

MISTER



; A PROJECT ABOUT STIMLUATION FOR CATS



LUND
UNIVERSITY

Degree Project for Bachelor of Fine Arts in Design
Main field of study: Industrial Design

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Lisa Christiansson



MISTER; a adaptable cat tree

By: Lisa Christiansson

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From Lund University School of Industrial Design, Department of Design Sciences

Examiner: Professor Claus-Christian Eckhardt

Supervisors: Professor Claus-Christian Eckhardt, Lecturer Anna Persson,
Senior Lecturer Jasjit Singh, Senior Lecturer Charlotte Sjödel

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A big thank you to all of the workshop guys for answering all of my questions and helping me figure out how to best build my prototype. A special thanks to David, Peder and Philipp for putting up with me terrorizing them every step of the way.

ABSTRACT

This bachelor's degree project started with discovering the problematics of furniture and products for animals, specifically for cats. Research was conducted to find out the vital parts of these products and what cat owners found problematic with the ones on the market. The focus was to create a product that will last and improve the look of the pet owners home. The result is a cat tree that is adaptable, can be proudly displayed in the home and that has a focus on longevity. This tree will grow with you and your feline friends.

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INTRODUCTION

More and more people are moving with their cats into bigger cities and therefore cats are spending more time indoor. When your cat is spending most of it's time inside it's important to give the cat a stimulating environment. For cats to be healthy, they need a number of different things: food, water, places to sleep, opportunities to scratch and hide. Cat owners need to ensure that the cat has an outlet for its hunting instincts and natural behaviors. A cat that spends a lot of time indoors must be given the same opportunity for stimulation that is available outdoors. The most common method for stimulating indoor cats is a cat tree that fulfills several of the cat's needs. The majority of these products that exists today don't fit the aesthetics of modern homes and they usually have a short lifespan. Furniture and products for animals usually have a specific look to them that often looks cheap, not well made and they sadly in most times live up to that.

"CATS ARE ACTIVE ANIMALS THAT REQUIRE A LOT OF STIMULATION TO FEEL GOOD, BOTH MENTALLY AND PHYSICALLY"

(Aktivera Din Innekatt | Sveland Djurförsäkringar, n.d.)

"DESIGN A PRODUCT THAT STIMULATE CATS INDOOR, FITS INTO MODERN HOMES AND WITH A LONGER LIFESPAN THEN EXISTING PRODUCTS."

MOTIVATION

Almost all the cat trees on the market today have the same look and materials. They are poorly constructed with cardboard and in the best case; particle board. Even though the materials are cheap, these trees are expensive. They are covered in sisal rope and fluffy fabric that gets worn just after a few months of use. Cat owners still buy these products due to the fact that cats need to get a stimulating environment, but most of them don't like the products.



ANALYSIS

Market research is important in every project but in this one it was extremely important and that is because this type of product exists in many different ways already. This specific research was to investigate what is already on the market, which types have a wide availability and what is missing. The finds were divided into six categories to more easily analyze them.

In the categories "floor to ceiling" and "average" the most common cat trees are. These are the ones you would typically find in a zoo boutique and there are thousands of different options to buy. They have the basic functions of a cat tree (scratch, sleep, play, etc.) and they look like it as well. The price of these varies depending on the size and where you buy it, they are usually more expensive when you buy them in a zoo boutique. Floor to ceiling trees usually land from 800 sek and up to 3000 sek (more depending on size and material).

FLOOR TO CEILING



WALL MOUNTED



ADJUSTABLE



The adjustable ones are more rare and you have to do a lot of digging to find these and they are both lacking when it comes to scratching opportunities.

AVERAGE



'CLEAN' AESTHETIC



LUXURY



The category "luxury" is what it sounds like. They look nice and are good quality products, however they are also missing the scratching part. They are also smaller than what some cats need. The 'tree' on the right costs around 7000 sek, without the bed and hanging toy. It's basically a very expensive shelf for your cat.

ANALYSIS

To get a better understanding of what the general cat tree situation looks like for more people than myself and the ones I know: an online survey was made and published in different groups on Facebook that specifically are for people with cats.

I wanted to get a broader view of what different types of cat trees people own, what parts get used of the cat/s and also longevity of the product. Questions like, how many cats they have, if they are outside or only inside, where the tree is placed in the home and if they have needed to replace it was also asked and those results along with the rest of the questionnaire can be found in appendix I. A total of 178 people answered the survey.

90,8 % of the people that answered have a traditional cat tree at home and only 2,3 % dont have one and have never had one before.

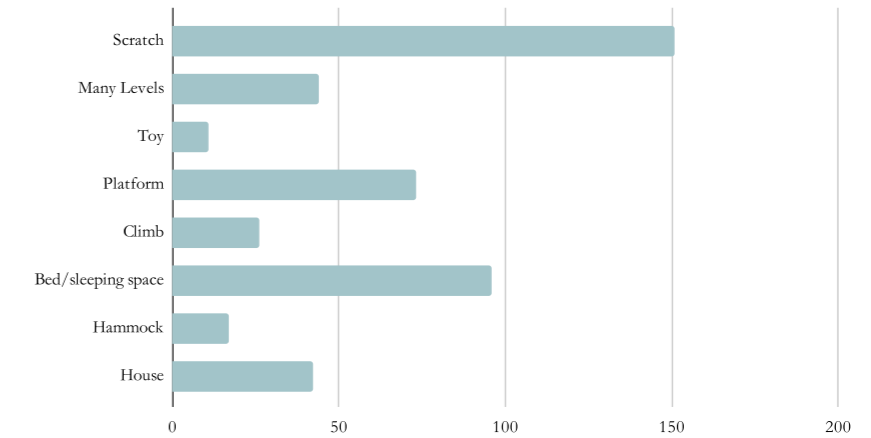
The most common functions were scratch and space to rest and sleep. These were also the most used functions (based on what the owner has seen)

This gave a good base for the function analysis that was done later in the research stage.

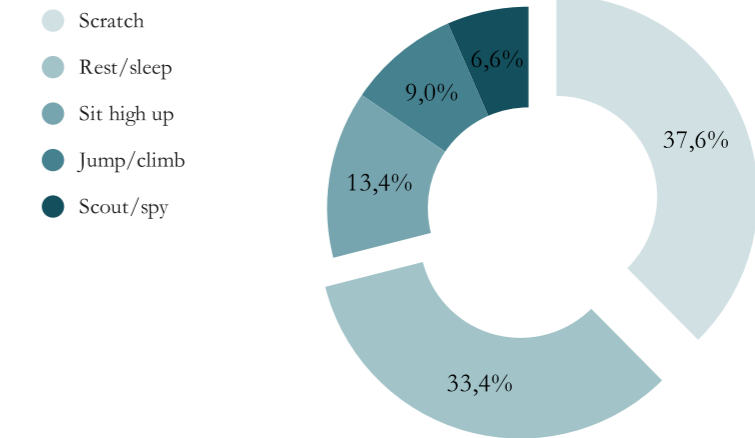
"LIKE A HOME GYM FOR MY CAT"

"LAYS ON THE HIGHEST PLATFORM IN SCOUT MODE"

What functions does it have?



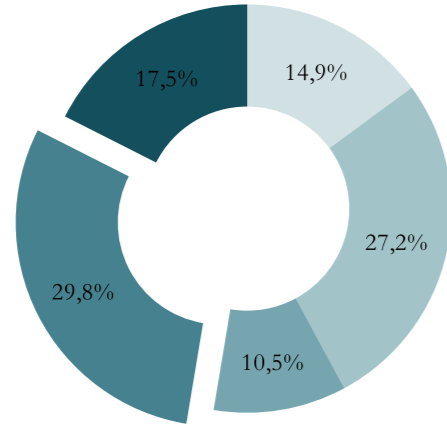
Which functions do your cat/s use the most?



ANALYSIS

What do YOU like about the tree?

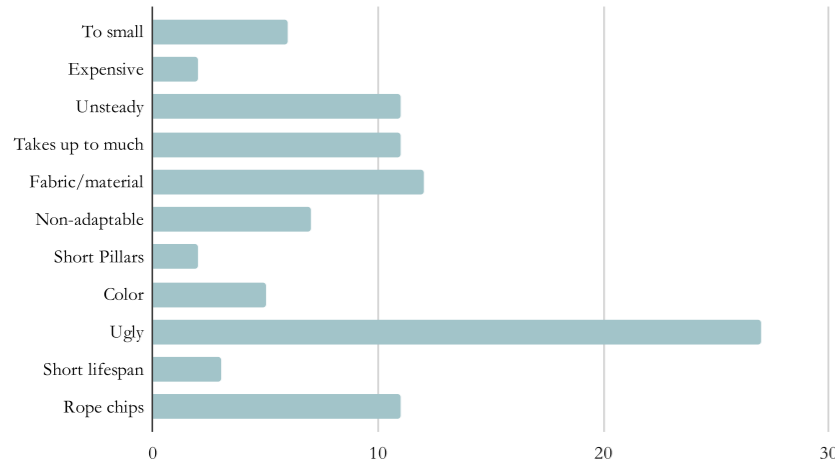
- Steady
- It's function
- Size
- My cats like/use it
- Color



When I asked what they don't like about it, there were a lot of different answers so I had to divide them all into categories. The most common answer was that the tree is ugly.

"A BIT UGLY BUT OK"

What don't you like about the tree?



I wanted to know what the cat owners thought about their cat trees. 29,8% said that what they like about the tree is that their cat/s like/ use it. The second most answered was it's size.

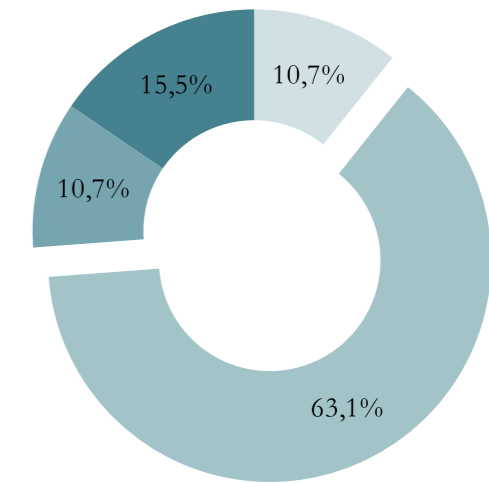
"IT'S UGLY AS HELL"

"TOO MUCH FLUFF"

The people who had replaced parts answered that they had to replace the scratching part. This makes sense due to the fact that the cats are using this surface to scratch and file down their claws.

If you have had to replace parts, which ones?

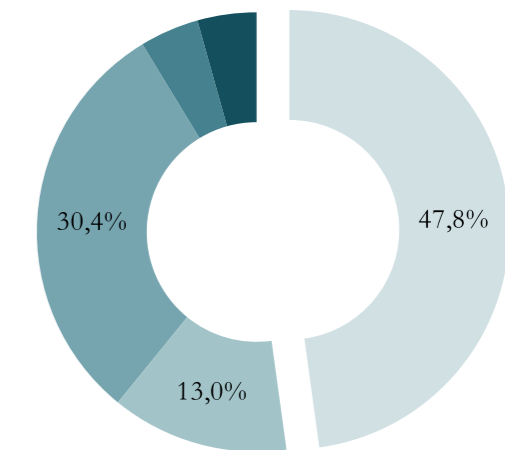
- Whole tree
- Scratching part
- Fabric/bed
- Other



Many people found their cat trees difficult to maintain and clean. The most difficult things were the fluffy material that often covered most of the tree and that you couldn't remove the fabric to wash if needed.

What parts of the tree do you find hard to maintain?

- Fluffy material attracts dirt/hair
- Corners/form
- Non-removable fabric
- Sisal rope sheds
- Non-changable parts



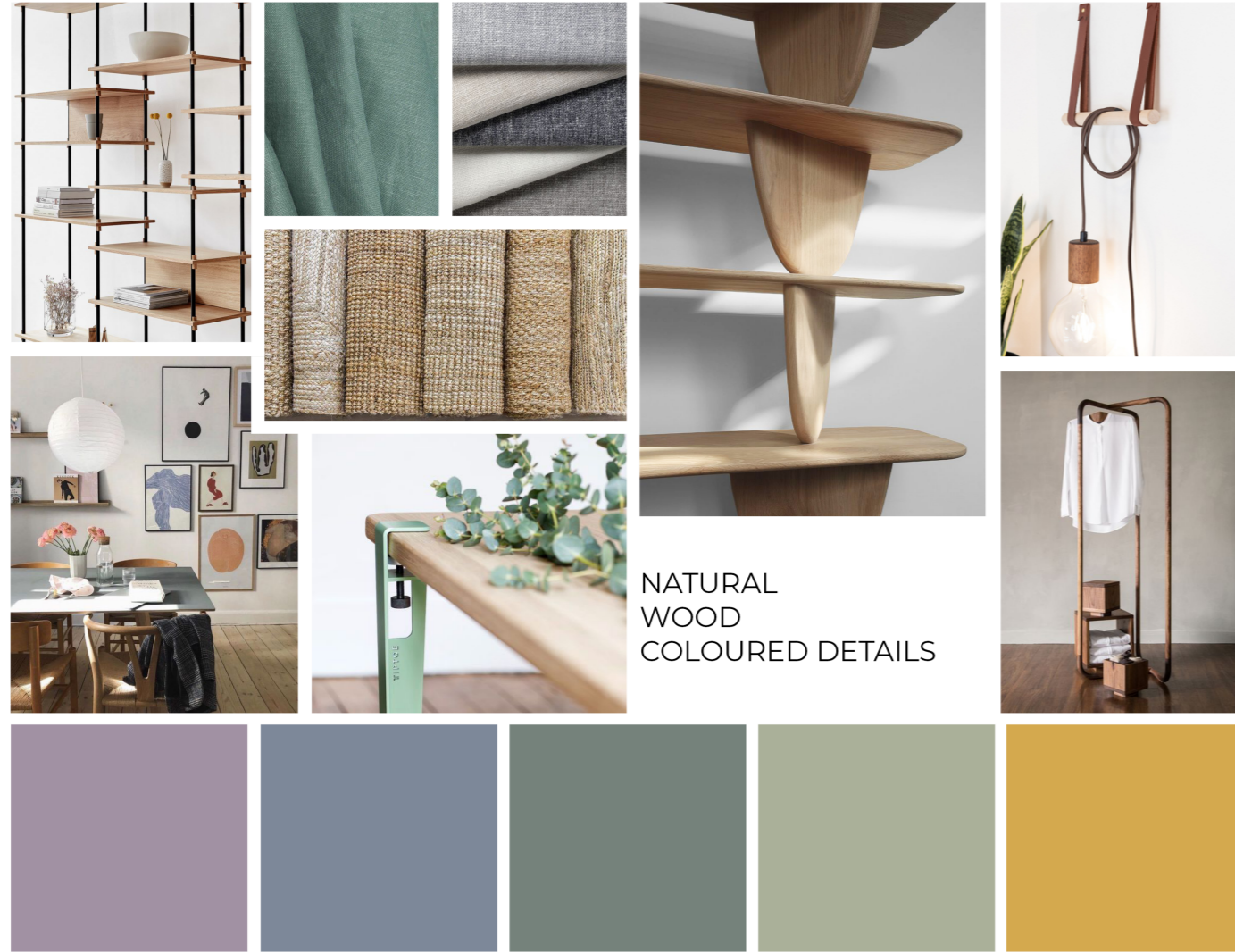
"VOMIT IN THE FLUFF"

