



ORI-ACT

TOOLBOX FOR URBAN RE-ACTIVATION

WHY

Problem statement
Context
Assignment

HOW

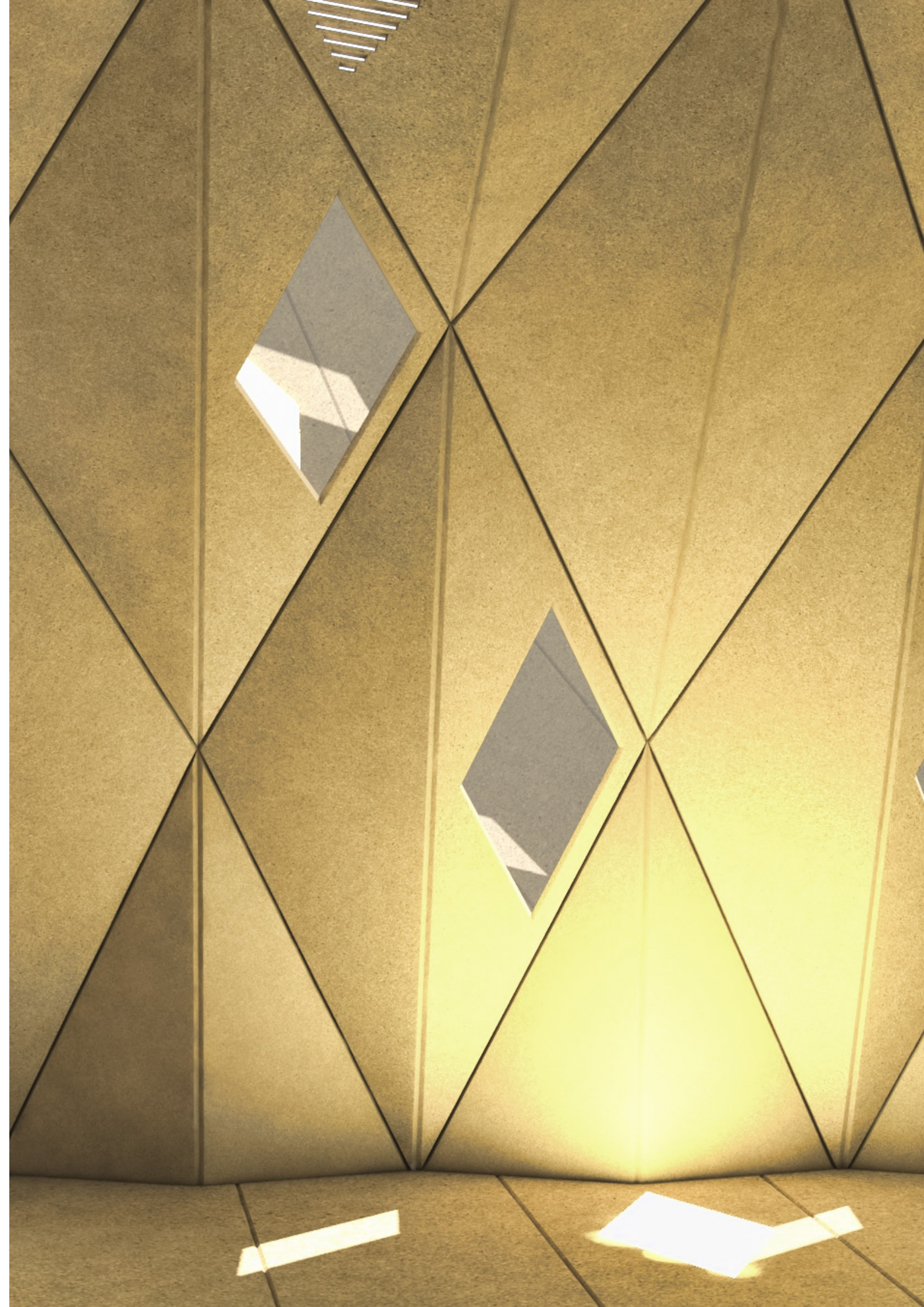
Research question
Objectives
Design requirements

