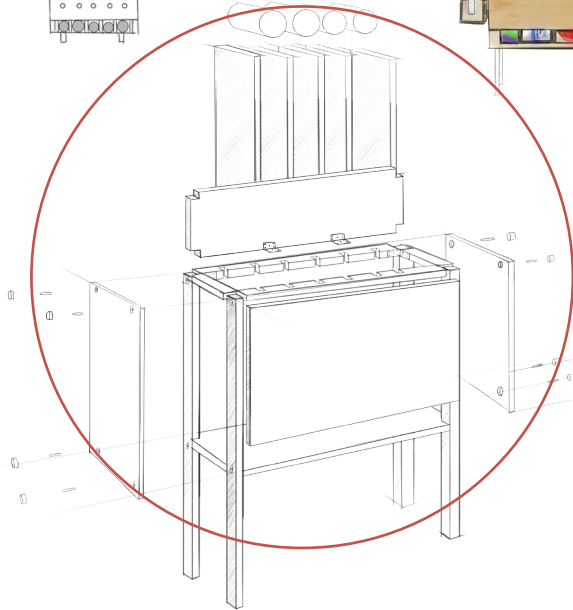
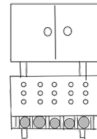
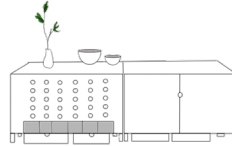
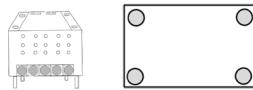
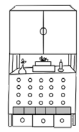
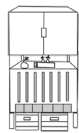
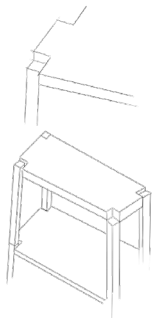
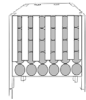
HANG BAGS?



HANG CAPS?

REGULAR STORAGE

# CONCEPT I



# CONCEPT III

**1:1 scale model**



After completing the ideation phase of the design process, the decision was made to create a 1:1 scale mock-up to better understand how the design would interact with the dimensions of the cans. This mock-up was constructed in the wood workshop to gain a tangible understanding of the design's constraints and possibilities.



However, upon completion, it was found that the construction was overly cumbersome and used excessive materials. While there were some positive attributes to the mock-up, such as the sliders that separated the cans and the heel that pushed out the can in the bottom, it became apparent that a different approach was necessary.

As a result, it was decided to return to sketching and reassess the design in order to better align with the project's objectives.



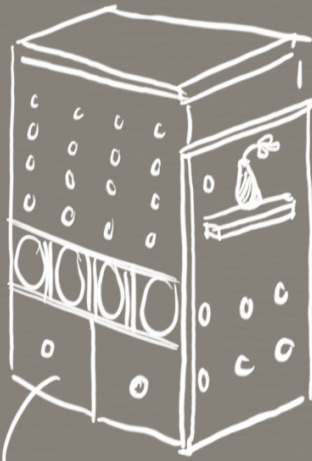
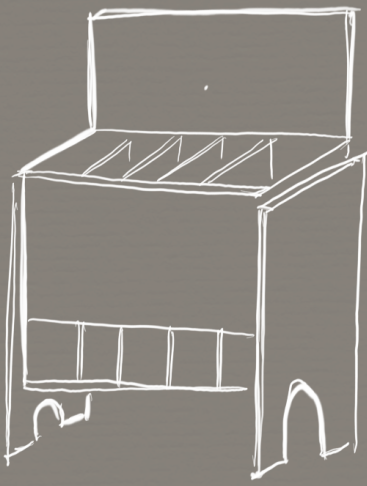




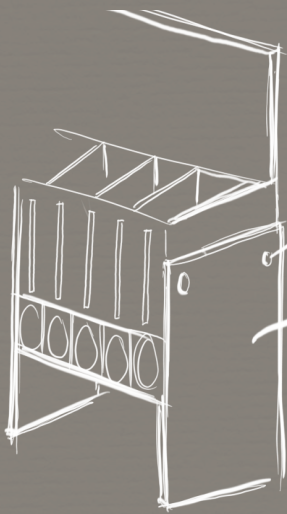
Good proportions but...  
Clumsy  
Not good with the joints  
Works but can be more minimal



Scale away  
Only work in 15 mm, 4 mm plywood  
Make it easier to assemble  
Easier construction



DRAWERS UNDER?

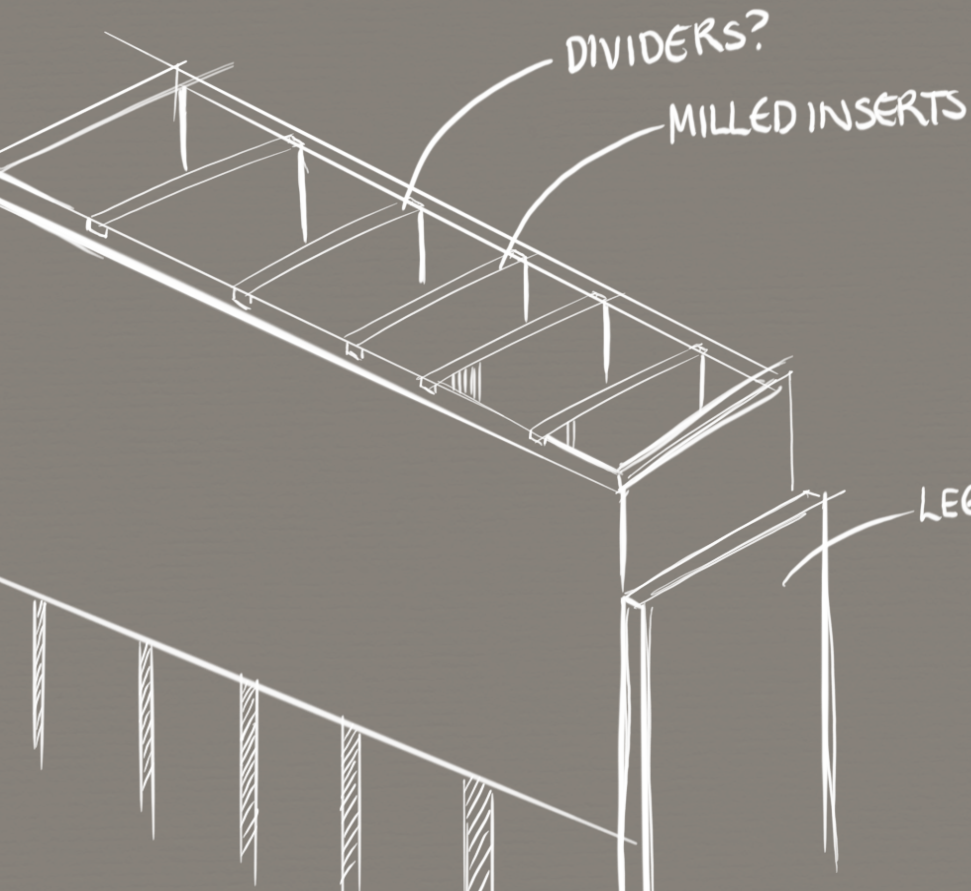


PLUGS?

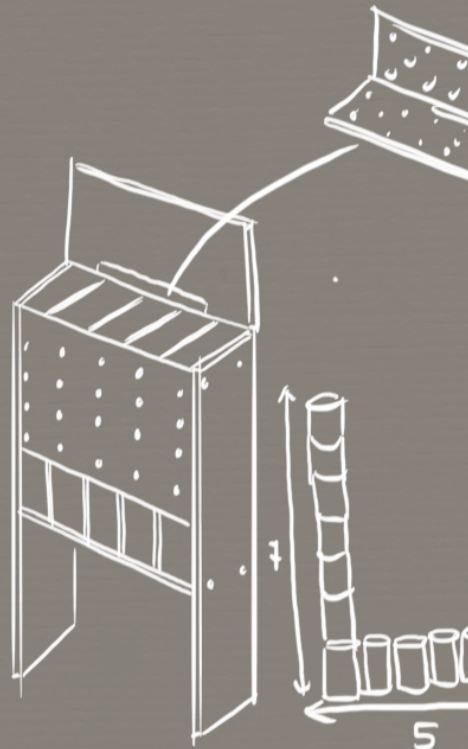
PEG BOARD?



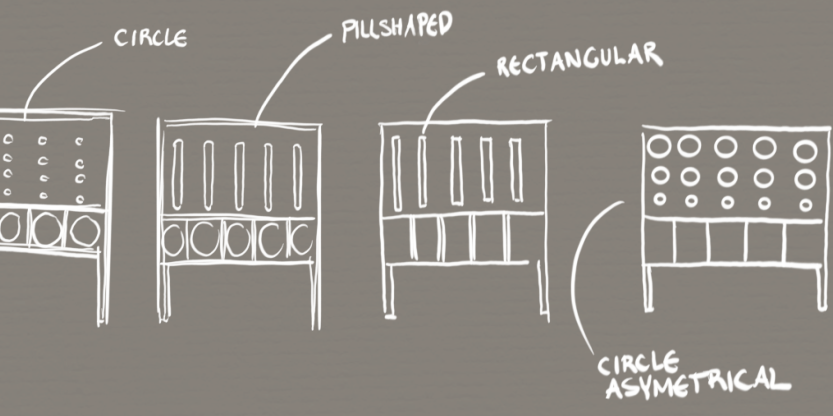
PIANO HINGE?



LEGS?

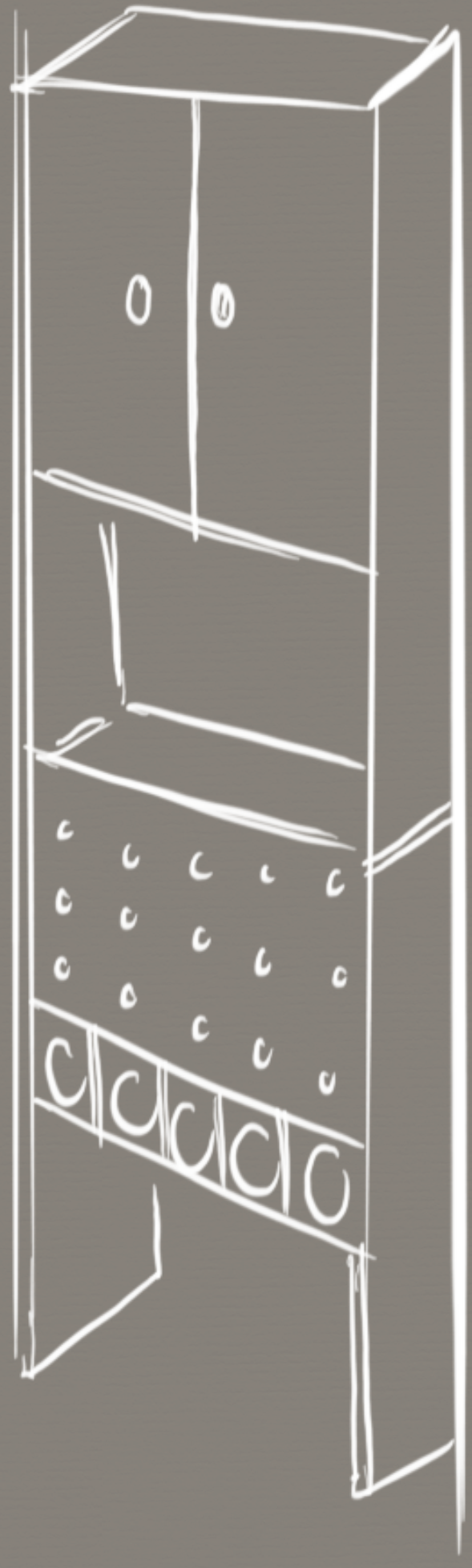
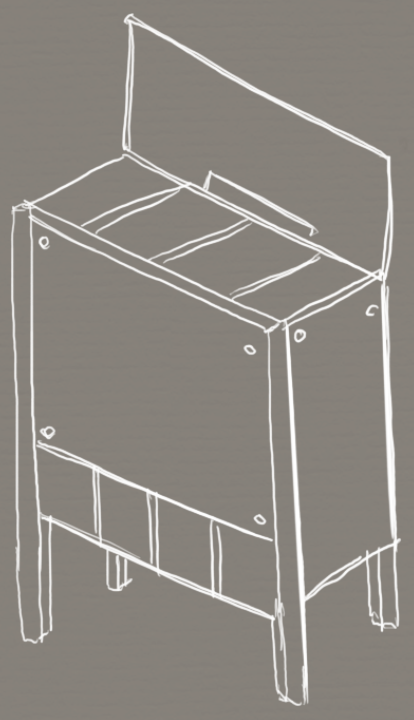
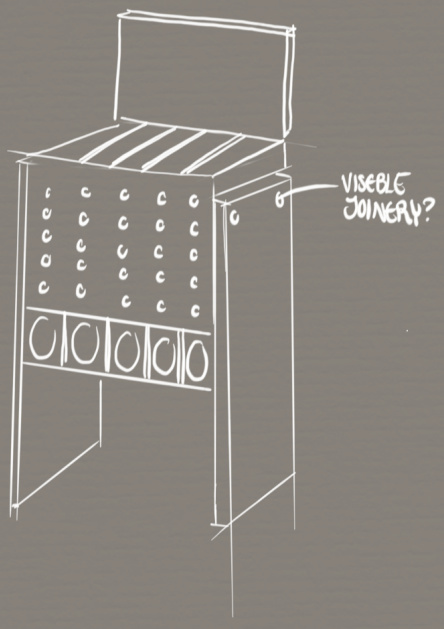