ANALYSIS

Cat owner (1 - 3 cats)
Their cat/s spend most of the time indoor
Prioritize their cats health
Conscious about the environment, but often take the easy path
Do not like to compromise when it comes to the appearance of their home

FUNCTION		RANK
provide	stimulation	MF
allow	scratching	N
allow	sleep/rest	N
allow	stretching	D
allow	jumping	N
allow	climbing	D
allow	watching	D
be	easy to maintain	N
be	adaptable	N
minimise	parts	D
simplify	repairing	N

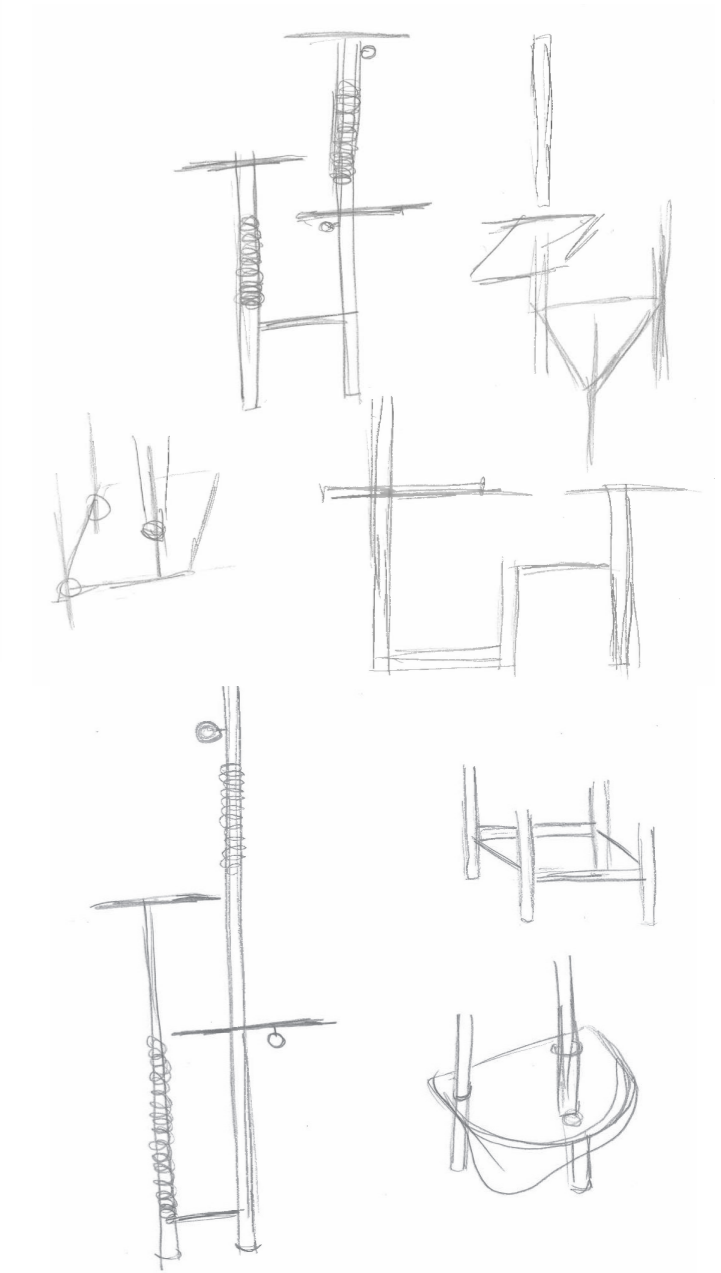
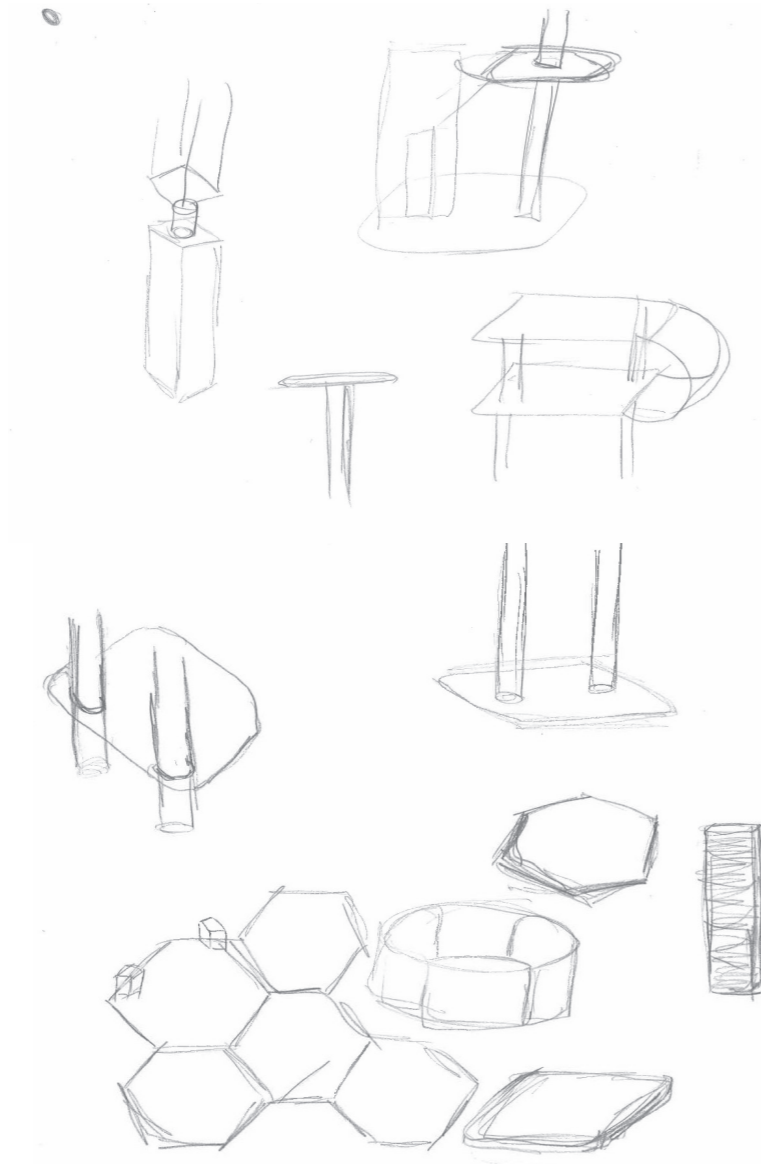
ANALYSIS



IDEATION

To kick-off the ideation process I got to sketching as one usually does in the beginning of a design project. But this time it turned into a mass production of sketches with no useful ideas or inspiration.

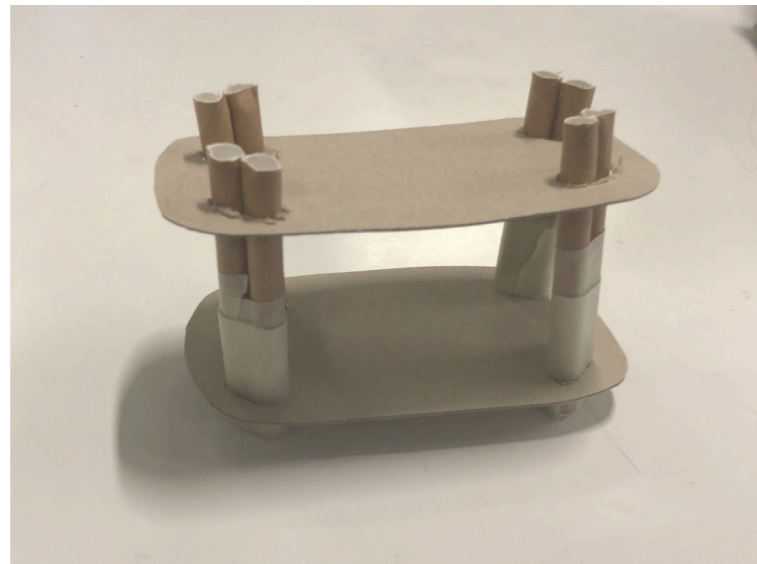
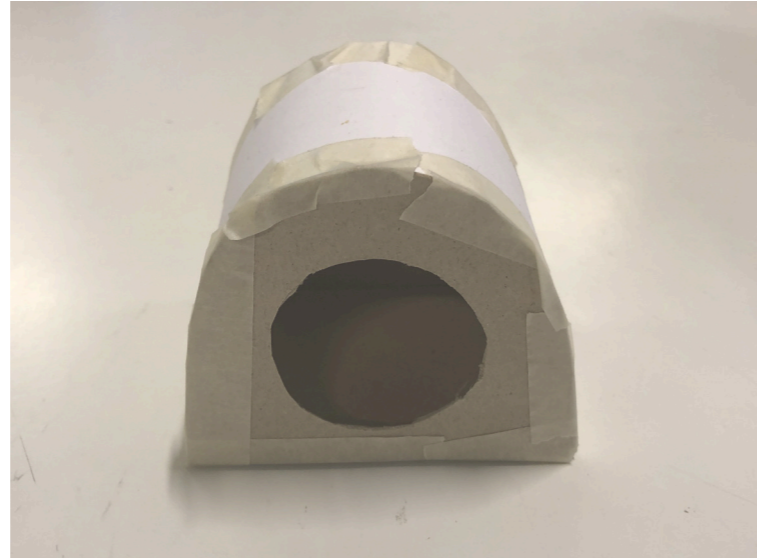
At the beginning I was stuck in how cat trees usually look and when trying to get away from this, all that was left was half-hearted bits and pieces.



IDEATION

My attempt to get un-stuck in my ideation was to create small 3D mockups. With basic materials, tape and glue I started putting together shapes, unfortunately this just made me more confused than before.

After this I shifted my focus to the specific functions that were most important for this product.

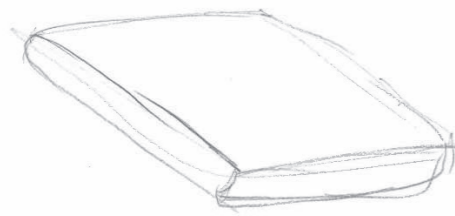


IDEATION

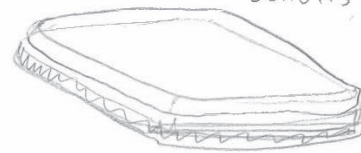
Removable fabric
Washable > 600
Natural material