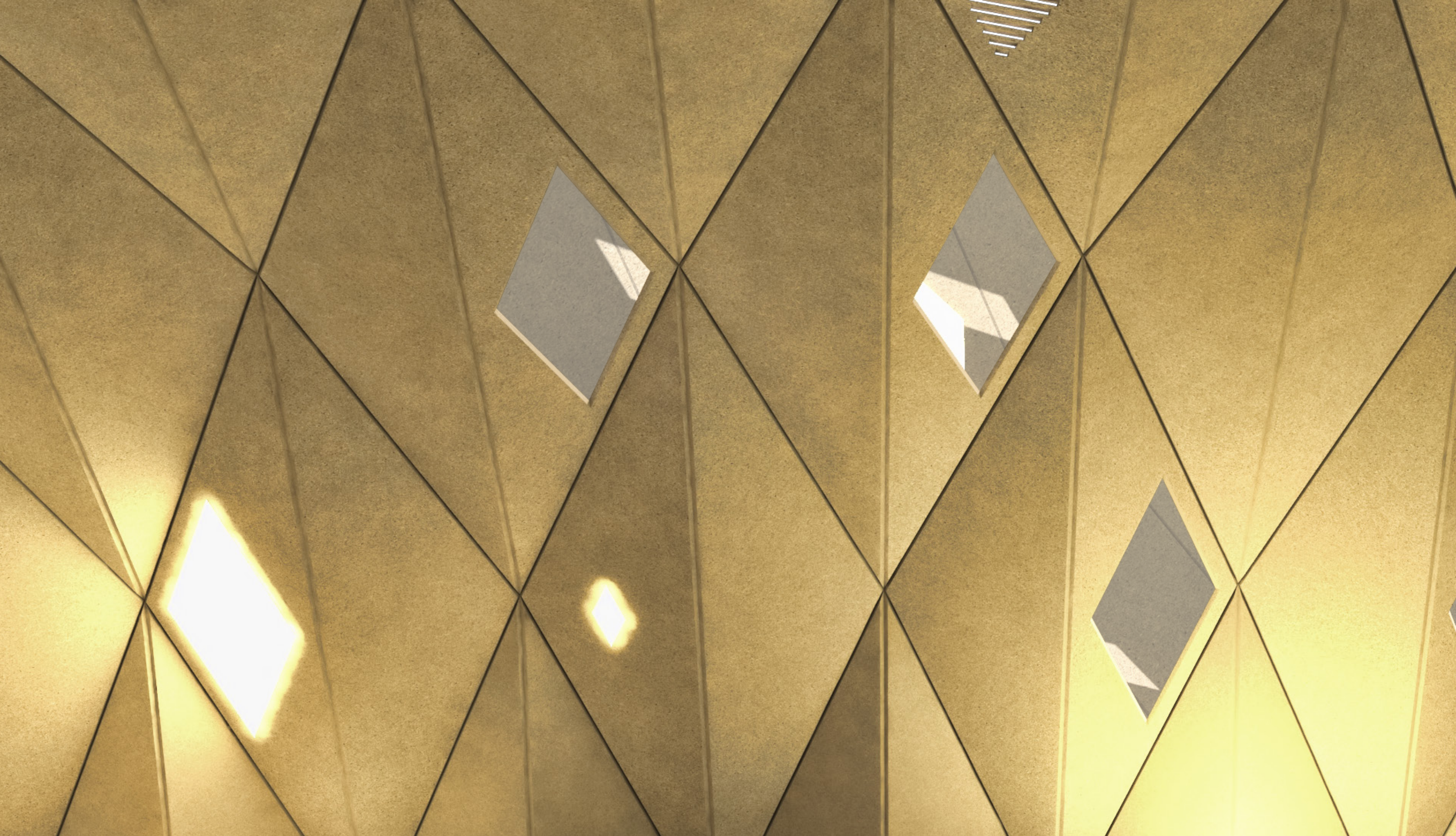
WHAT

Folding structure
Manipulating the structure
Module plug-ins

DESIGN