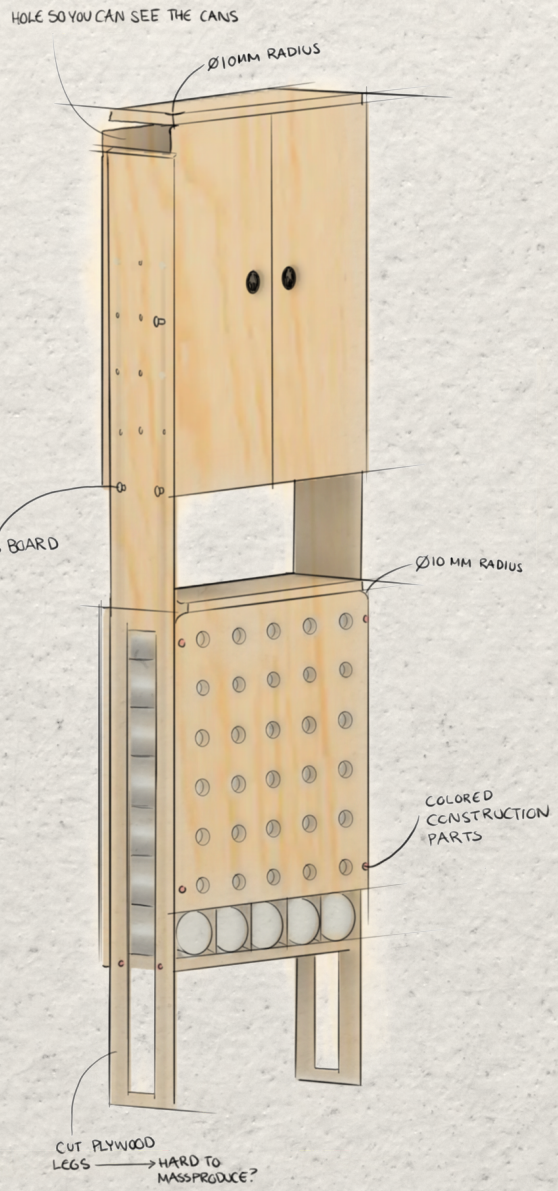
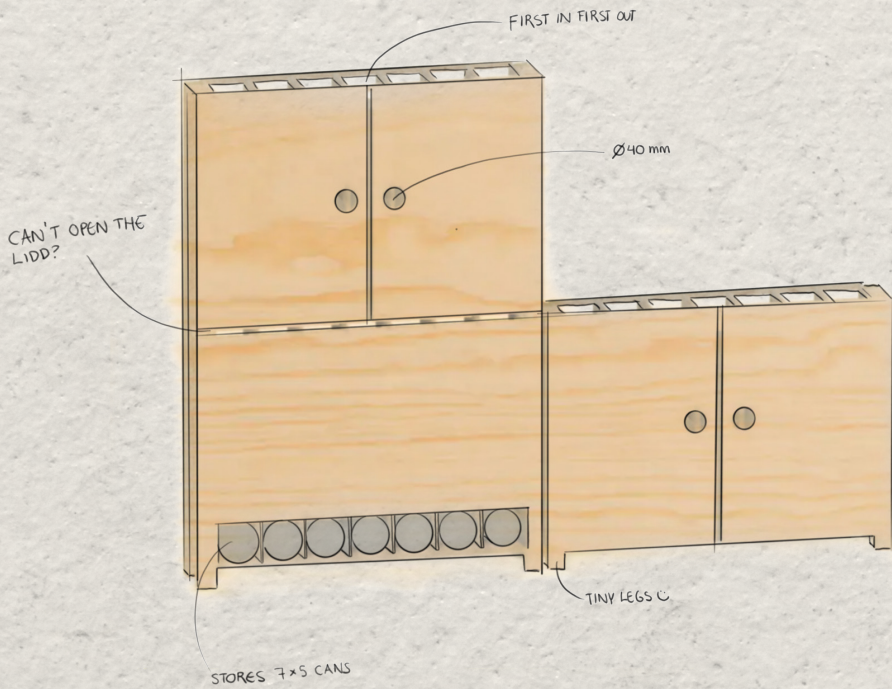


2mm

10mm

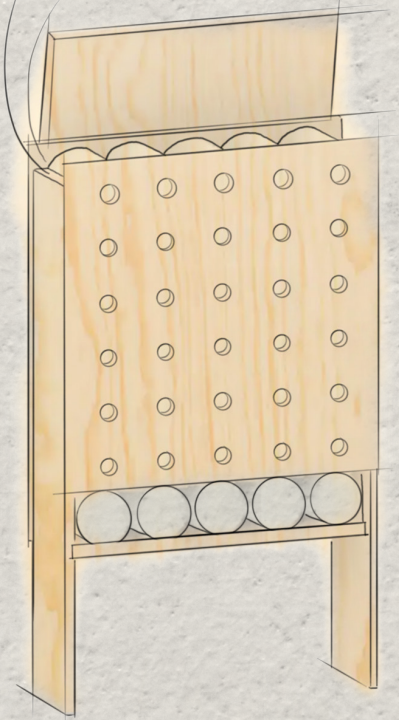






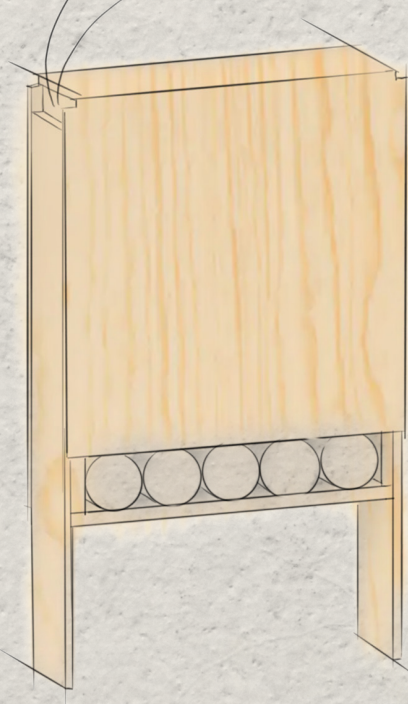
30MM IMMERSION THAT MAKES IT STACKABLE

SMALL GAP BETWEEN FRONT AND LIDD WHICH MAKES THE CAN VISIBLE

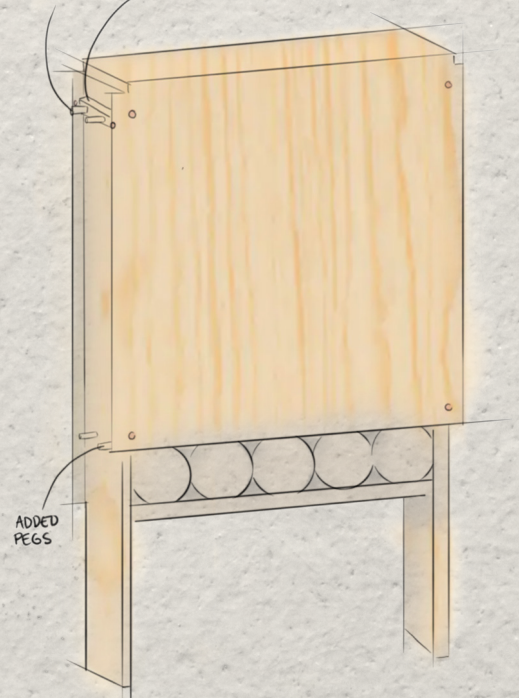


ADDED PLYWOOD PARTS THAT HIDES THE GAP

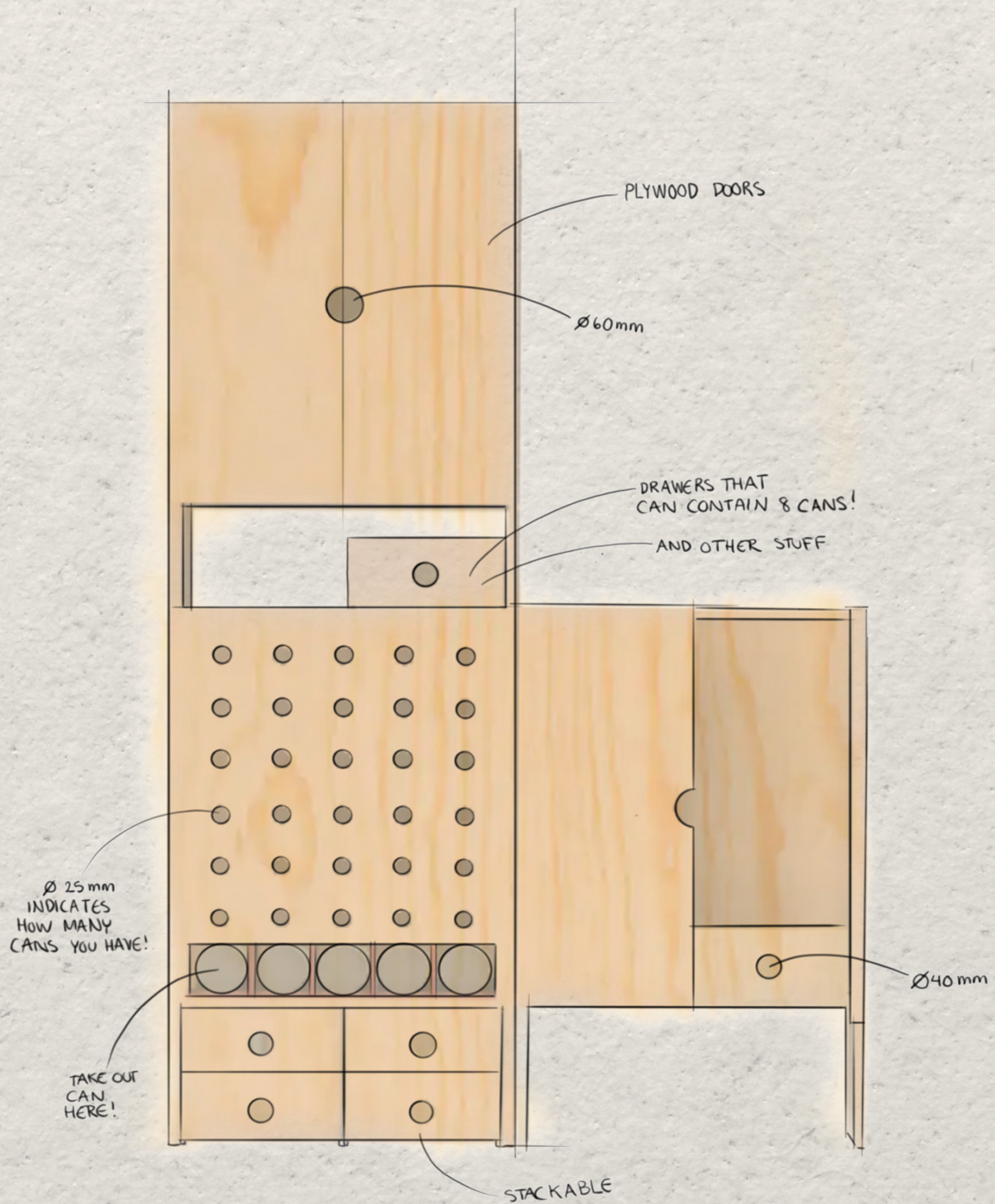
ADDED MATERIAL -> MORE PARTS = BAD



ADDED MATERIAL TO MAKE IT STACKABLE



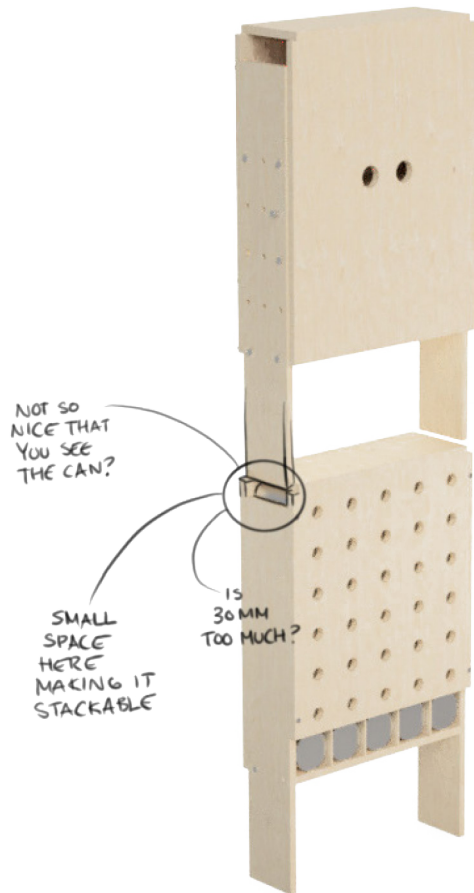




After several iterations, the third ideation phase proved to be a significant step in the design process, as the focus shifted towards creating a more easily assembled and lightweight product. Multiple variations of the concept were explored, with careful consideration given to the diameter of the holes and the height of the furniture.

Through this phase, several promising design concepts were identified, which were refined and tested further. Ultimately, the emphasis was placed on achieving an optimal balance between functionality, aesthetics, and ease of assembly.





ROUNDED  
LIDD! NO....

ROUNDED  
CORNER, NO....

METAL  
DETAIL! NO....

RED  
PLYWOOD  
FRONT?  
NO?

# FINAL CONCEPT

**“A stackable storage system ”**



# **CANS**

***- A circular prepping system for single households.***





## **SETTLING DOWN IN YOUR NEW STUDENT ACCOMMODATION**

The fundamental purpose of the design is to serve as a viable option for individuals who intend to purchase furniture items upon their children's departure from the parental household. In the newly established household, individuals assume responsibility for setting up daily routines while also requiring adequate storage space for food and other essentials.