linen
cotton
few different
colour options

Washable
Cushin + removable fabric



band
Elastic
secured by - Velcro
- buttons



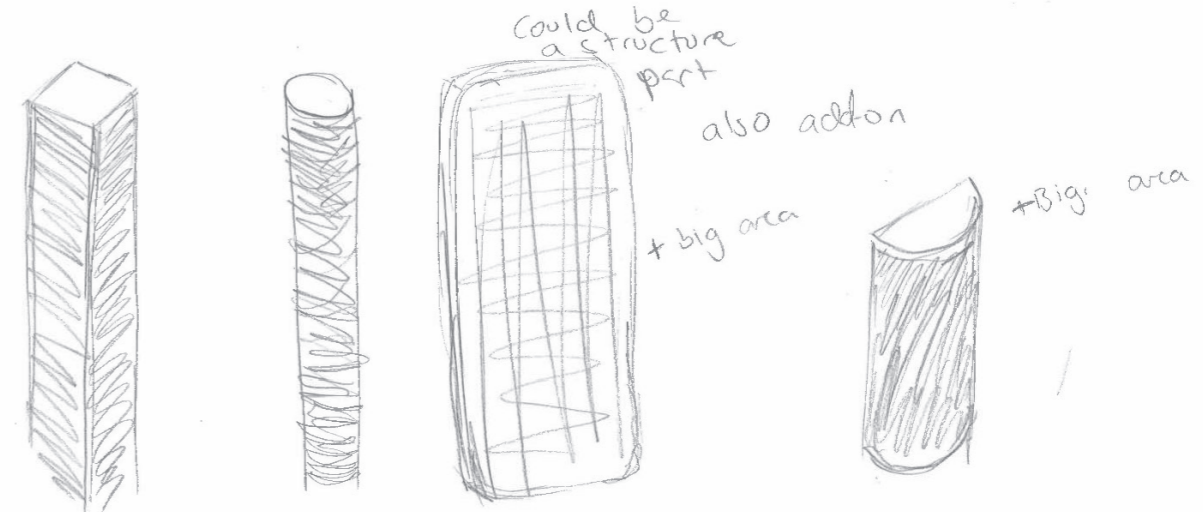
Band
nice feature



"dra-pa" taken
+ softer edges
loss of wood accent



Different claw possibilities
Natural material

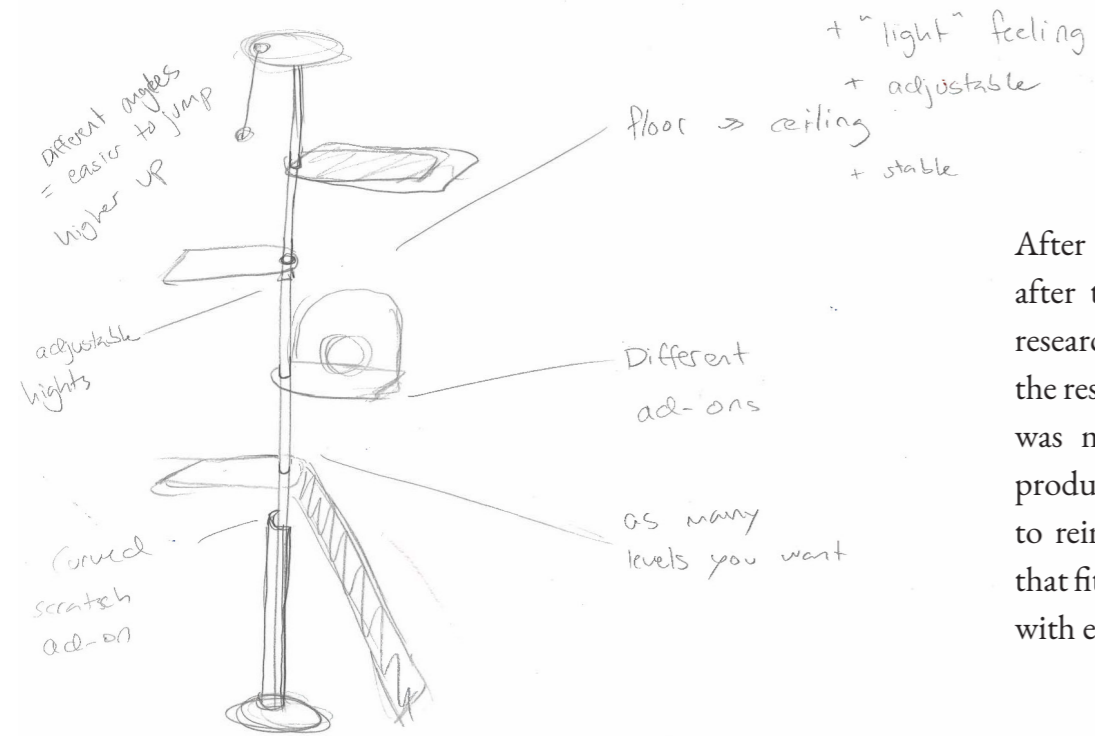


Incorporated
in structure

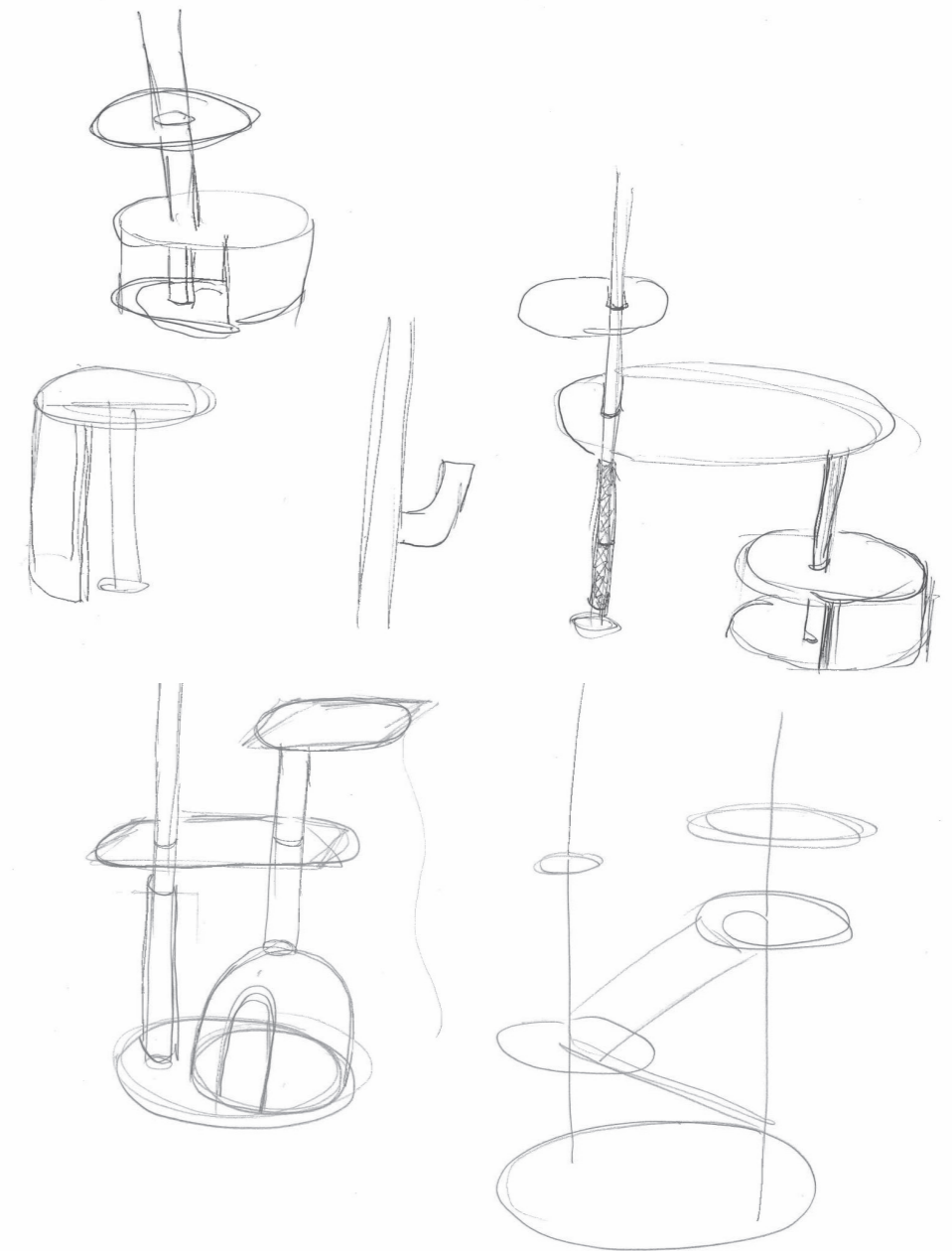
Important
• Long
• Sturdy

- Sisal rope → creates "chips"
- Sisal rug → more expensive
→ more color choices

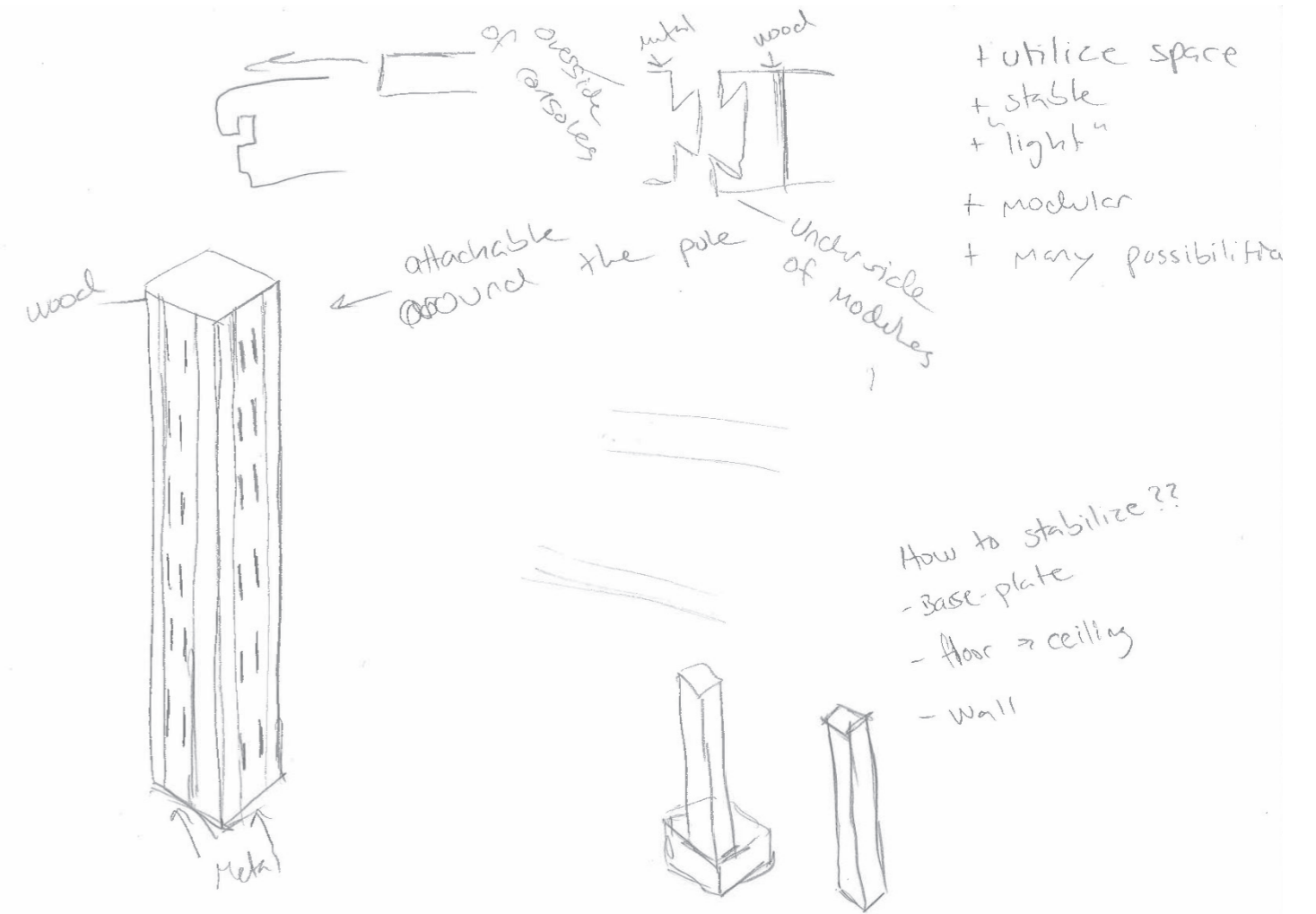
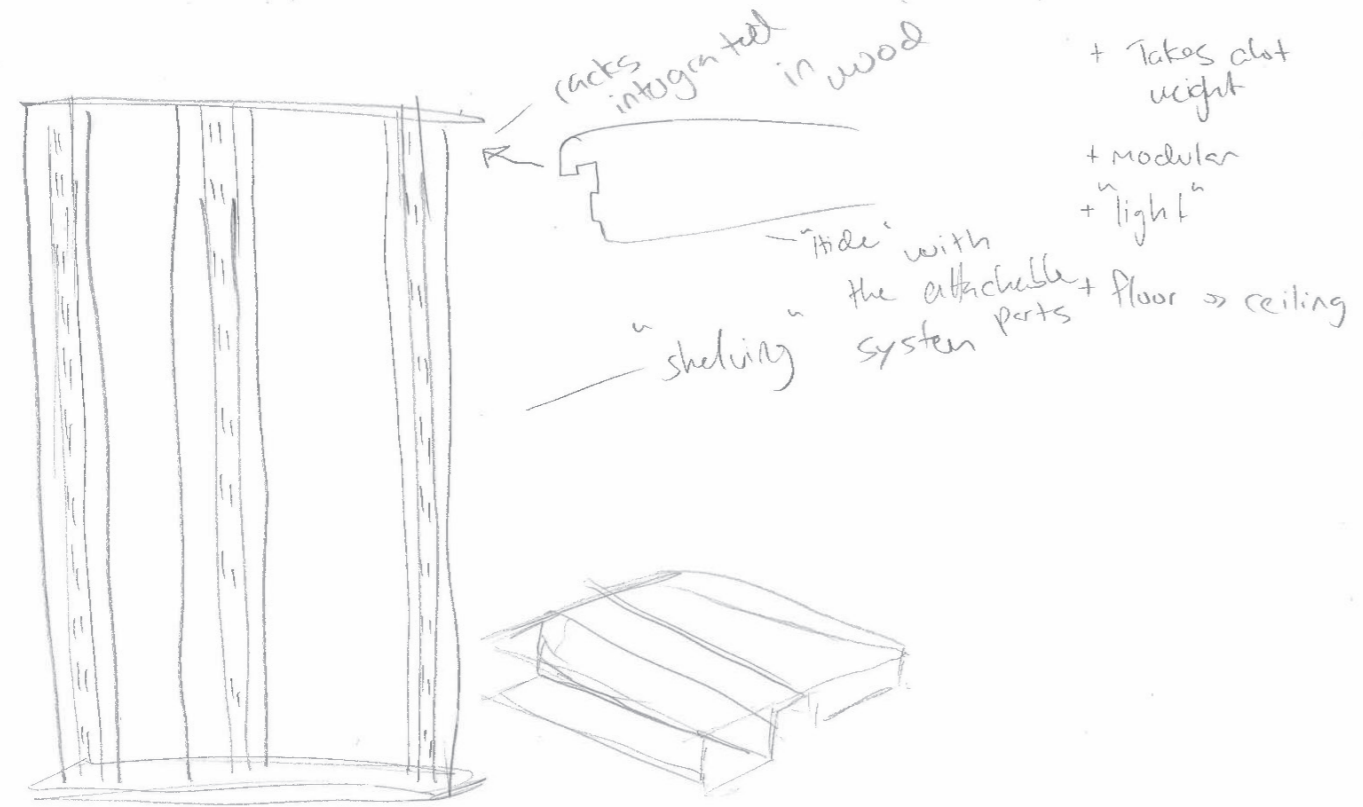
IDEATION



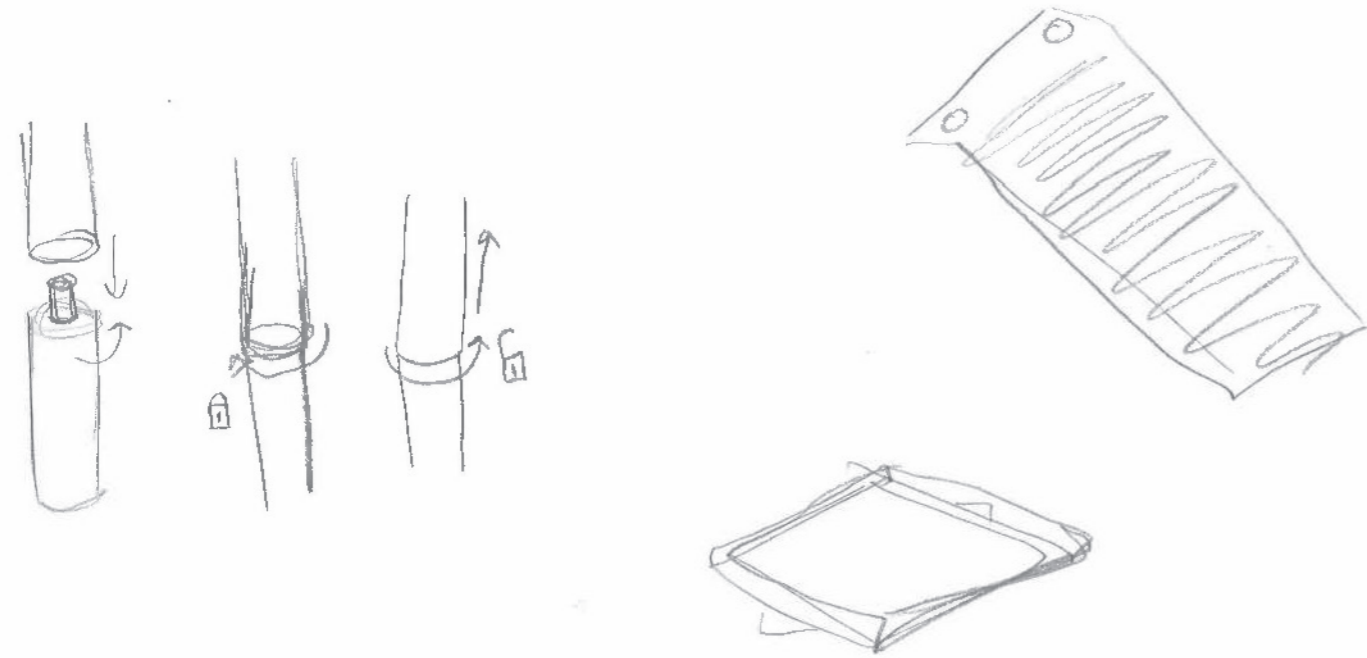
After a small break from the project and also after taking a step back and looking at the research done in the beginning I decided to use the research to do what the customers thought was most important. For this process and product to be good doesn't mean that I need to reinvent the wheel, but design something that fits my target group and fixes the problems with existing similar products.