# GROWING UP

Moreover, the design's modular structure allows for scalability, wherein the units can be expanded to yield larger furniture items, thereby catering to the needs of those who relocate or commence a family.



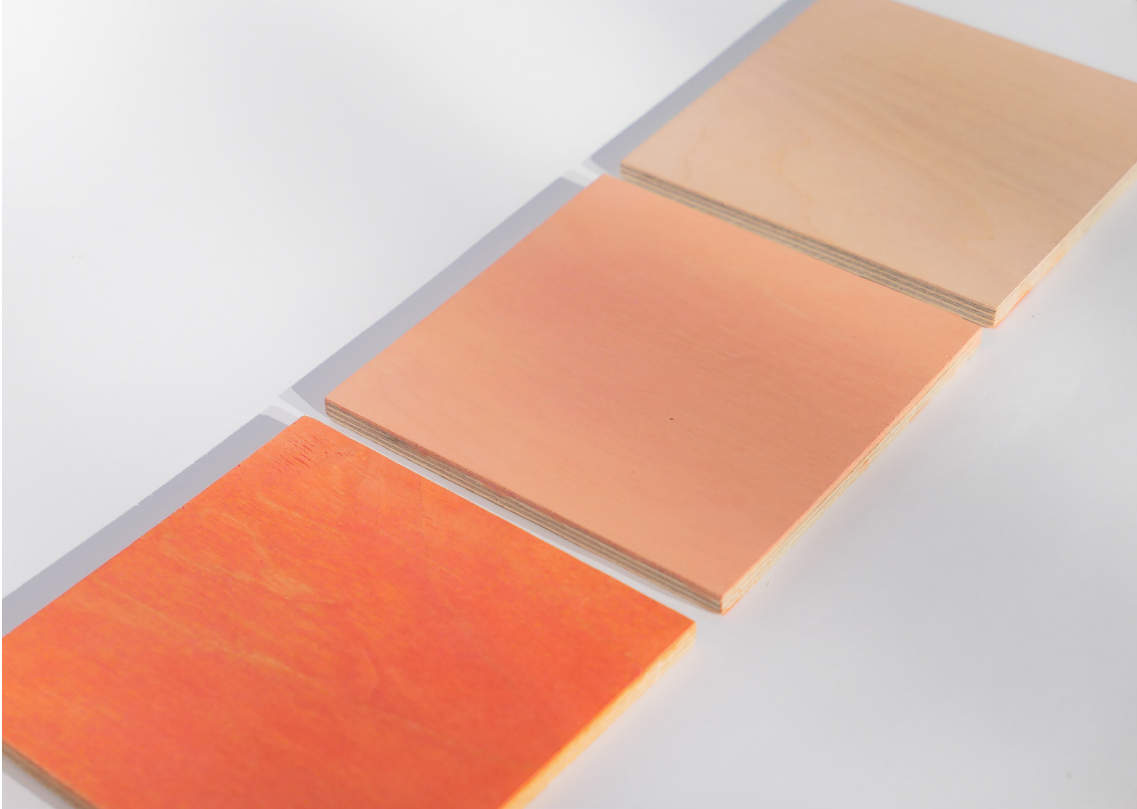
# CMF INSPIRATION







# CMF PROPOSALS







## SIGNAL ORANGE

Drawing inspiration from the iconic 1970 Porsche 911T model in signal orange, I came to the conclusion that this particular hue would be an appropriate colour choice for the detailing of their furniture pieces.



# CMF

In order to maintain a balance between boldness and subtlety, I made the decision to conceal the colour details of their furniture on the inside. This approach is intended to create an element of surprise and intrigue for those who come into contact with the furniture, as the unexpected burst of colour will be concealed from immediate view. Furthermore, the author has planned for the coloured inserts to be interchangeable, allowing for customization to a variety of different colours.

**/Birch /Pine-wood /Spruce /**

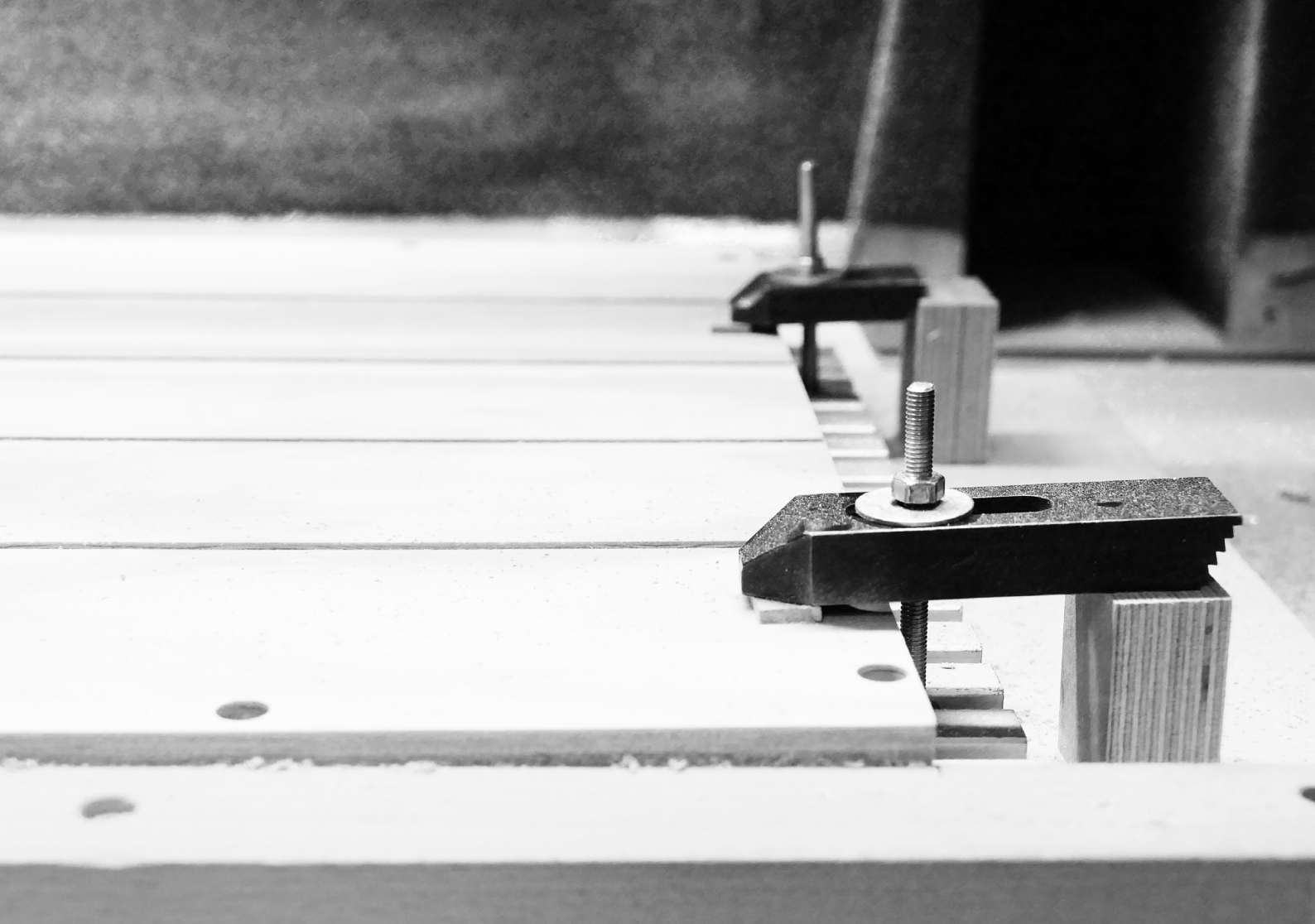


# PRODUCTION METHOD

For this work, I have chosen to CNC mill the front and back pieces. The CNC uses 10 mm radius and 3 mm radius mills. The total production time is 40 minutes for both the front and back pieces. The production method is chosen due to that it is a relatively cheap production method, and you get the exact proportions as in the CAD file.

I have also chosen to work by hand using a pillar drilling machine and screwdriver. The meeting between the precise CNC and my workmanship is something that is going to be reviewed later on in the project.







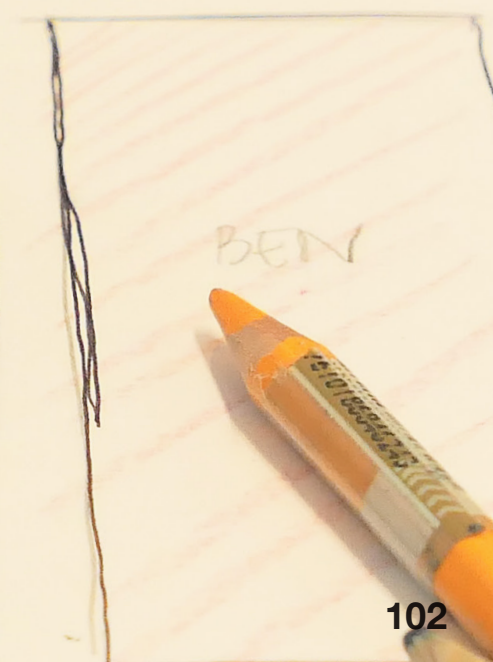
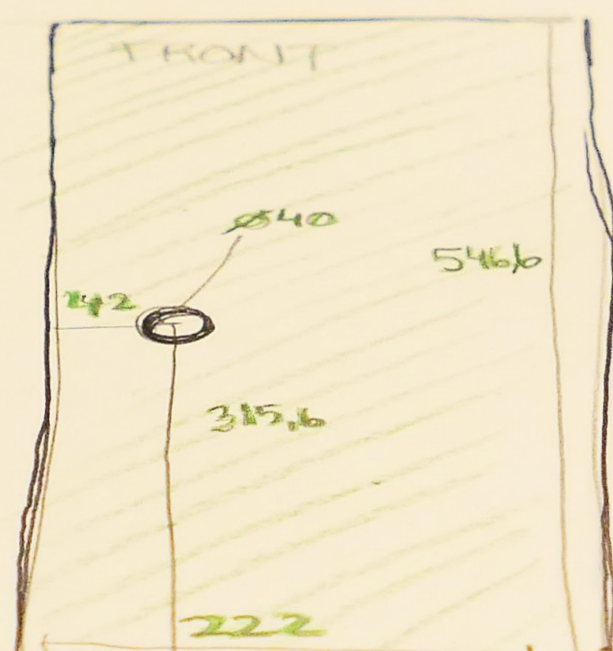
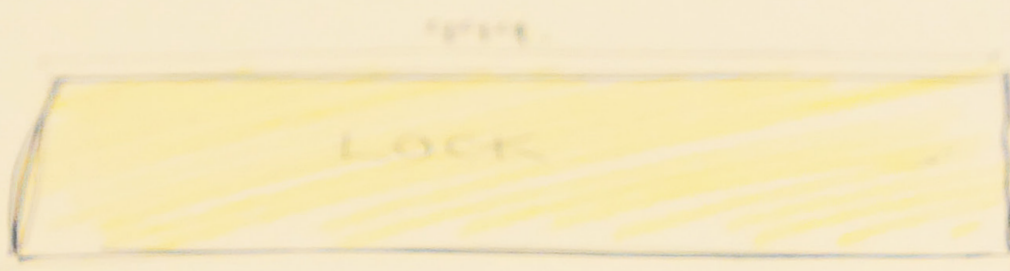


***“It is important to think of the manufacturing early on in the design. “***

During the process I learned how to CAM prepare a Auto Desk Fushion 360 file to be able to see how it was going to be manufactured, and later on, CNC the piece.

The process itself was quite tricky in the beginning, with many steps and a slow start up time. But after a while, and with help from John in the metal workshop, I understood what the different steps actually did and how to become a smarter CAD-designer. It is important to think of the manufacturing early on in the design.