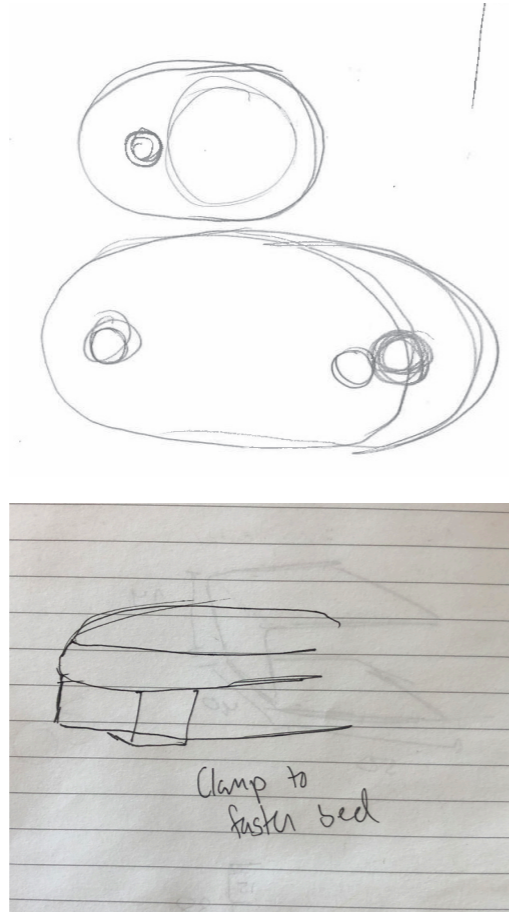
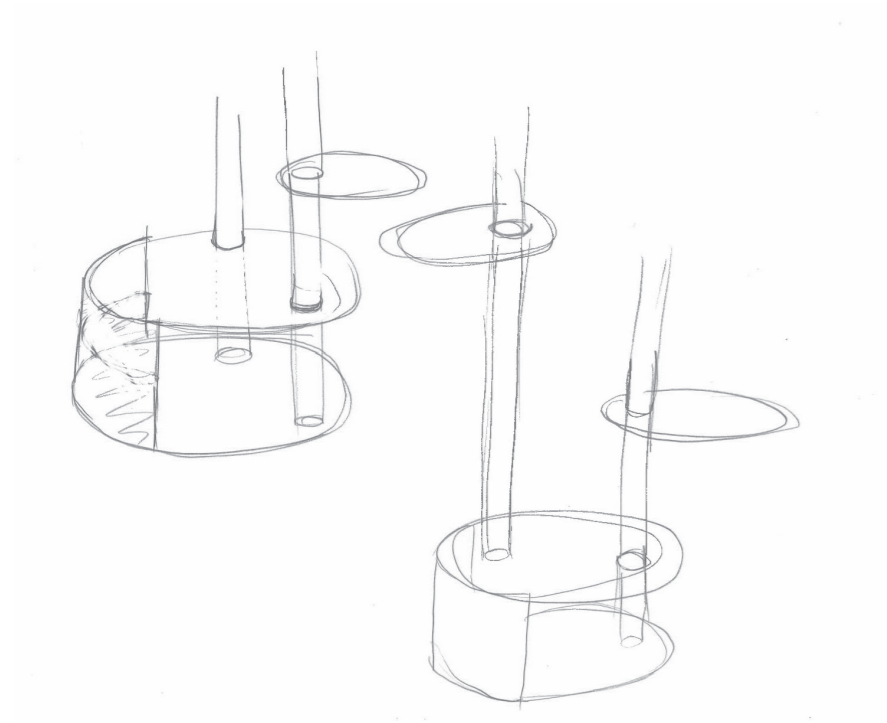
IDEATION



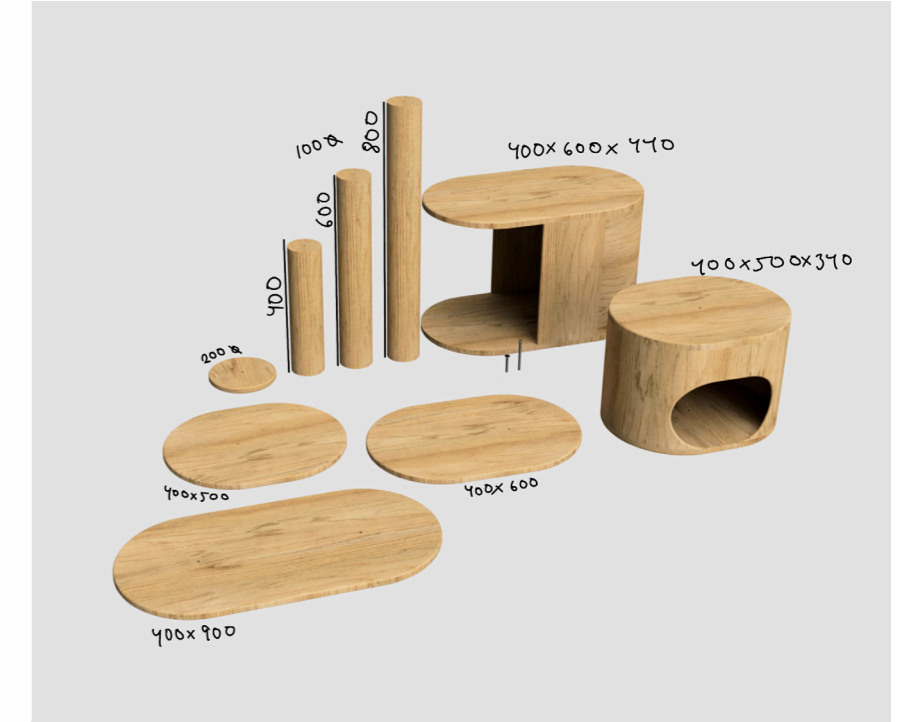
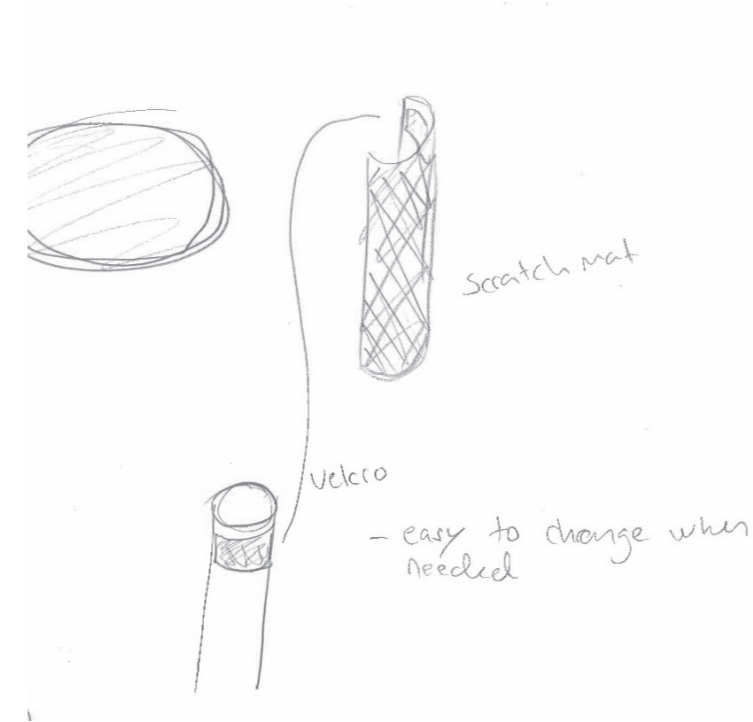
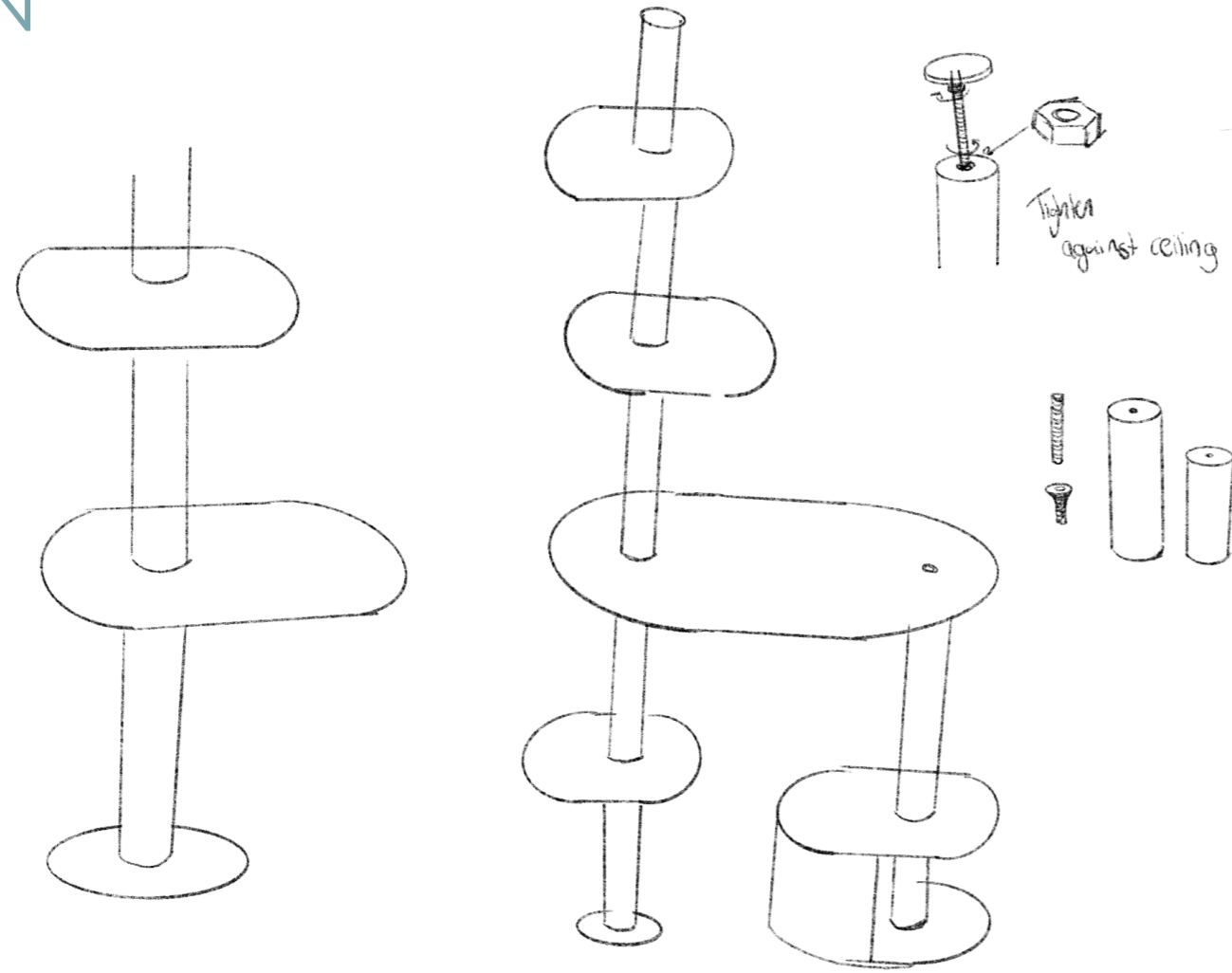
IDEATION



IDEATION



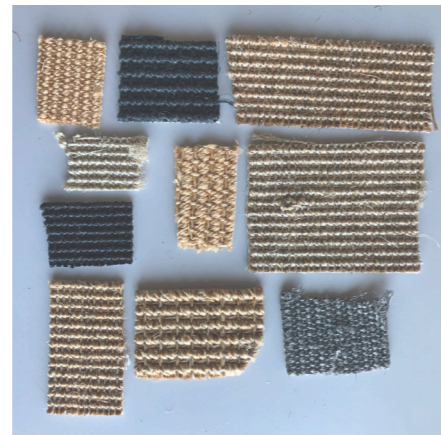
IDEATION



IDEATION

SISAL ROPE -> SISAL RUG

- natural material
- stronger than the sisal rope
- easier to switch out due to whole pieces



Because of the materials thickness it was hard to find a sewing machine that actually could sew the rug, but after a bit of searching I found this old singer sewing machine made for leather. It worked wonderfully for the rug, however it was not the easiest to use. After a bit of trial and error I got it to work as well as possible.

IDEATION

ATTACHING SCRATCH PIECE TO THE TREE?

Easy to de- and reattach for the humans but sturdy enough for the cat to scratch and climb on it.

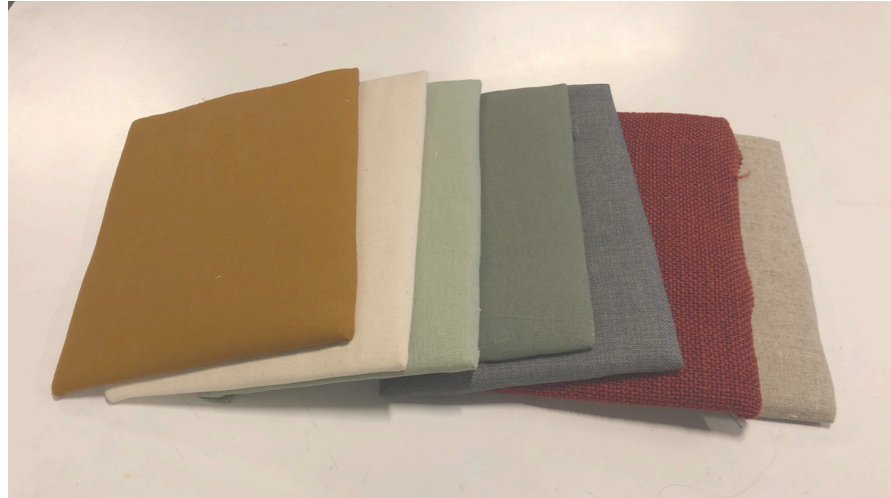
- Zipper
- Buttons
- Velcro
- Rope
- Hooks

Velcro is easy to de- and reattach for humans, but it's incredibly strong in the other direction. It would be hidden when the piece is on the tree and it's a cheap material.



When two classmates tried to remove the sisal rug that was attached with velcro in the direction the cat would scratch, they did not manage to drag it off. This proved that the velcro would work excellently for this purpose.

IDEATION



When it comes to the material of the beds the most important thing was to stay away from any plush or fluffy material.

In the picture above there are a few textile samples, a few in cotton, linen and furniture fabric. I tested the different fabrics with my cat, a friend's cat and also went to a cat home (pictures in appendix II), but unfortunately I got no useful results from this.



The most suitable fabric for this purpose was found to be cotton canvas. It's a natural material, durable and strong, but still soft. It's washable in your machine, easily available and cheap.



When it came to the shape of the beds, the first idea was to wrap it around the poles but with a simple test I decided against it due to the fact it reminds me of a toilet seat.

For the filling I chose to have one layer of foam, this created a firm and soft feel that will keep its form over time.



IDEATION

For the material of the structure, wood was a given choice by the start of the project. It's strong, durable and there are many different choices in what type of wood would fit the criterias of the design.