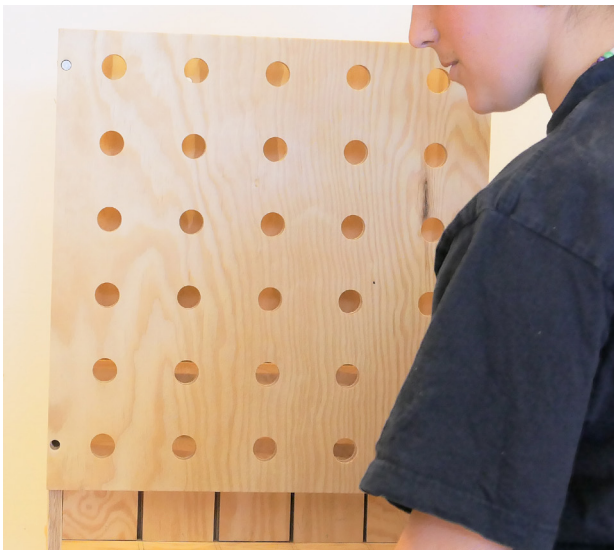










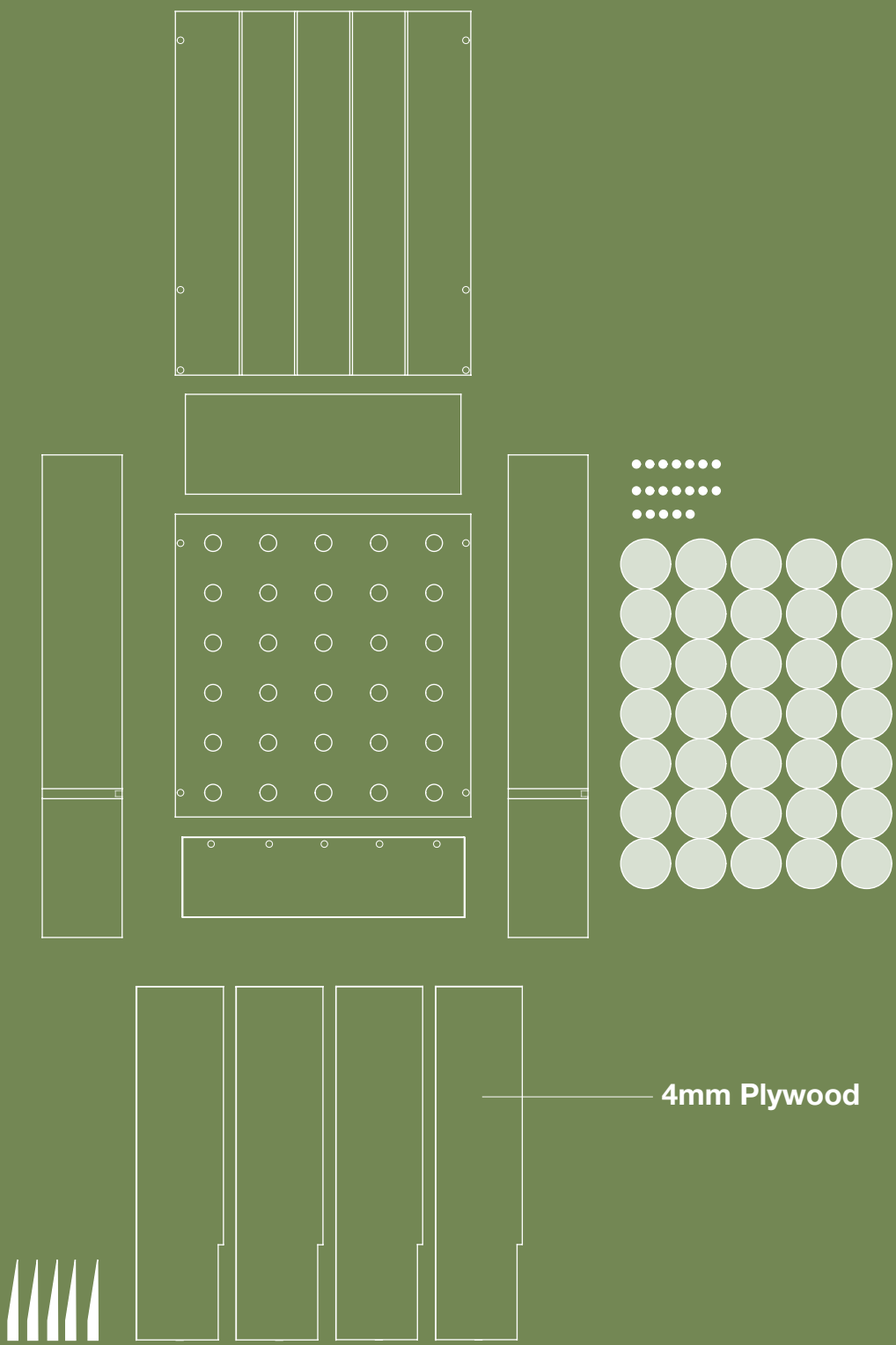


# TECHNICAL DRAWINGS



**All the parts.  
In detail.**

# PART I



**BACK**  
x 1

**LIDD**  
x 1

**FRONT**  
x 1

**BOTTOM**  
x 1

**DIVID-ERS**  
x 4

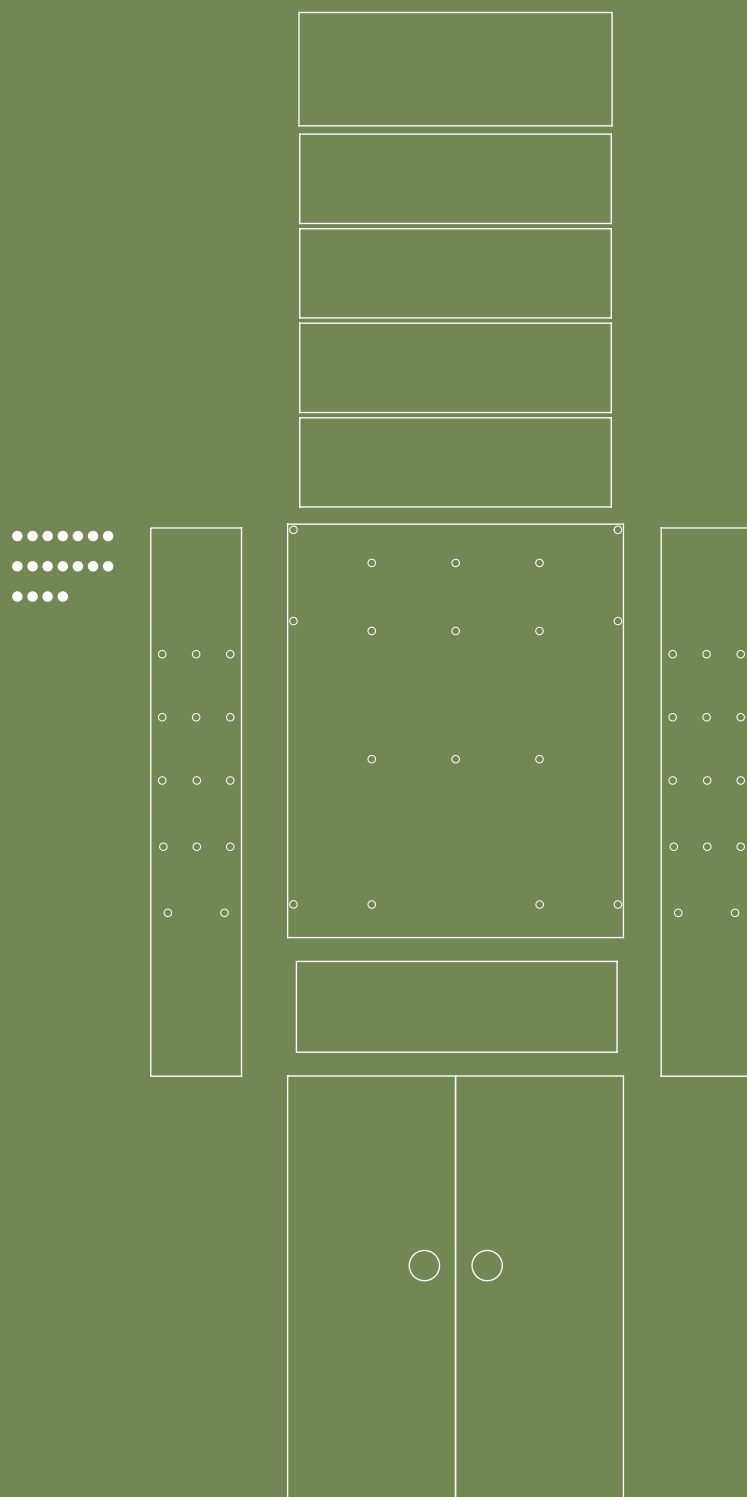
**SLID-ERS**  
x 5

**PLUGGS**  
x 19

**LEGS**  
x 2

**CANS**  
x 35

# PART II



**SHELF**  
**x 3**

**LIDD**  
**x 1**

**BACK**  
**x 1**

**BOTTOM**  
**x 1**

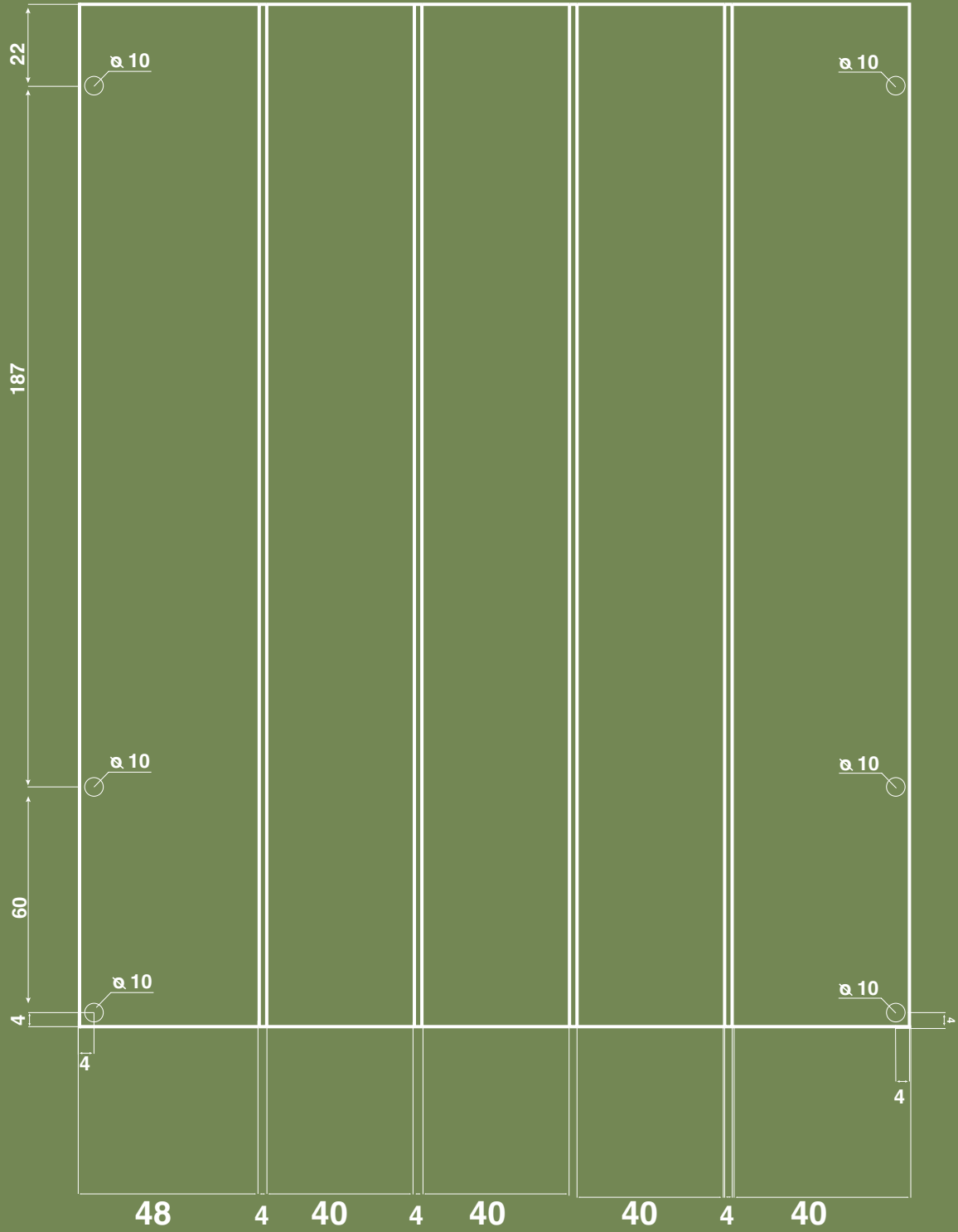
**DOORS**  
**x 1**

**LEGS**  
**x 2**

**PLUGGS**  
**x 19**

# PART I

**BACK**  
**x 1**





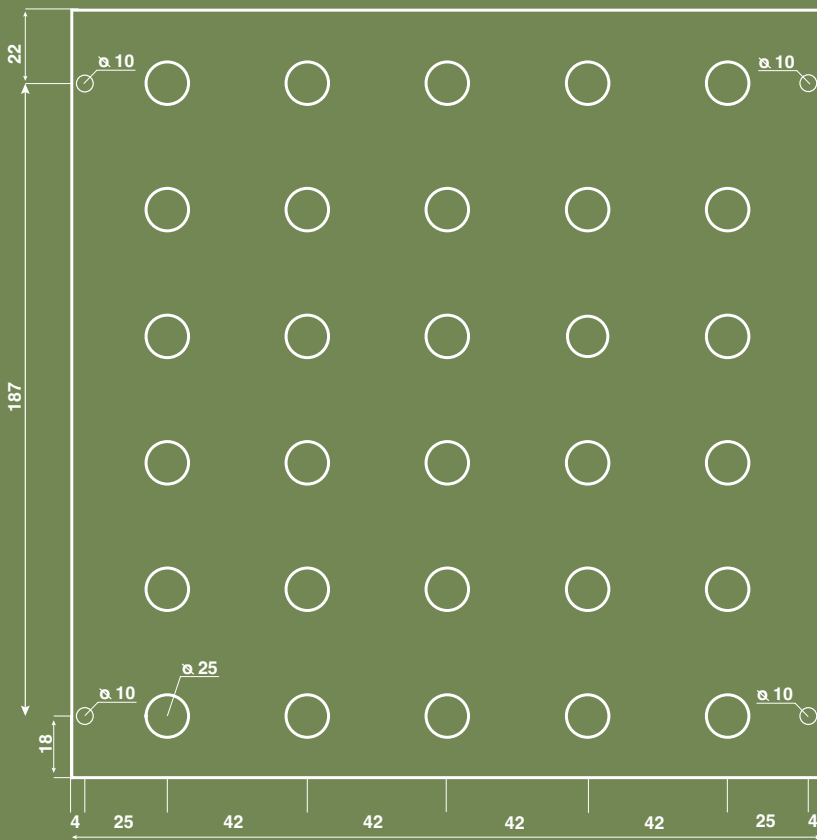
LIDD  
x 1

207

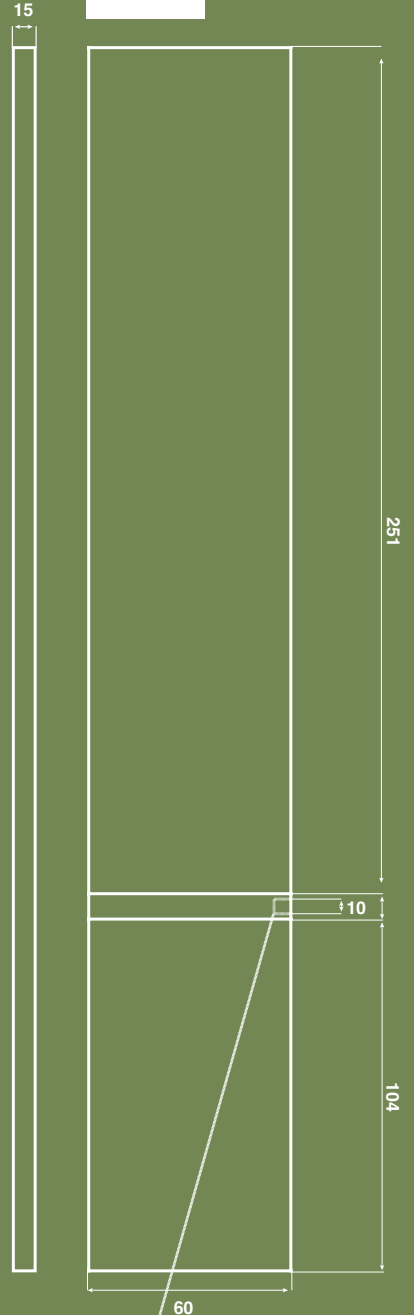


75

FRONT  
x 1

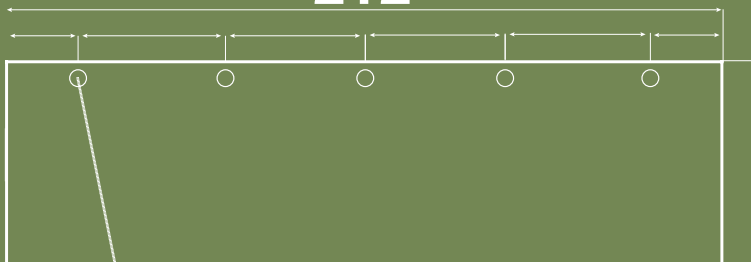


LEG  
x 2



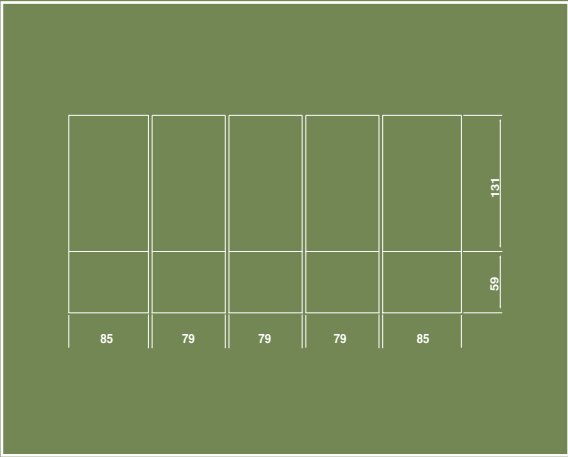
BOTTOM  
x 5

212



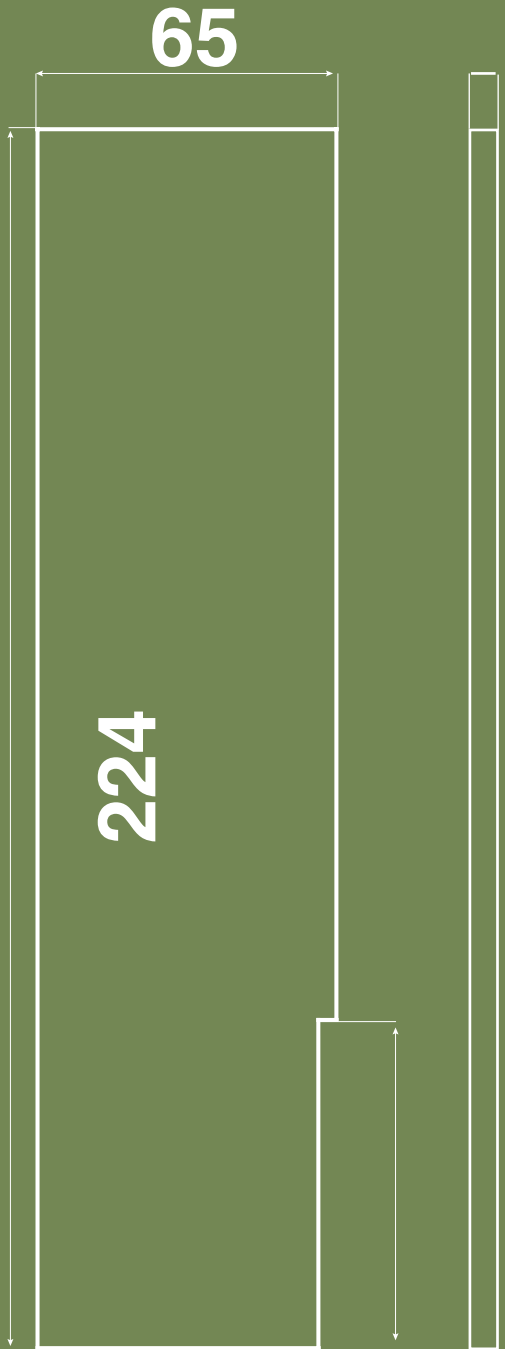
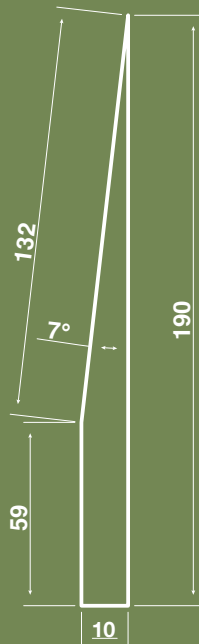
60



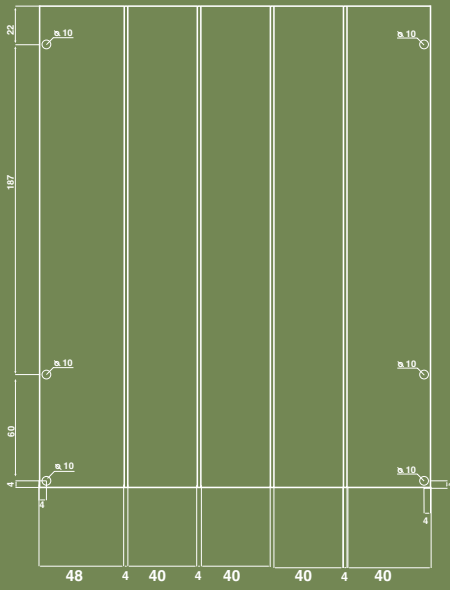


**SLIDER  
x 5**

**DIVIDER  
x 5**



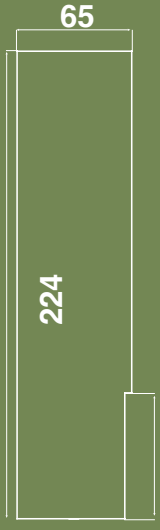
**BACK**  
x 1



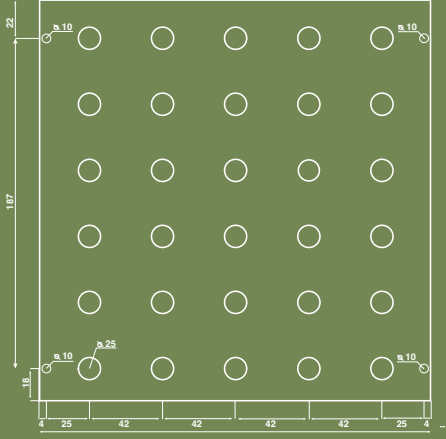
**LIDD**  
x 1



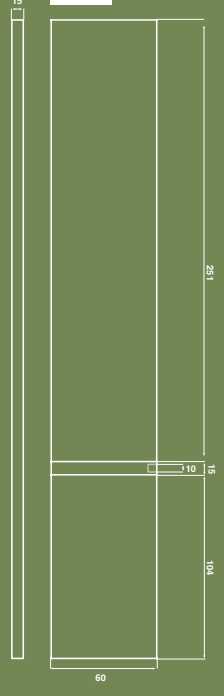
**DIVIDER**  
x 5



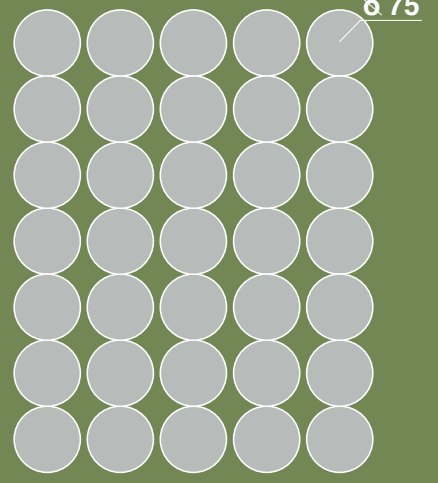
**FRONT**  
x 1



**LEG**  
x 2



**PLUGG**  
x 19

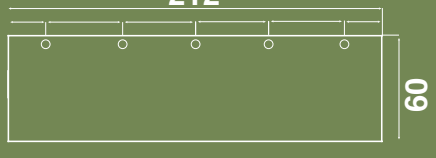


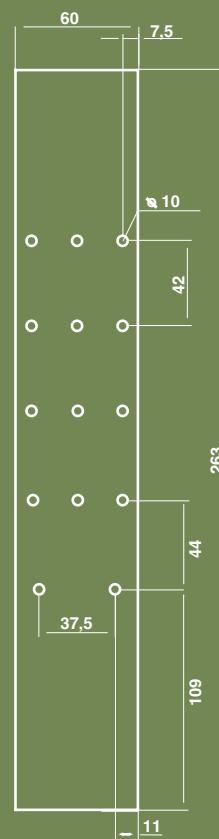
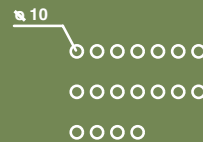
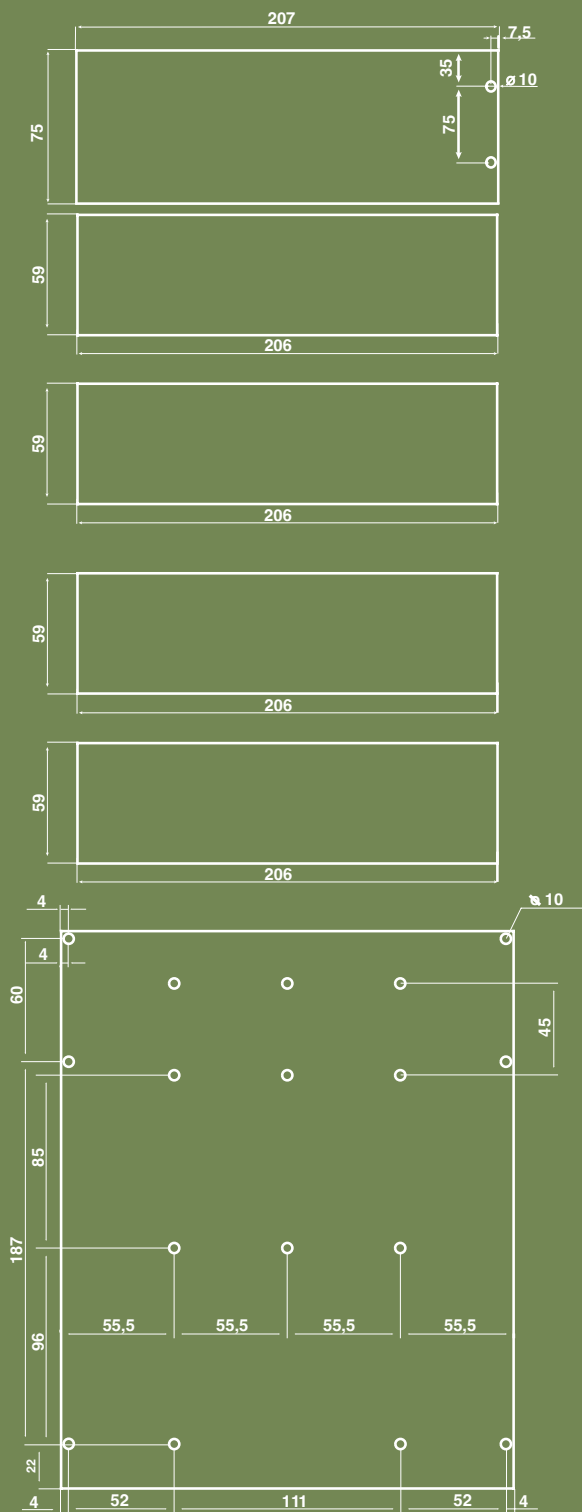
**CAN**  
x 35