- PINE
- + Cheap
- + Takes paint well
- + Available
- Soft
- Prone to scratches and dents

BIRCH

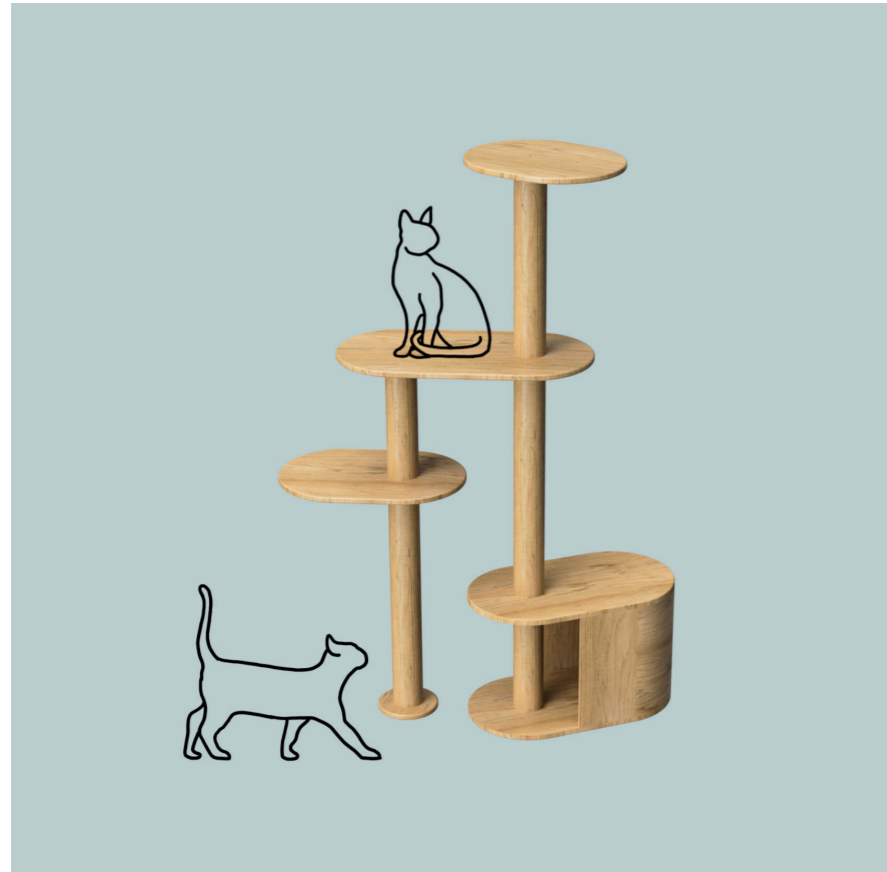
- + Hardwood
- + Available
- + Bendable
- Can get yellow over time



PLYWOOD

SOLID

RESULT



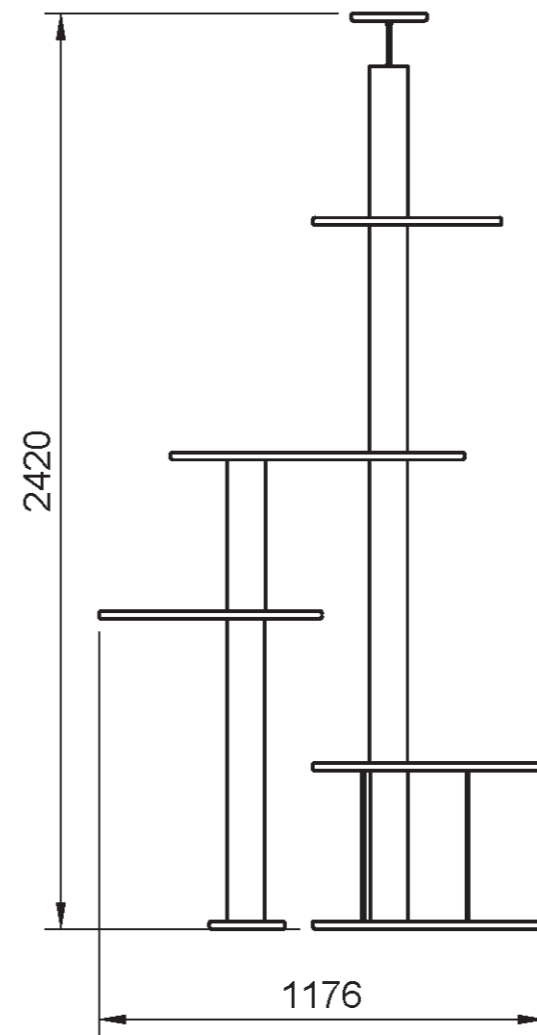
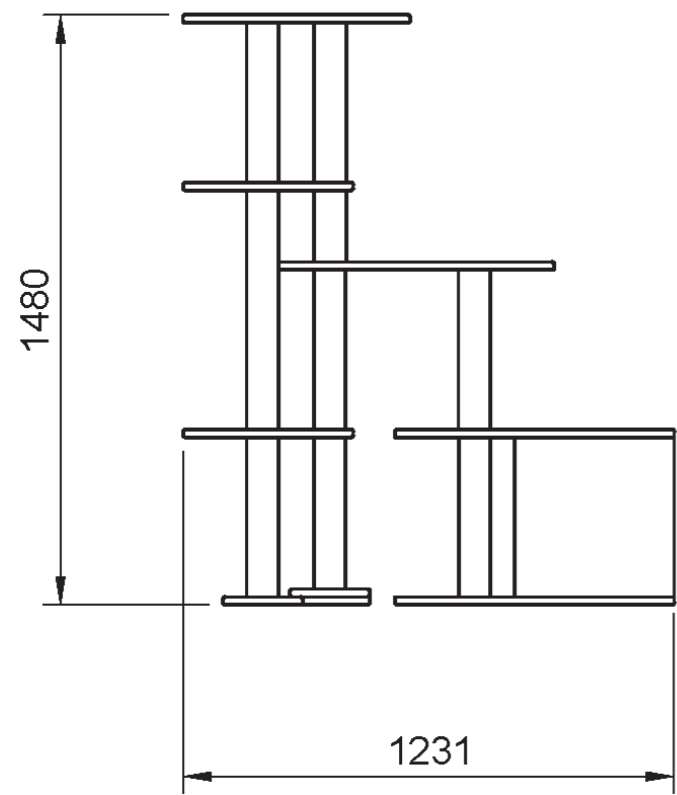
Mister is an adaptable cat tree that not only focuses on your cat's needs, but also is a furniture piece you can be proud of.

Beds for rest can be added to every platform and scratching mats for clawing can be added to the poles. The beds are washable and are fastened to the platforms with metal clips.

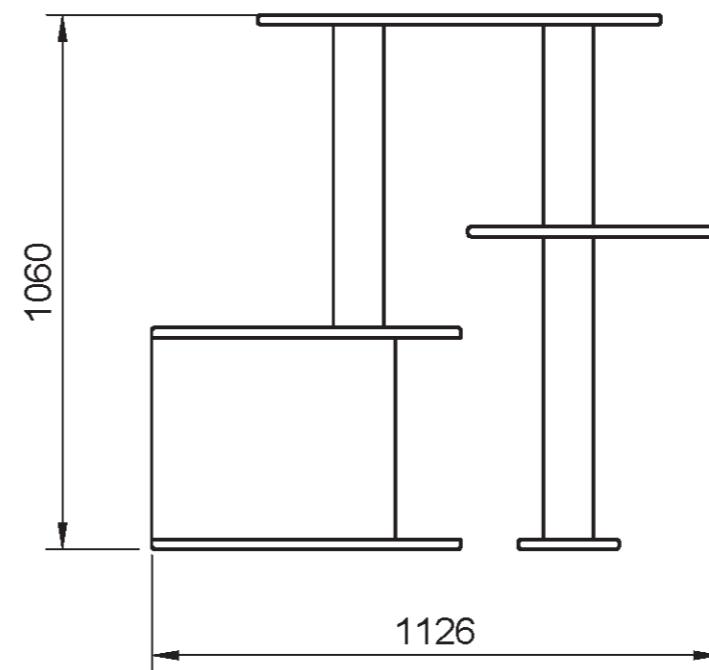
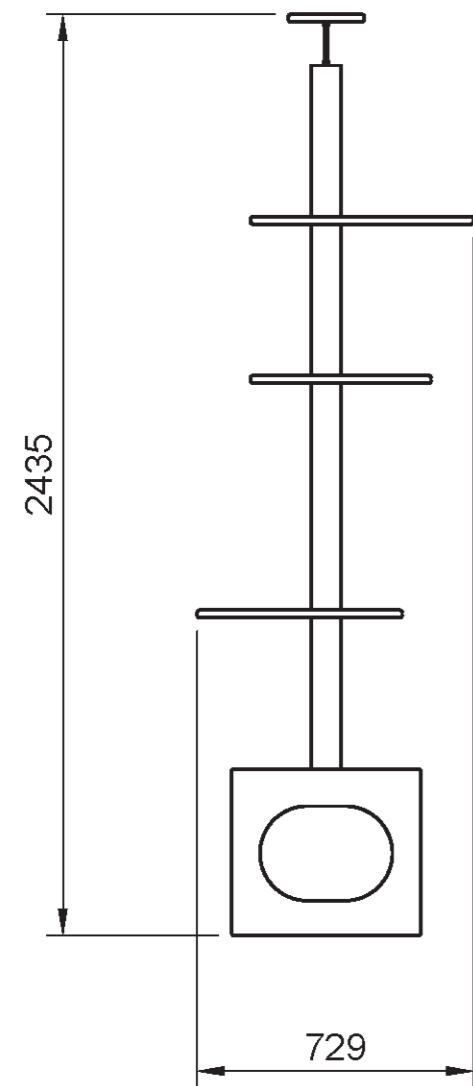
All of the parts can be replaced and changed if needed, if they break or don't get used by your cats. Due to the material this cat tree will remain for many, many years. With Mister, there is no need to buy new cat trees after just a few years or when your cat gets older. This tree will grow with your feline friends.



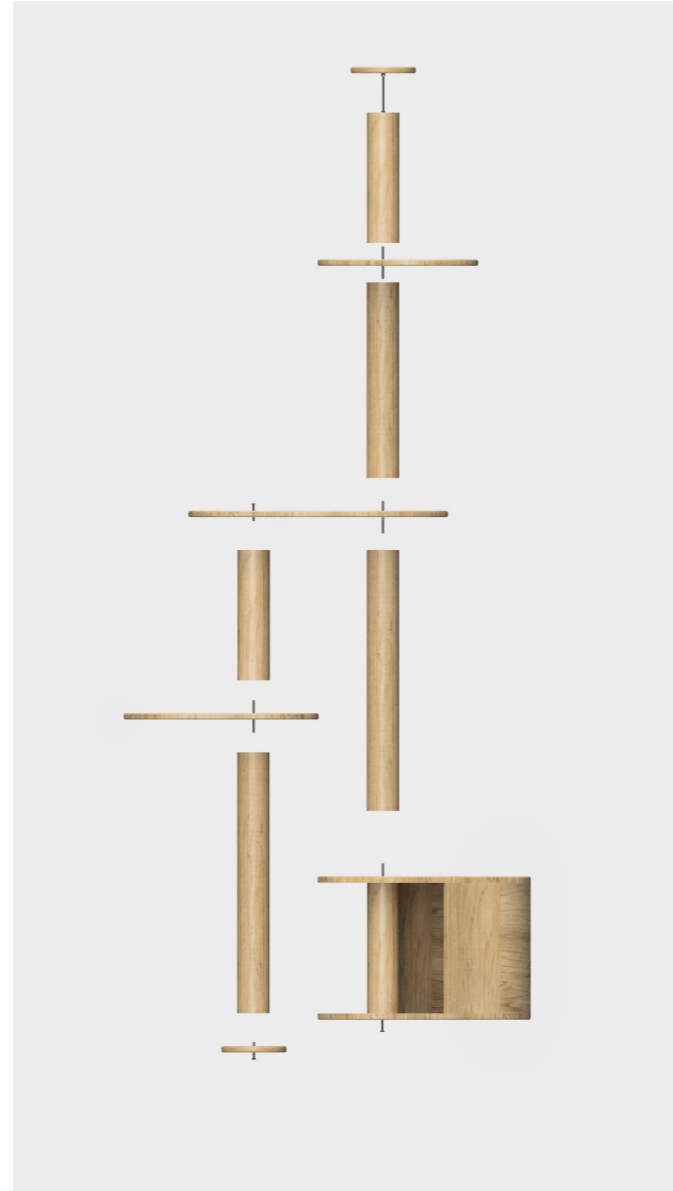
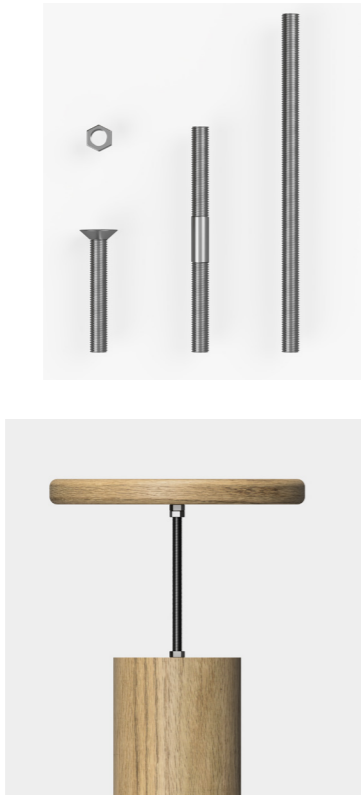
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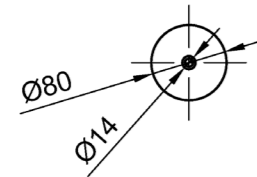
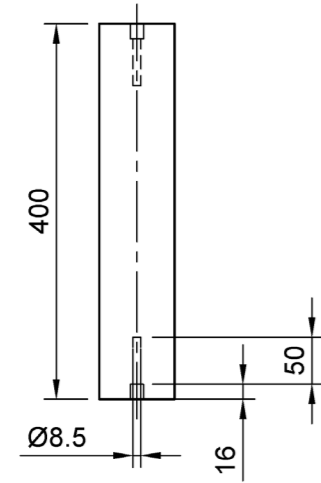
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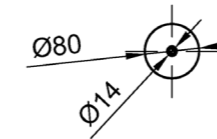
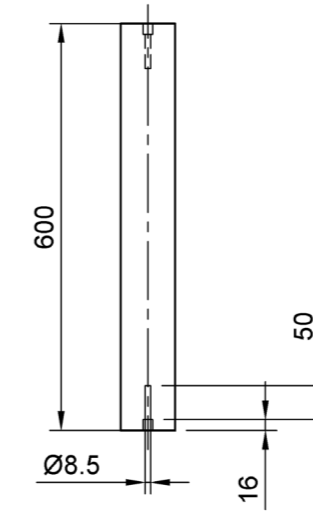
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RESULT

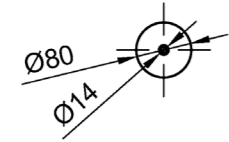
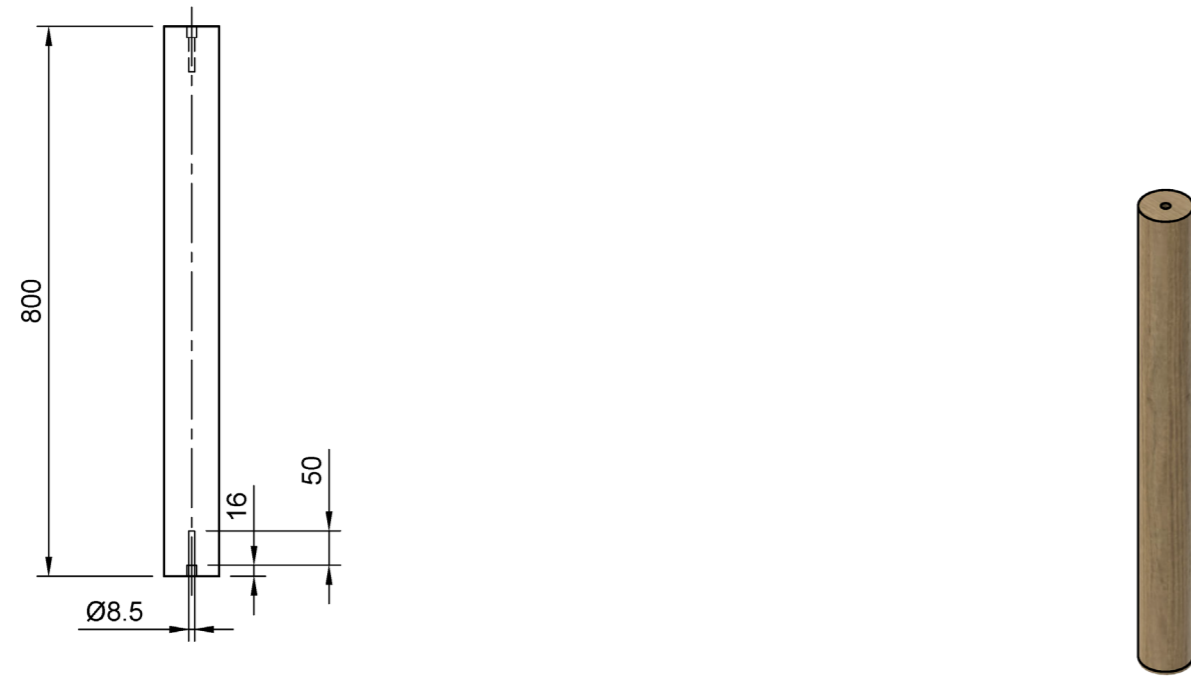