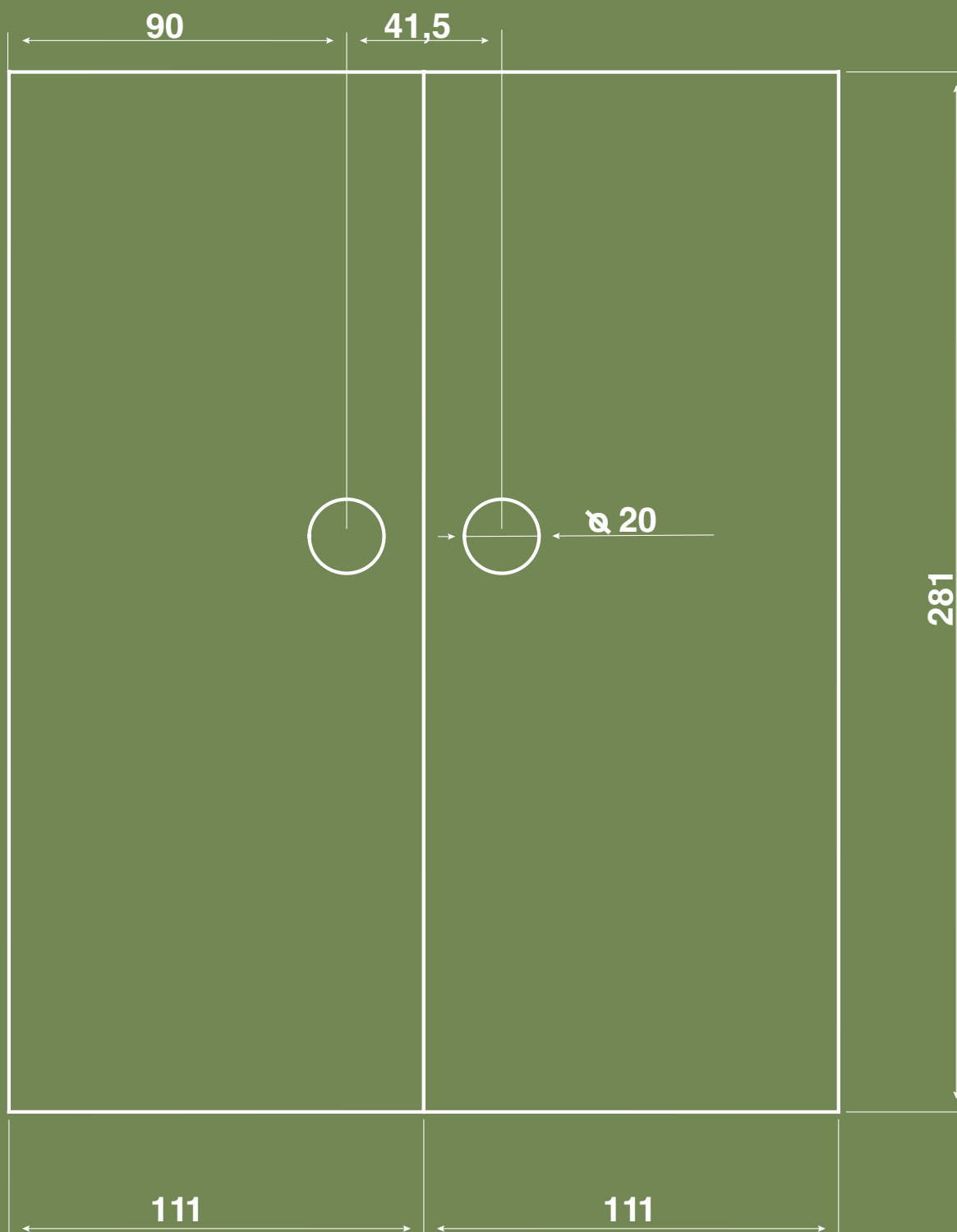
**SLIDER**  
x 5



**BOTTOM**  
x 5





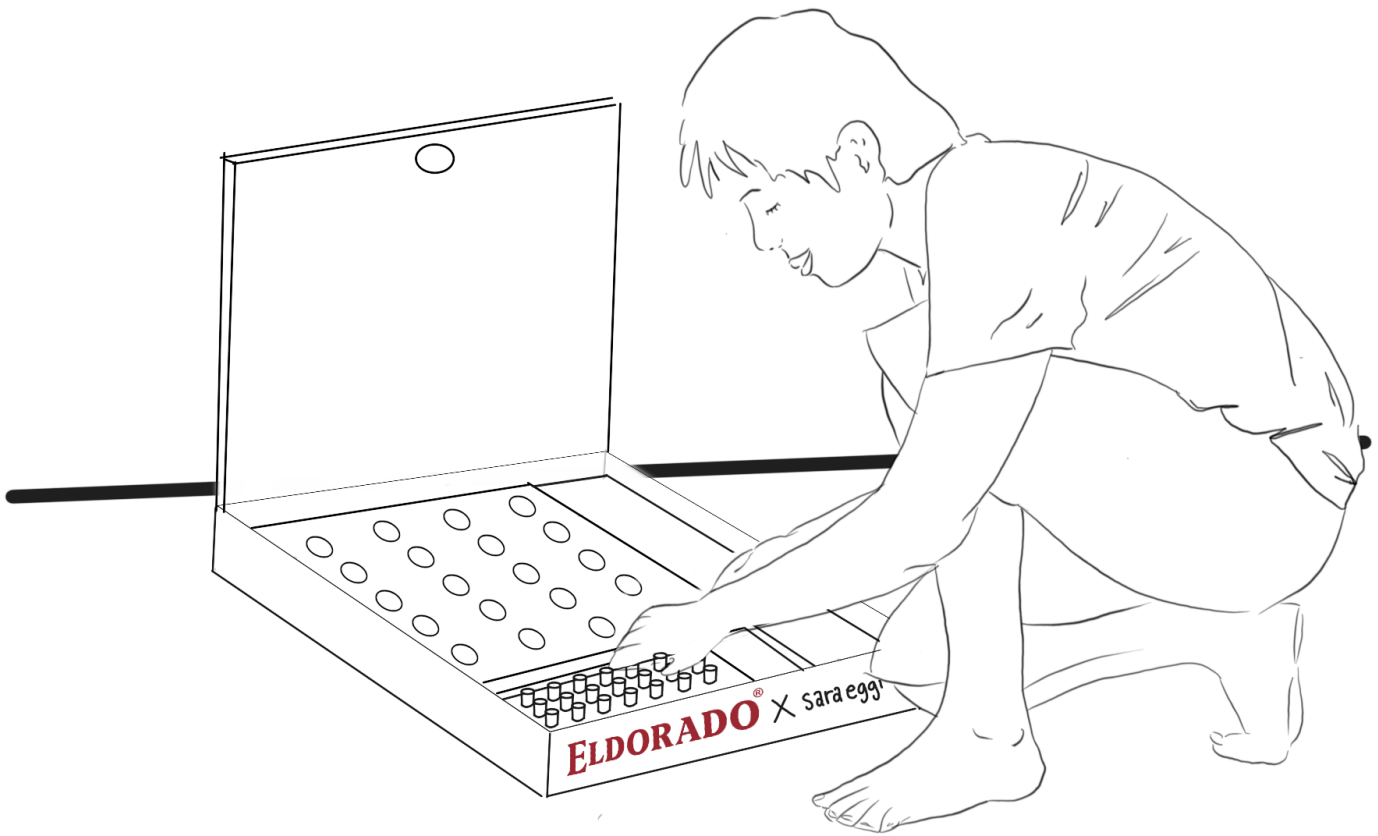


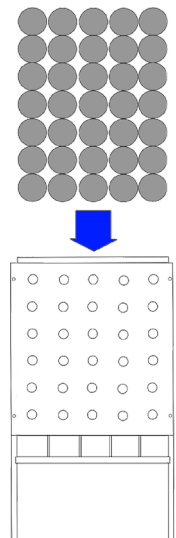
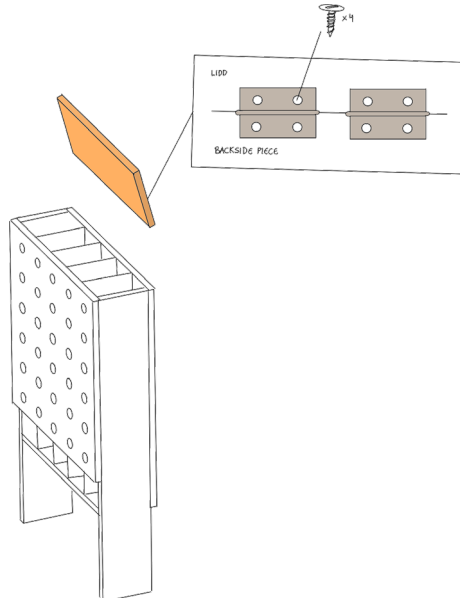
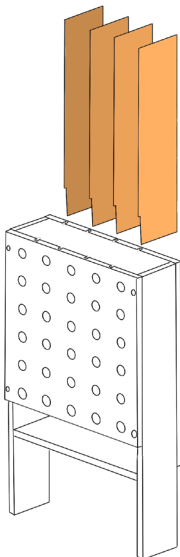
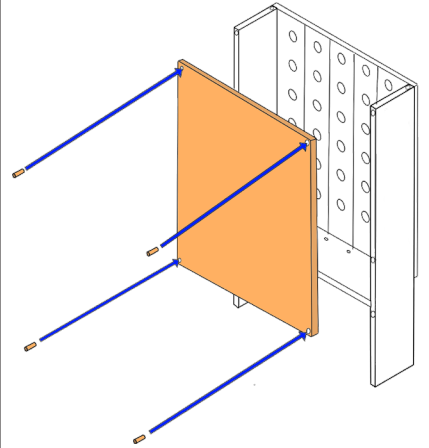
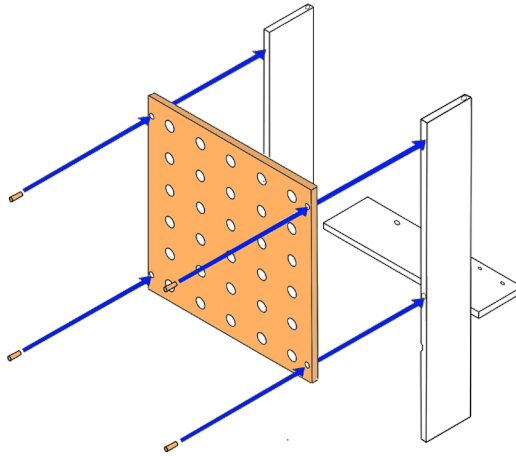
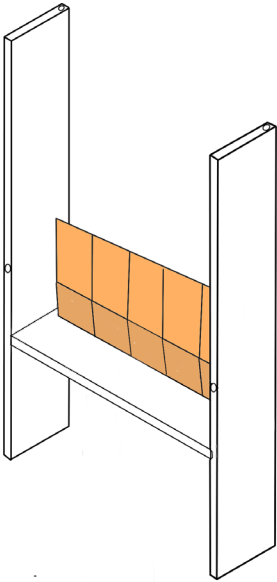
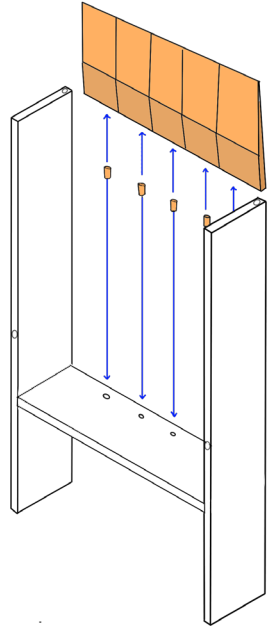
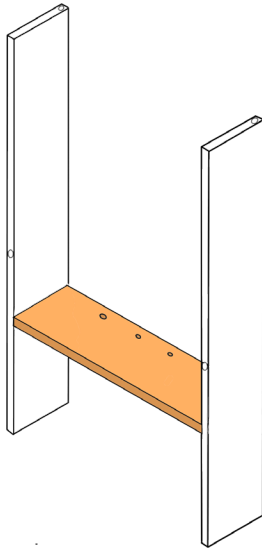
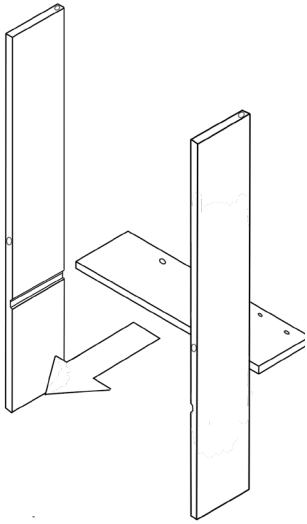


# ASSEMBLY PLAN

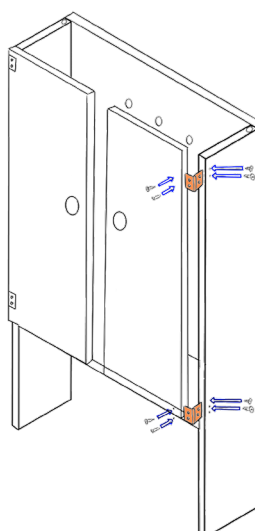
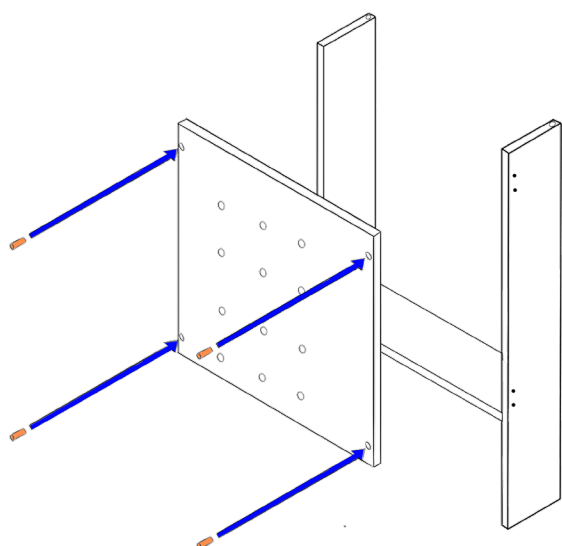
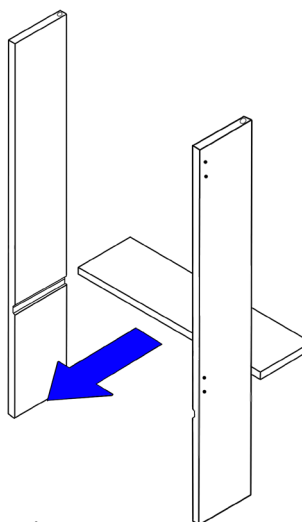
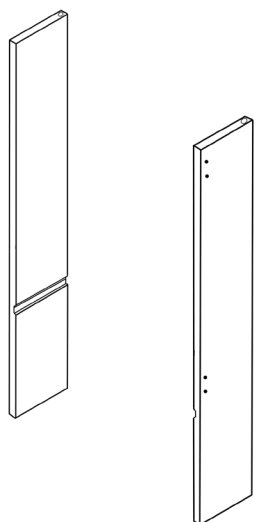
**Which parts goes  
where?**

# ASSEMBLY CAN SYSTEM

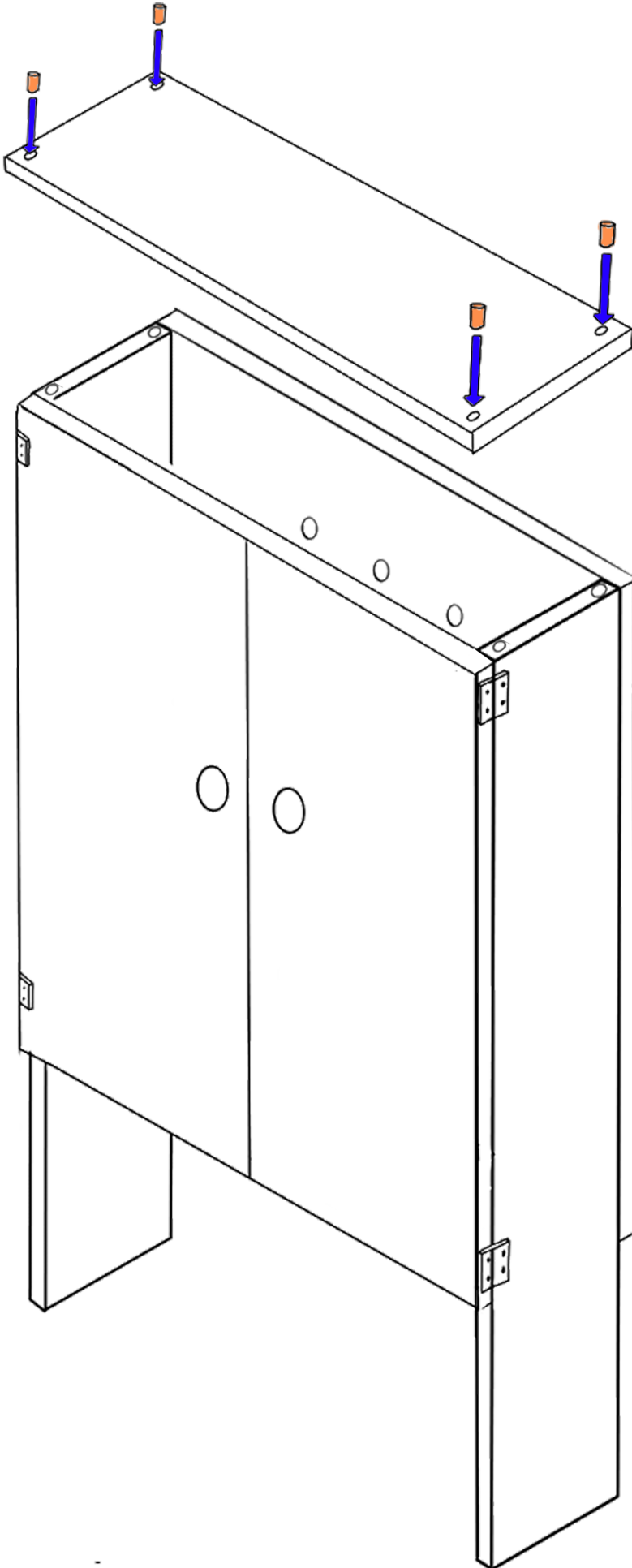




# ASSEMBLY PEG STORAGE



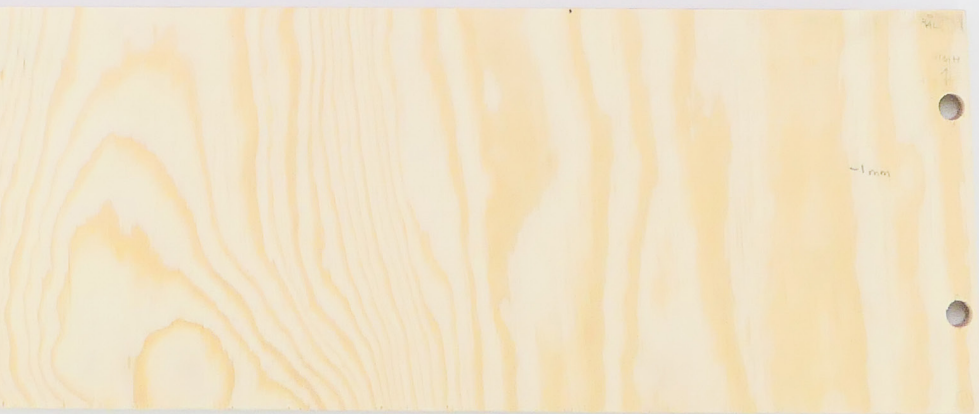




# FINAL PRODUCT

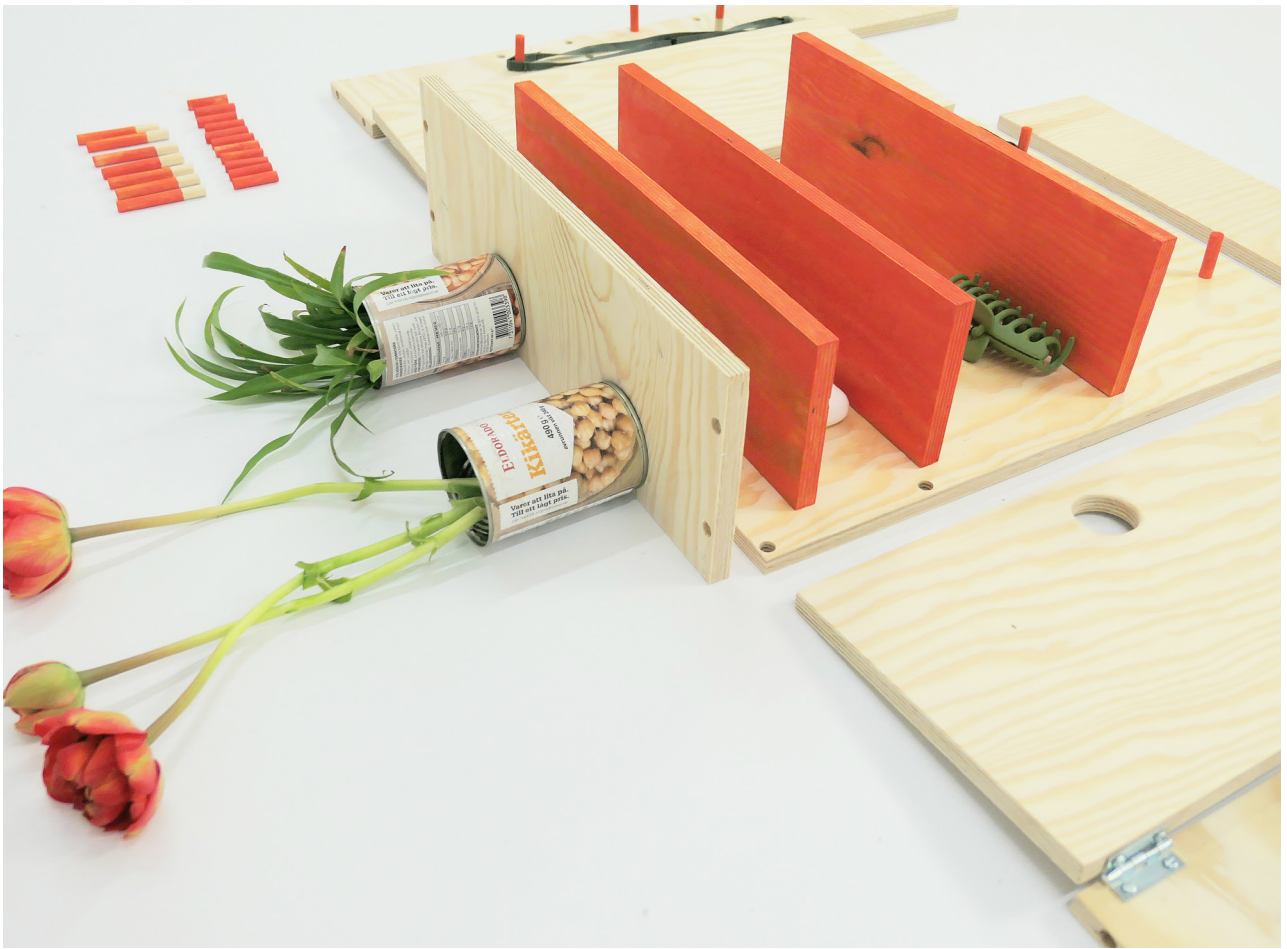
**Is it done now?**











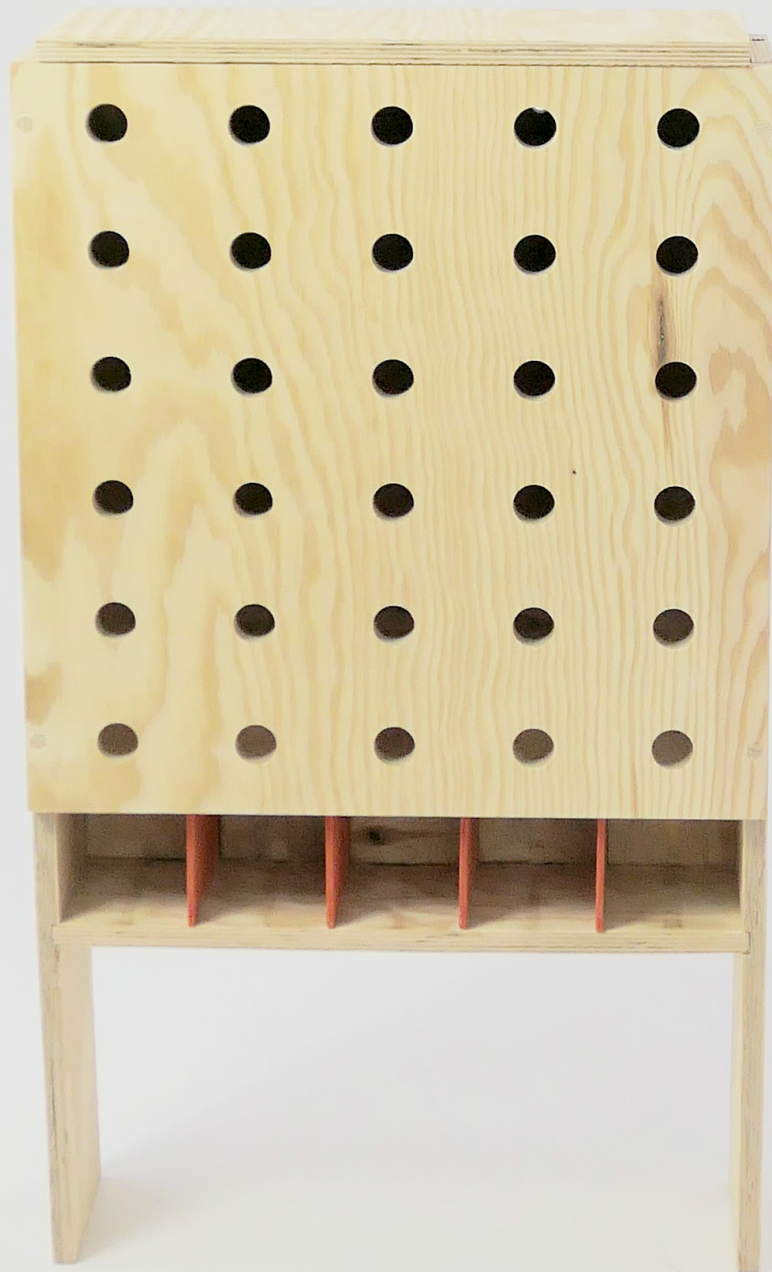








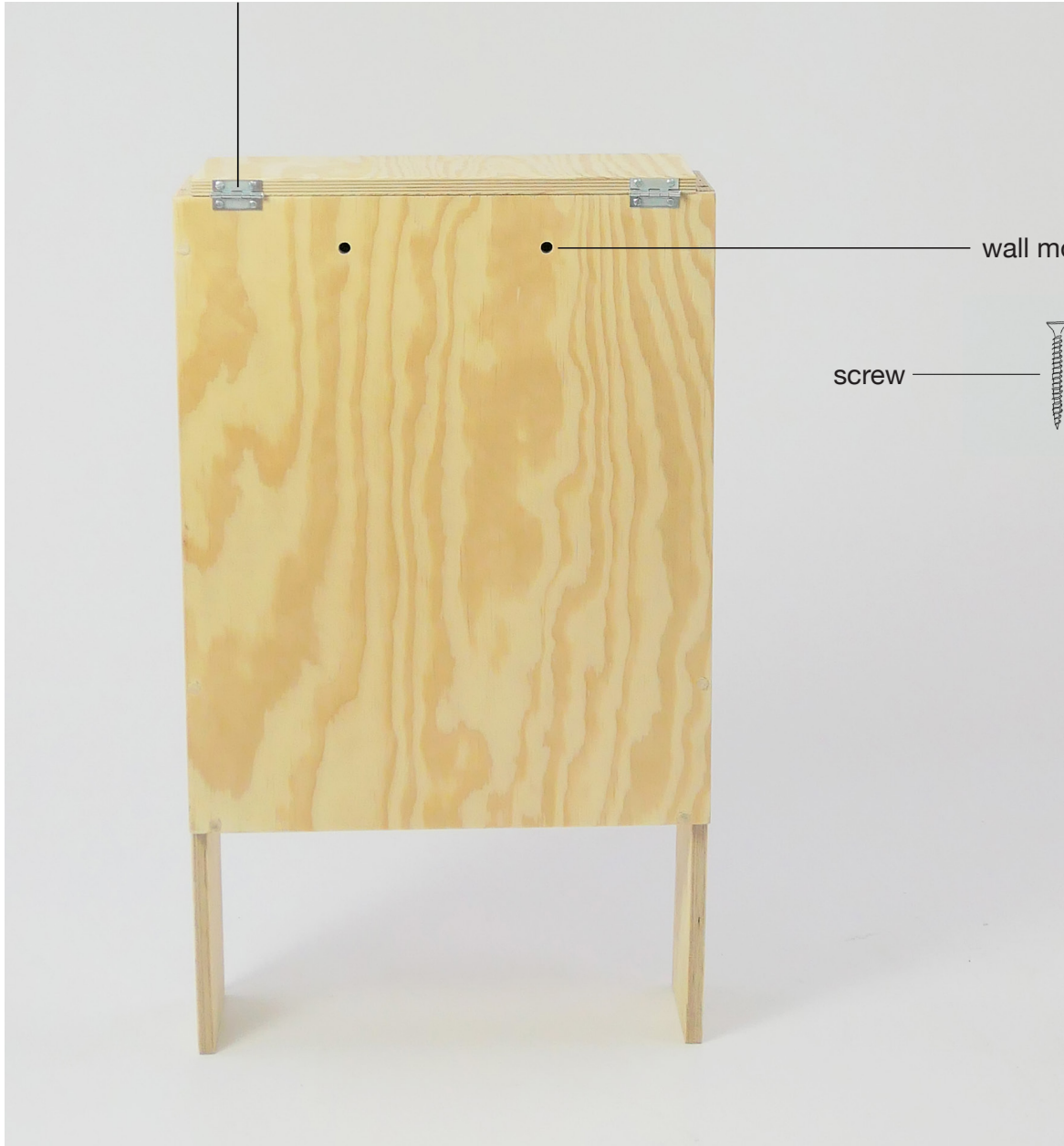








hinges to open lid



wall mounting holes

screw

distance pug  
between furniture  
and wall



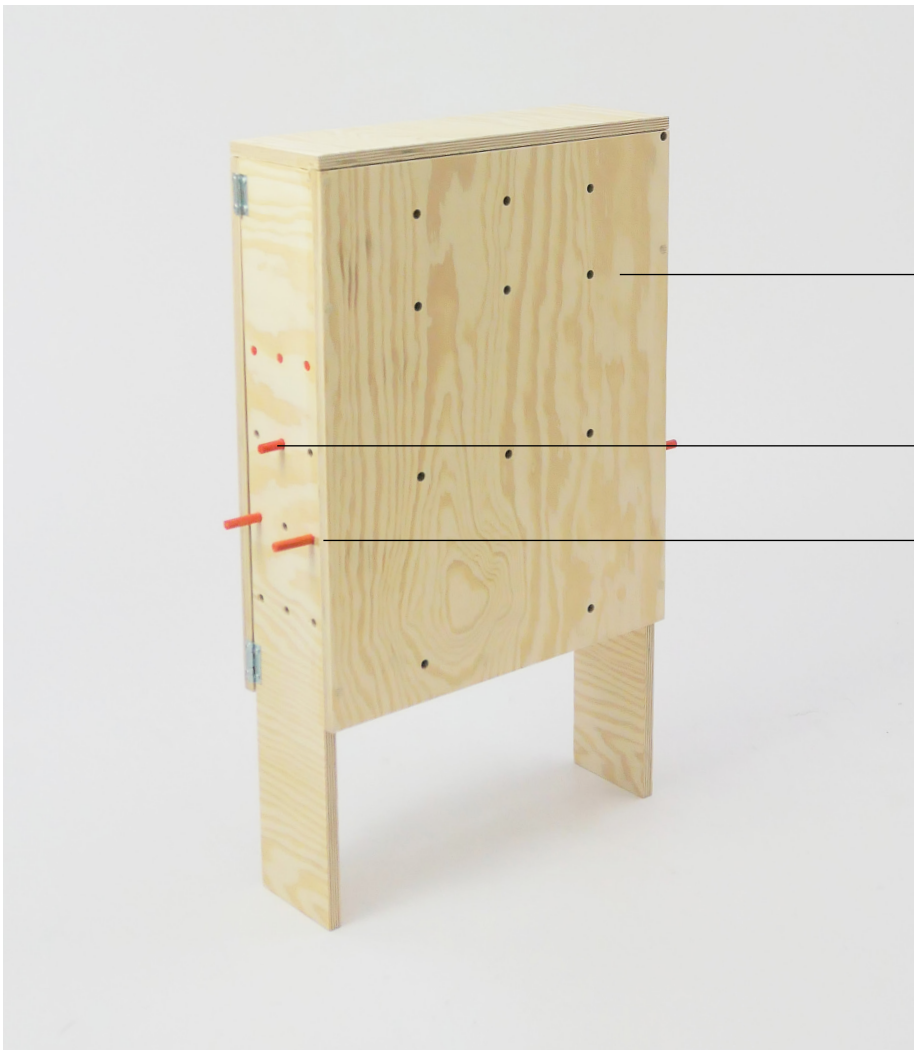
ELDORADO  
Röda  
Beybönor  
490 ge

ELDORADO  
Kikärter  
490 ge

ELDORADO  
Köttbällor  
490 ge







holes that you can wall-mount the piece with or add pegs to on the inside

short peg

long peg





# HOW TO CREATE STABILITY

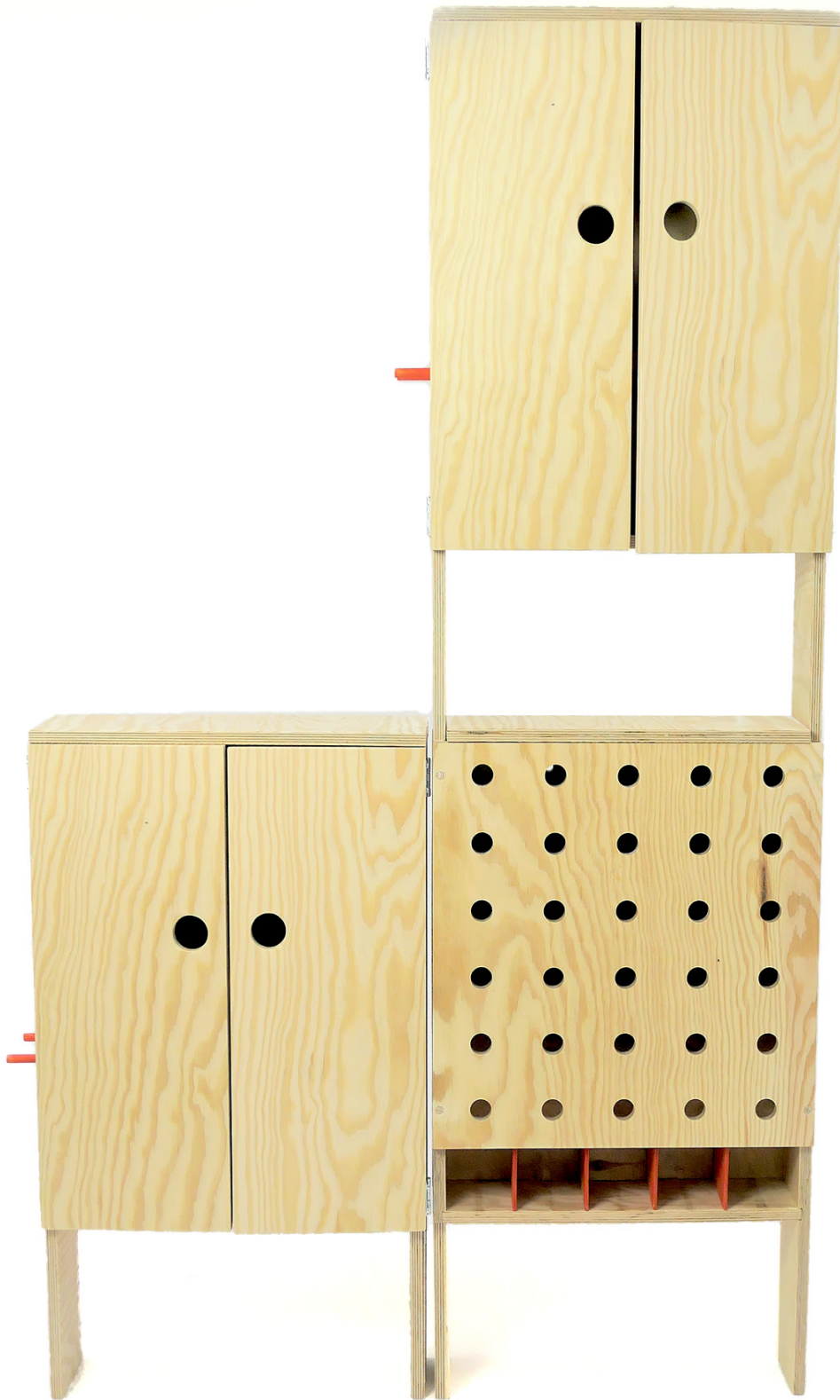
To create stability in the storage two different methods is used. Firstly, plugs to secure the can storage to the other things storage. Secondly, the other things drawer should be wall-mounted to create maximum stability



Plugs that create stability when stacked



Wall-mount the stacked shelf in the pre drilled holes







Push in the long pegs so  
you only see wood  
= perfect shelf peg distance









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Lomakäite  
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VITÄ HÖNÖ  
Lomakäite  
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KÖRSBÄR  
DOMA IER  
Lomakäite  
42090











# USER EXPERIENCE











ELDORADO  
*Röda*  
**Kidneybönor**  
400 g e  
avrunnen vikt 240 g

ELDORADO  
**Ärtor**  
400 g e  
avrunnen vikt 240 g

**Kvalitet:**  
Eldorado är  
utvalda med  
Svea och  
mest kunnig  
förpackning  
Produktionen  
Är förberedd  
med 24 timmar

ELDORADO  
**Vita Bönor**  
400 g e  
avrunnen vikt 240 g

**Tips:**  
Till det goda  
Till det goda

**When you have eaten up the cans you can either recycle them or as me, grow a micro garden in them!**

**Endless possibilities!**





At the exhibition, 500 cans were given away to visitors to start their prepping journey.







# ANALYSIS OF PROJECT

**“ Valuable learnings and pitfalls ”**





Throughout the duration of the project, I challenged myself to gain a deeper understanding of the design industry and how it operates in real-world settings. In order to achieve this goal, I sought out the expertise of subject matter experts and engaged in discussions with individuals who shared an interest in normalized prepping. These meetings were instrumental in igniting my creativity and honing my problem-solving skills.