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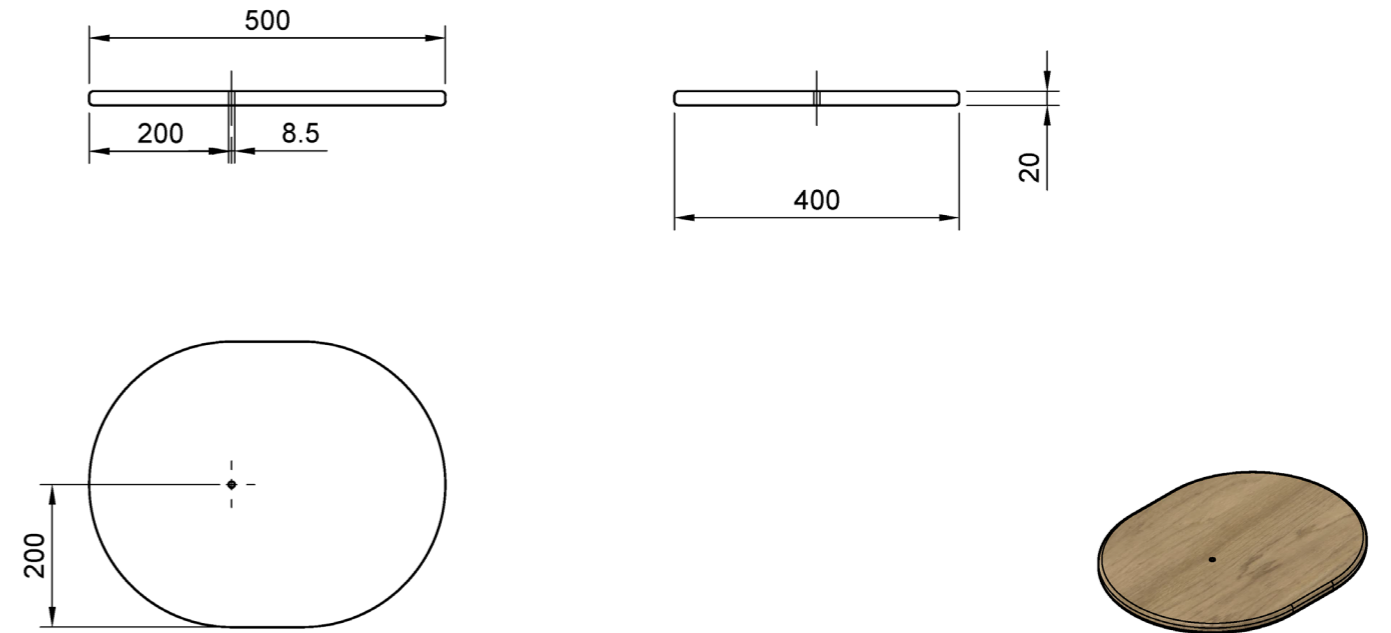
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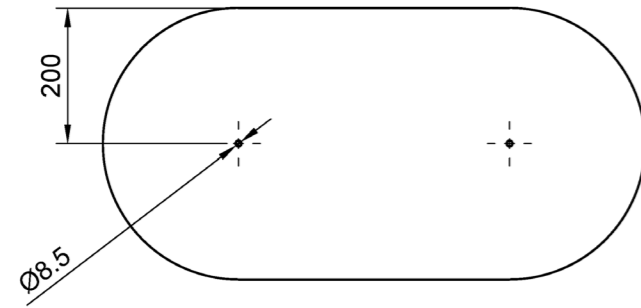
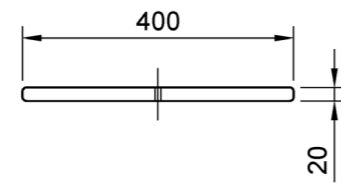
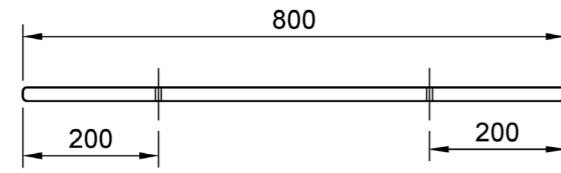
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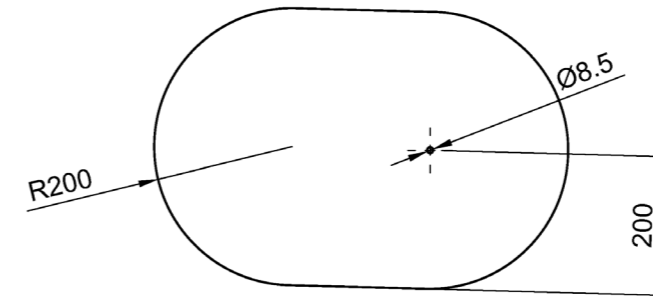
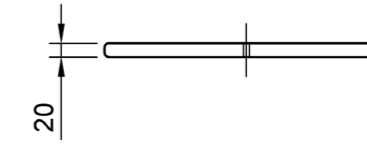
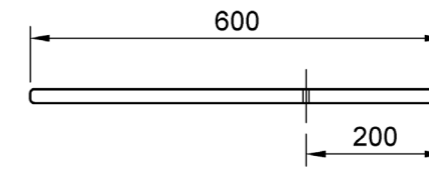
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Plattform 50

RESULT

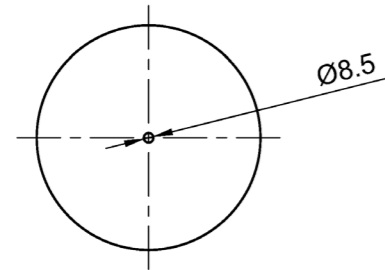
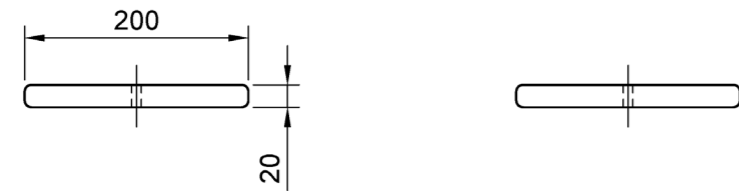


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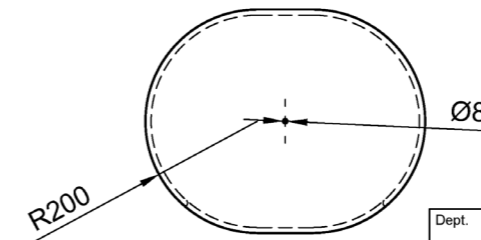
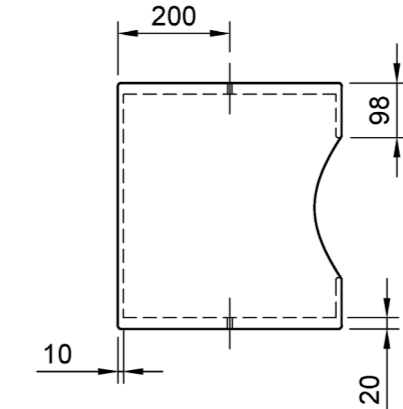
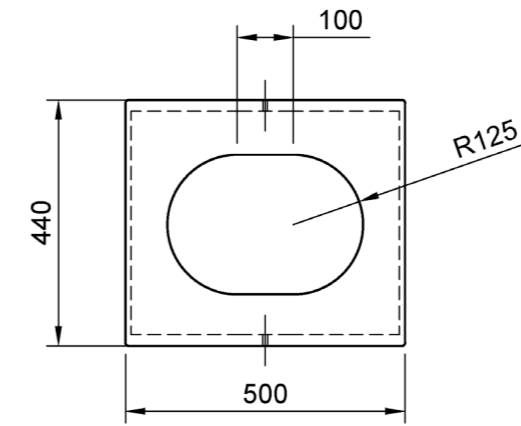


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		Rev.	Date of issue	Sheet 6/12	

RESULT

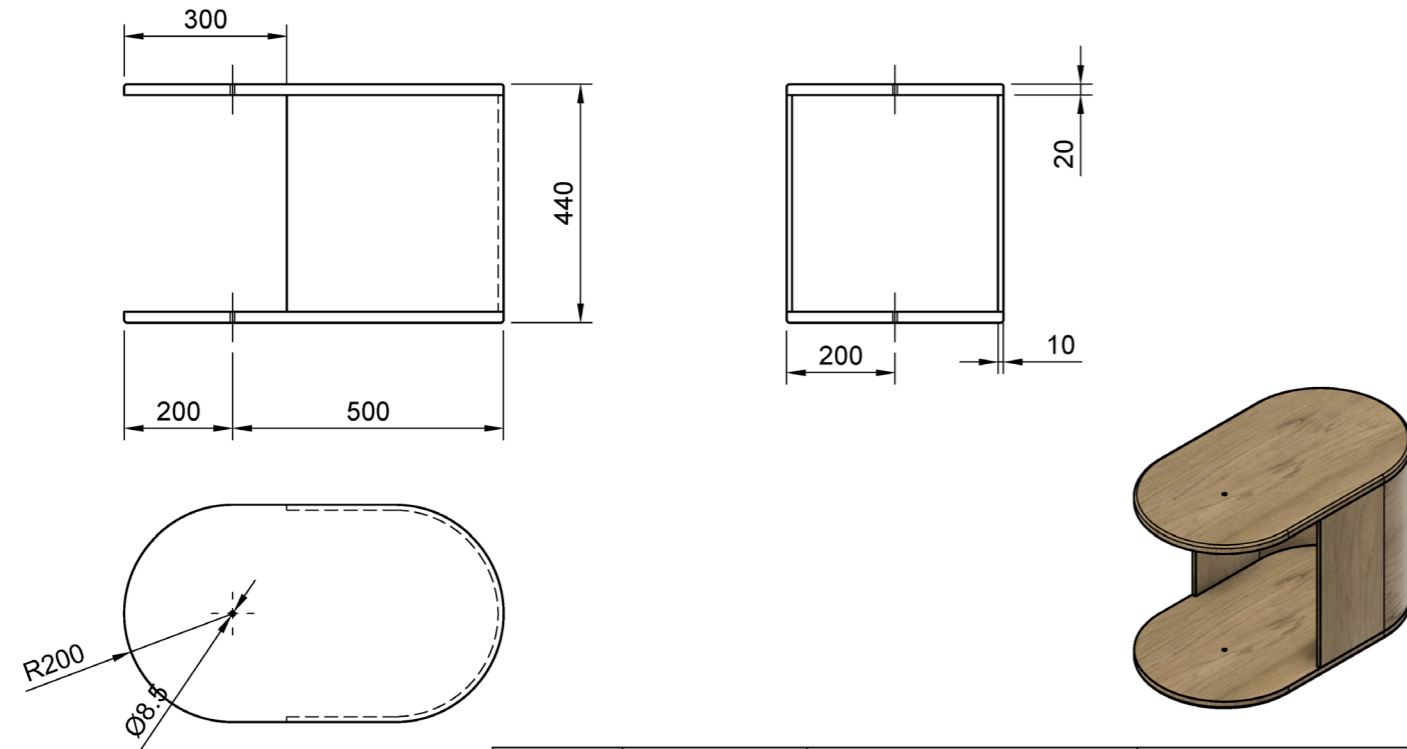


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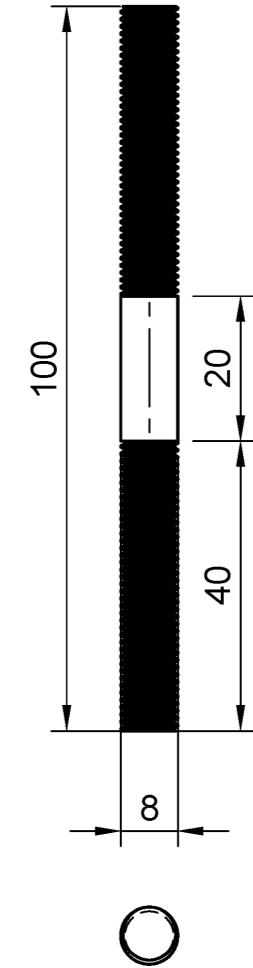
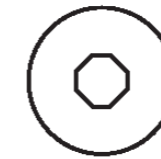
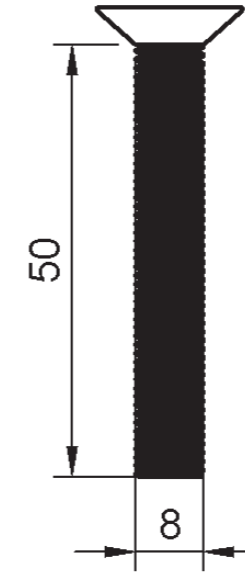


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		Rev.	Date of issue	Sheet 1/4	

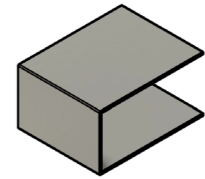
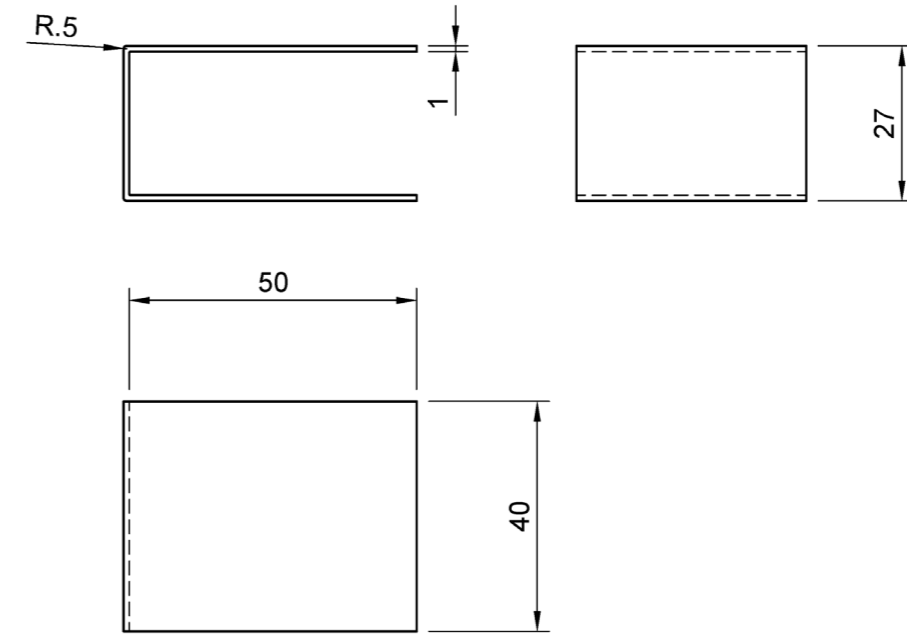
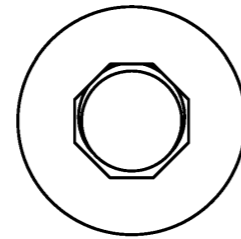
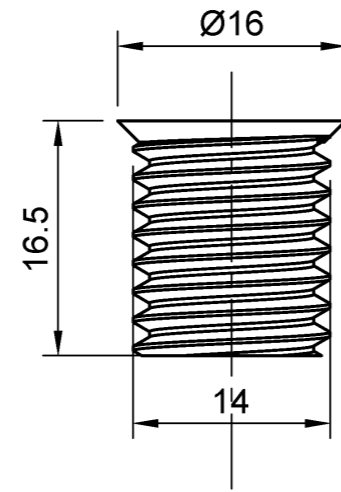
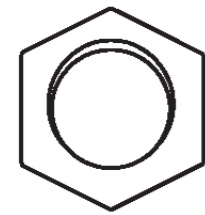
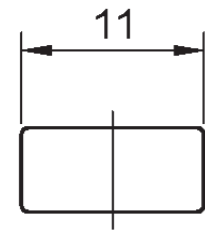
RESULT



Dept.	Technical reference	Created by Lisa Christiansson 2023-04-10	Approved by
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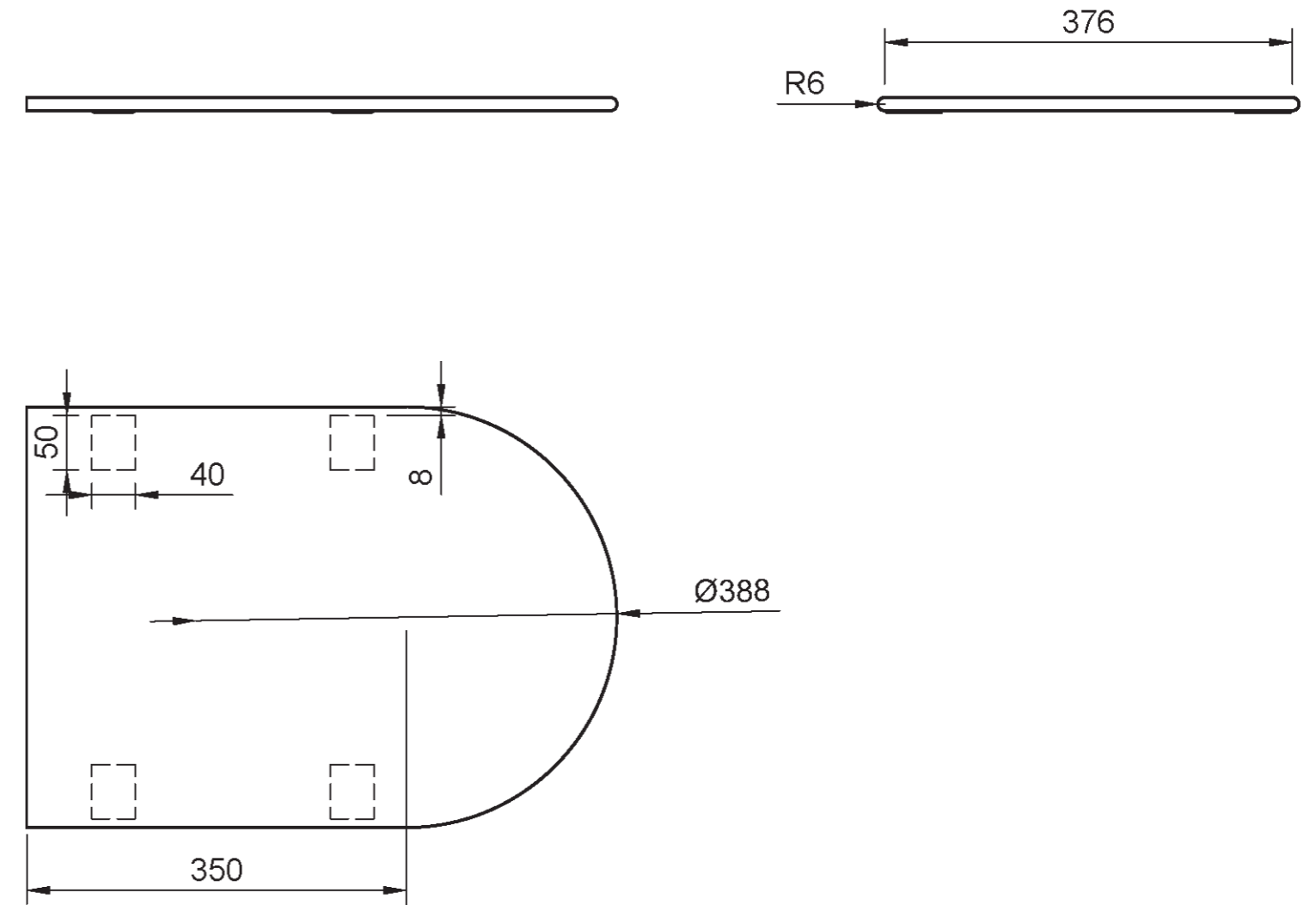
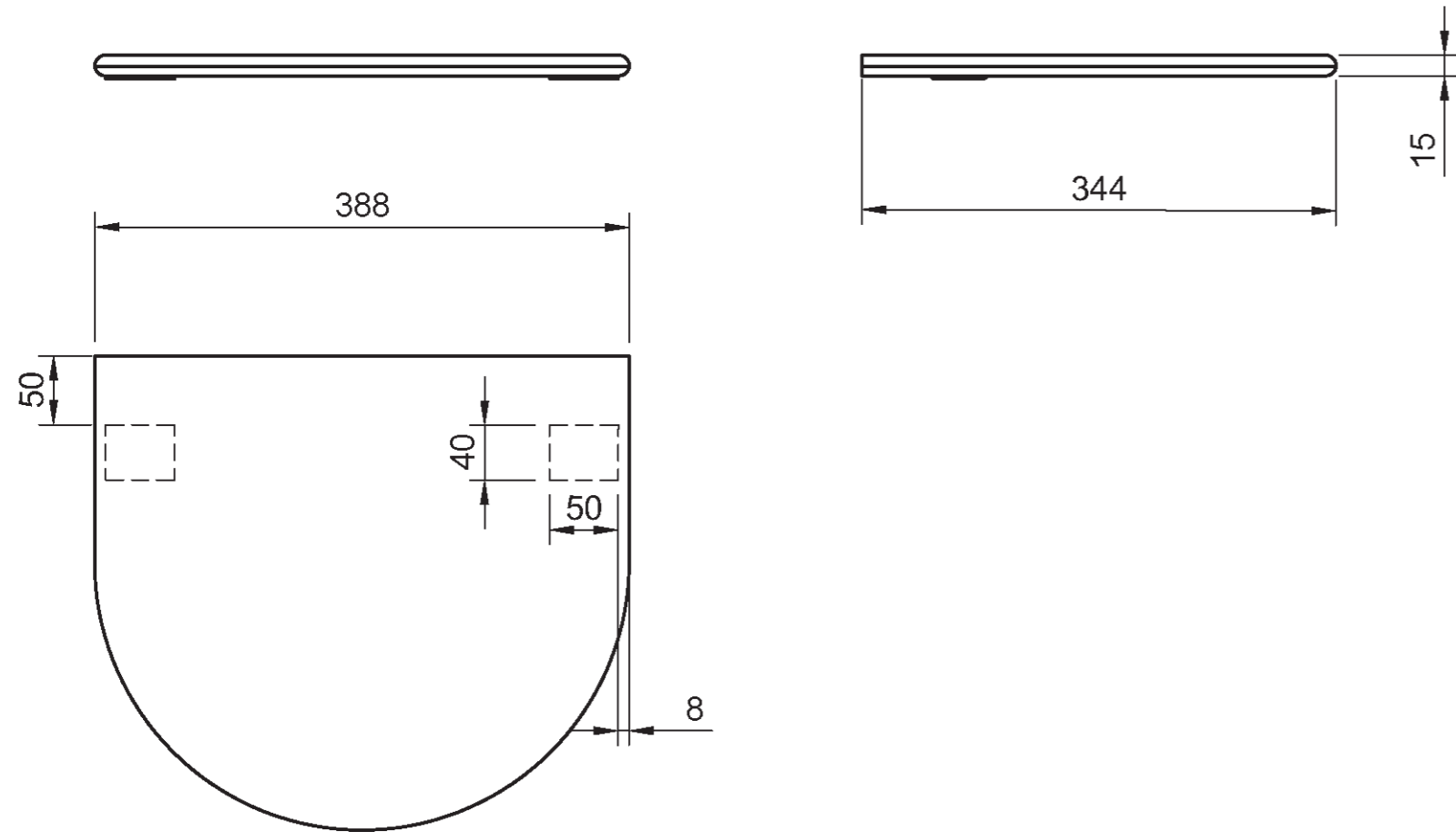


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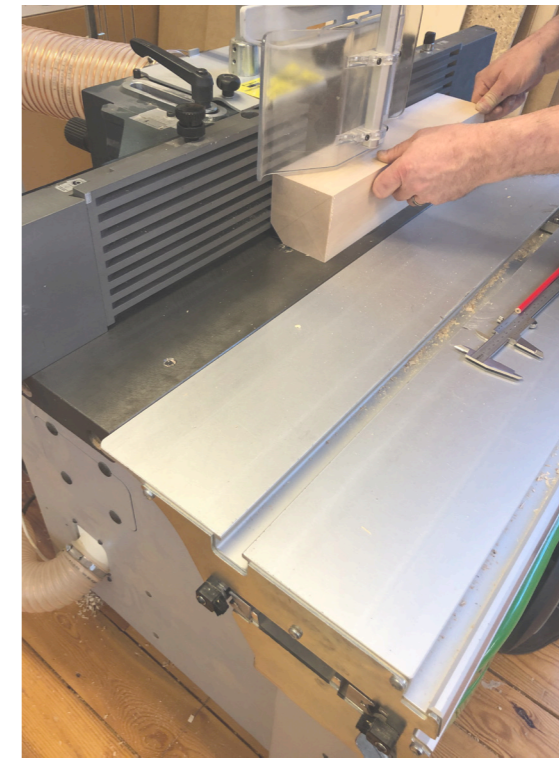


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			Sheet

RESULT



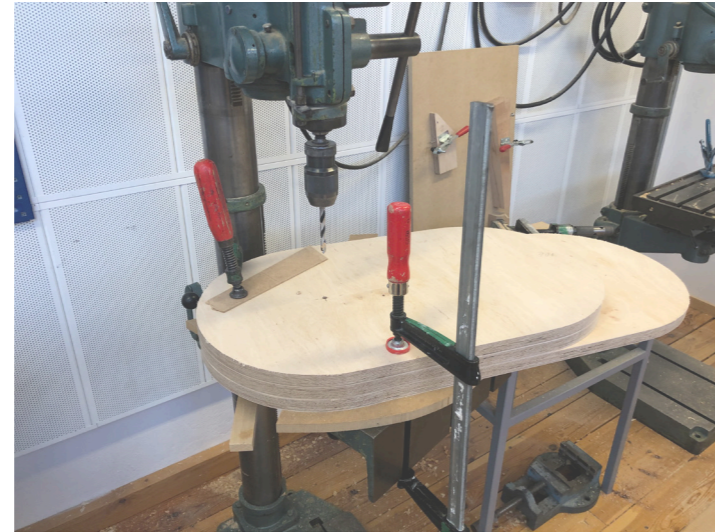
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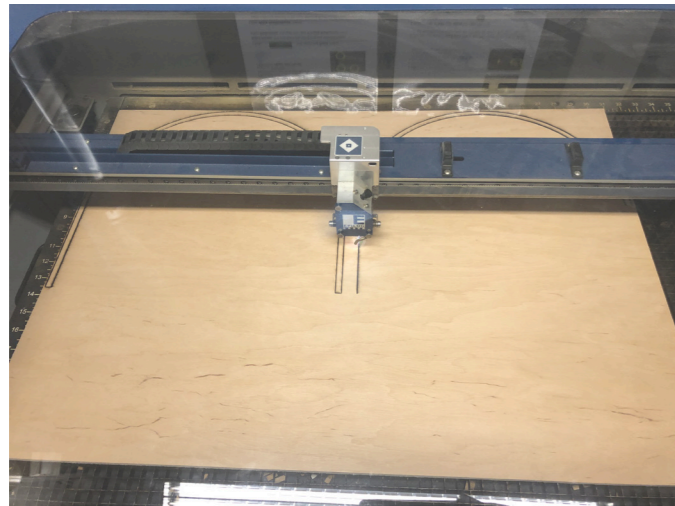
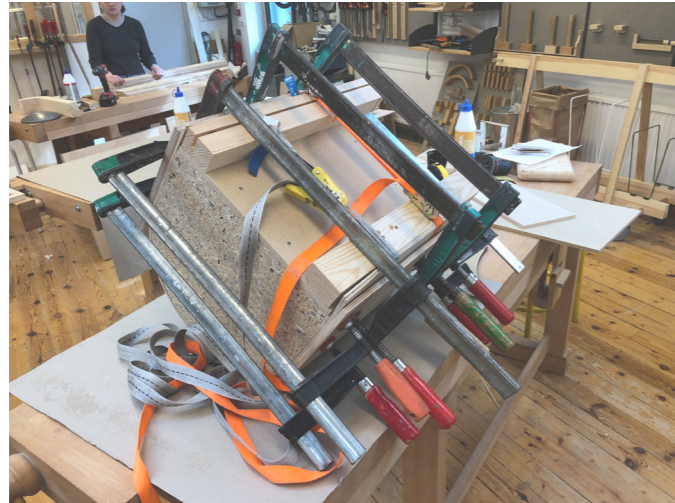
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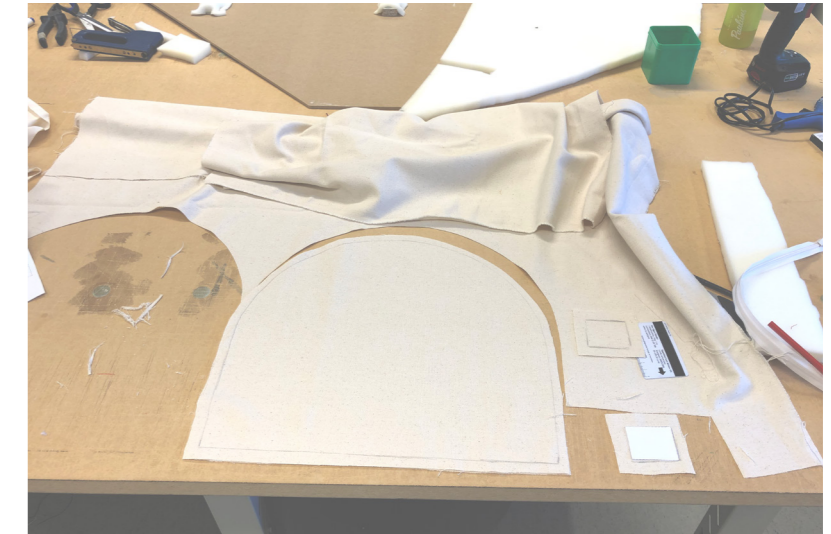
RESULT



RESULT



RESULT



RESULT



RESULT



RESULT



RESULT



RESULT



REFLECTION

If I were to redo this project I would keep notes of what work I did everyday to more easily follow my process and to lessen the burden for the final documentation. One thing I took from my most recent reflection after a project was to take many pictures of the whole process. This was done throughout this project, but next time I need to be more mindful of the picture format to make it easier for the documentation and to be able to get a more cohesive layout.

Be more forgiving of myself when things take longer time than planned or when the process doesn't go as planned or intended.