Furthermore, presenting my ideas to industry professionals such as Emma Töpel Hansson and Redgert and comms was extremely valuable to me. Their insights from a conceptual and marketing perspective helped to elevate the project to the next level. I also greatly appreciated their trust and encouragement in my design proposals, as it gave me the confidence to push my ideas further.

The excitement of collaborating with a diverse group of people was a highlight of the project for me. The opportunity to engage in different types of meetings and partnerships made me feel supported and less isolated during the design process. I thoroughly enjoyed the thrill of working with others and will carry this experience with me moving forward.



As an individual working with cans, I have realized that they are much like people in the sense that they are all the same, yet they also differ in various aspects. Therefore, it is crucial to consider the tolerances when working with them. Working with a constrained volume has proved to be more challenging than I initially thought. It has become clear to me that one needs to have extra tolerances to ensure that the cans fit perfectly. Despite the fact that I thought I had provided ample margins, there is still room for improvement.

Moreover, I have learned that working with cans with different weights can also affect the weight of the can storage. Initially, I did not consider the mechanical properties that the furniture needed to have to work effectively. This oversight led to some issues with the weight of the cans. I realized that no other products on the market store cans in this way, making it difficult to understand the issues with weight.

However, I was able to solve this problem by using a heel that pushes the weight forward so it does not go straight down. This innovation proved to be a game-changer in storing cans effectively. Therefore, it is crucial to consider all aspects, including tolerances, mechanical properties, and weight when working with cans, as they are much like people in that they have their unique characteristics.









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Curt Arledge, *Design Ethics and the Limits of the Ethical Designer*, January 2, 2019, <https://www.viget.com/articles/design-ethics-and-the-limits-of-the-ethical-designer/> [hämtad 2023-03-1].

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# PICTURES:

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## Synthesis:

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