Something that will be in my upcoming projects is a clear timeplan from the start and then a new and updated one at the end to be able to evaluate what needs to be changed next time. This way it's easy to track the difference of how much time I think is needed and what actually is needed.

For the process I would have liked to do more user tests with cats to see how they would respond to the different designs. This is ofcourse a bit tricky but would have liked to try and see what types of responses I could get. It would also be beneficial to see what the pet owners would pick when it came down to the concept due to the fact that they are the ones who will buy it and not the cat.

When it comes to the product I want to explore more parts and ad-ons for the concept. Integrated toys is one part that I will be exploring more after the end of this project.

Something that would be interesting is to look more into price examples and how much this product could cost if it were on the market.

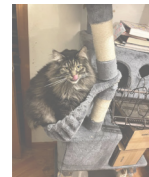


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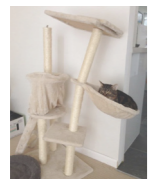
IMAGES



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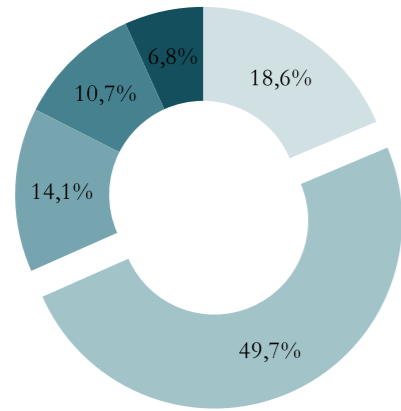


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APPENDICES

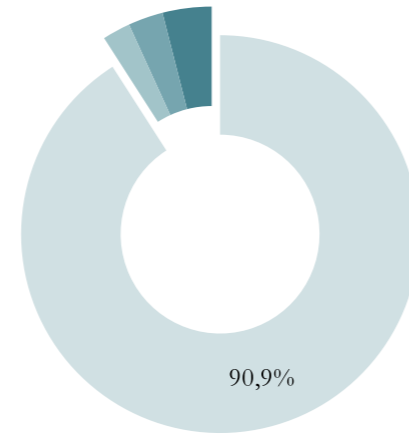
How many cats do you have?

- 1
- 2
- 3
- 4
- 5+

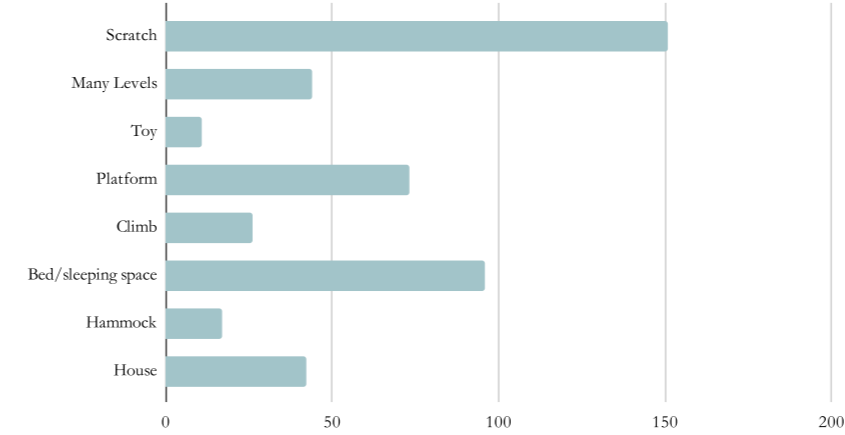


Do you have a cat tree at home?

- Yes
- No
- Had one before
- Other

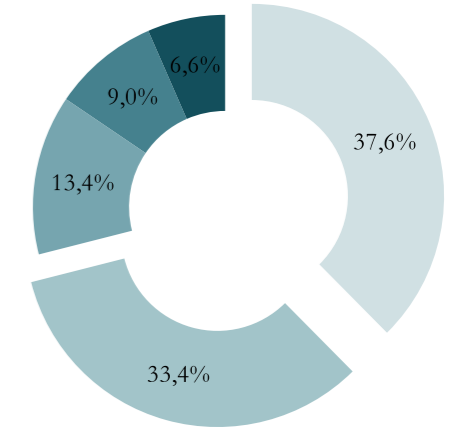


What functions does it have?



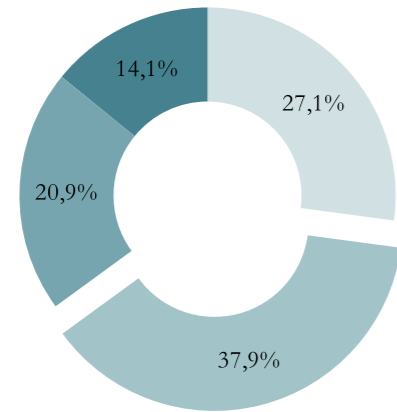
Which functions do your cat/s use the most?

- Scratch
- Rest/sleep
- Sit high up
- Jump/climb
- Scout/spy

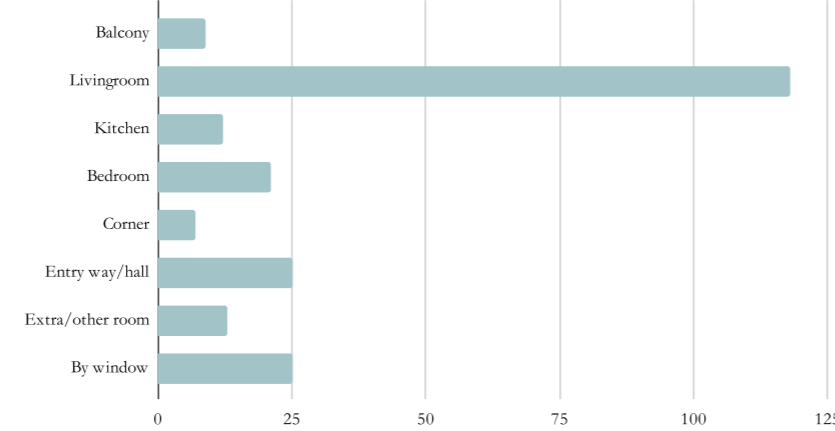


Are they indoor cats?

- Yes
- Yes, but can go out on balcony
- Yes, but sometimes goes out in harness
- No, they have free access

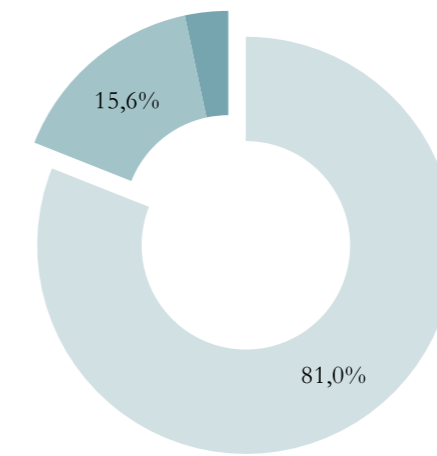


Where is it placed in your home?



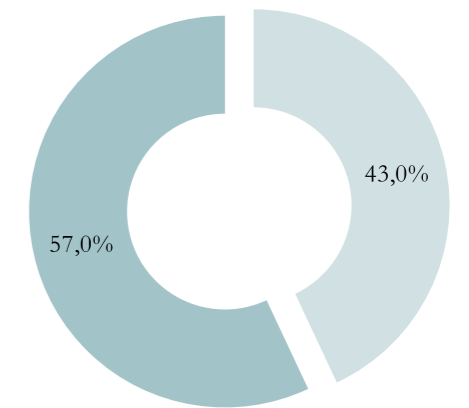
Do your cat/s use the tree and its functions?

- Yes
- Some
- No



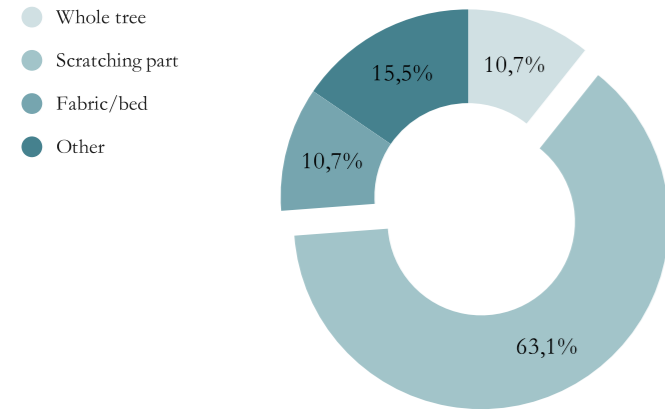
Have you needed to replace parts or the whole tree?

- Yes
- No

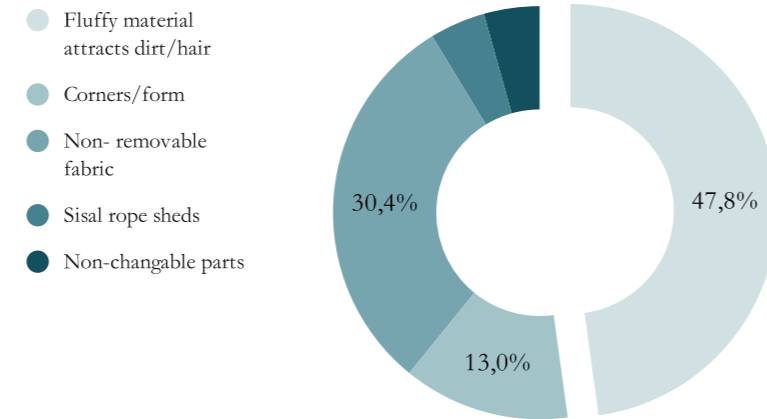


APPENDICES

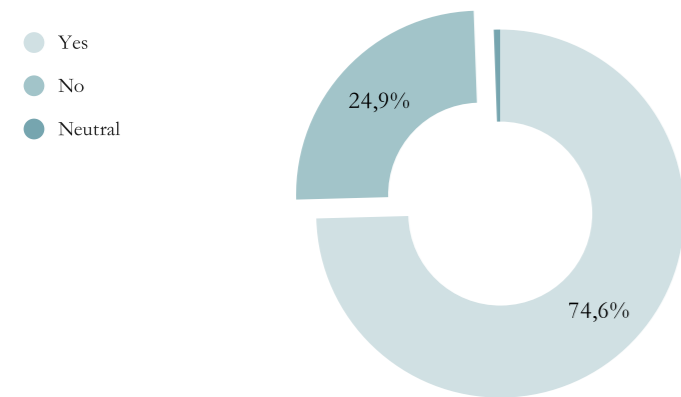
If you have had to replace parts, which ones?



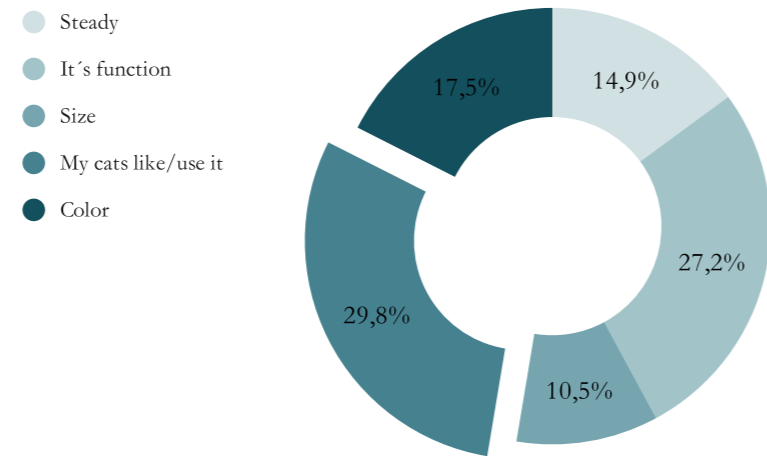
What parts of the tree do you find hard to maintain?



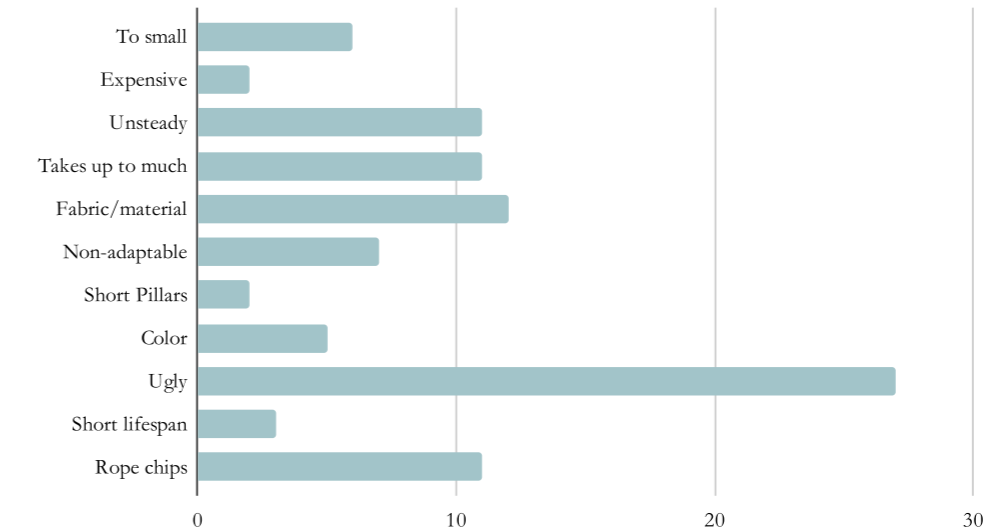
Do you find it easy to maintain the tree? (wipe off, dust, etc)



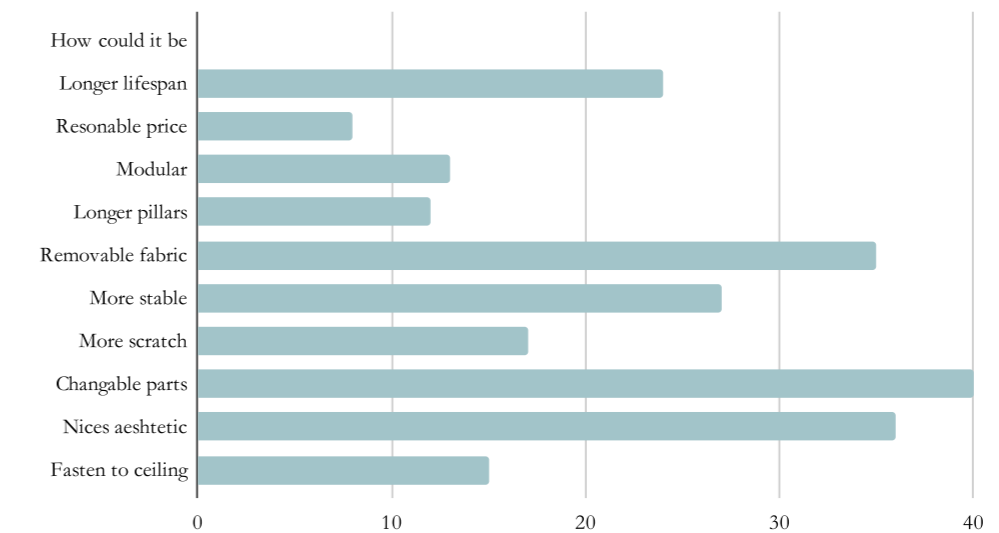
What do YOU like about the tree?



What don't you like about the tree?



How could it be better?



APPENDICES





lisa.ch@hotmail.se
+46 706 99 3183