CONCLUSION & REFLECTION

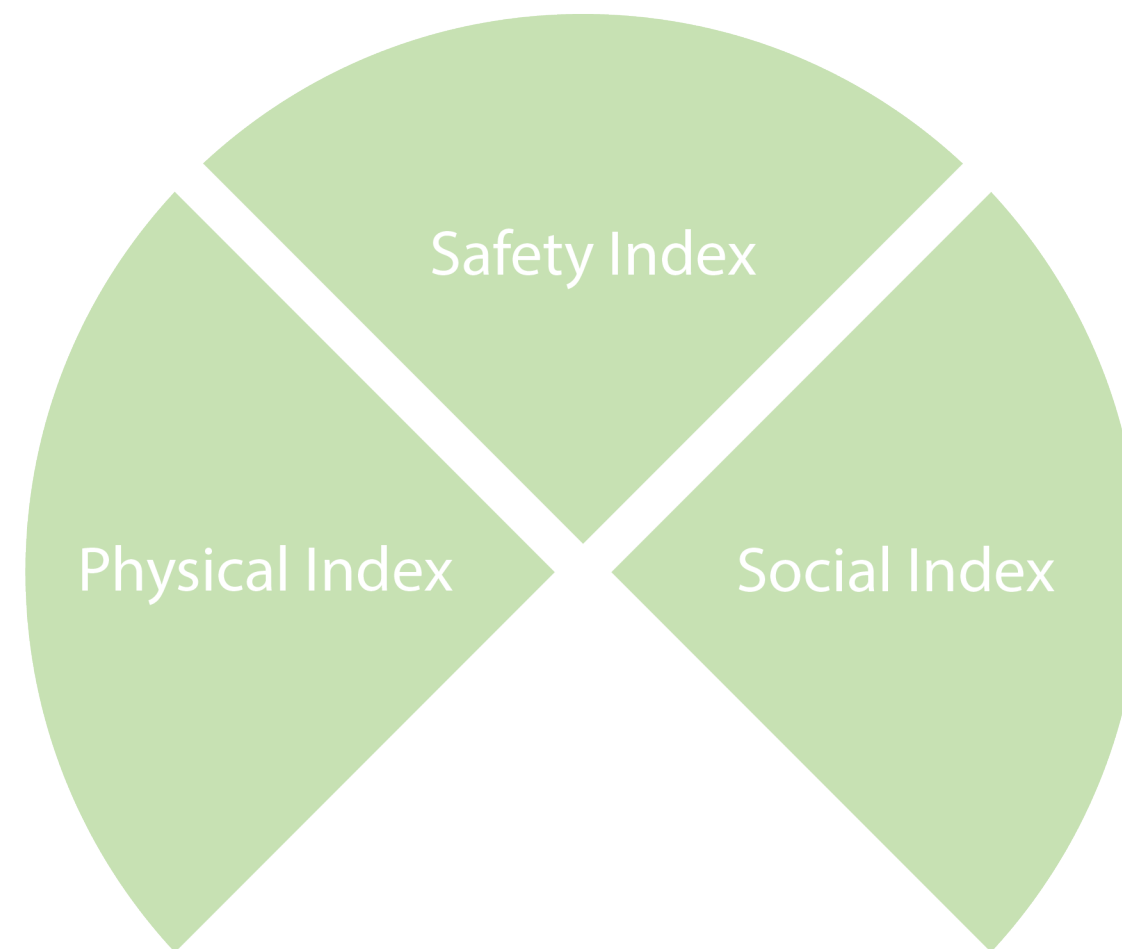
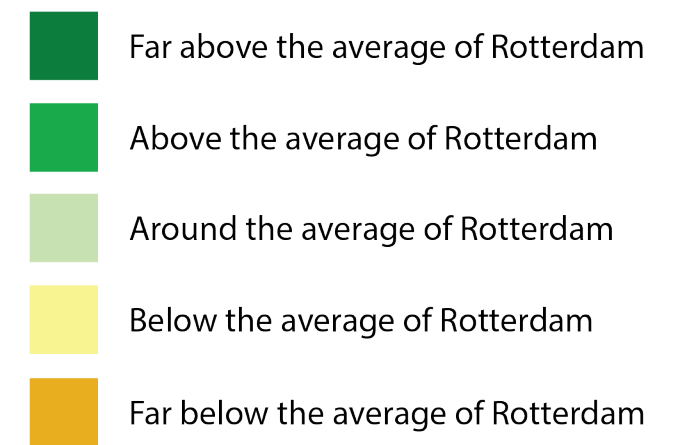




WHY

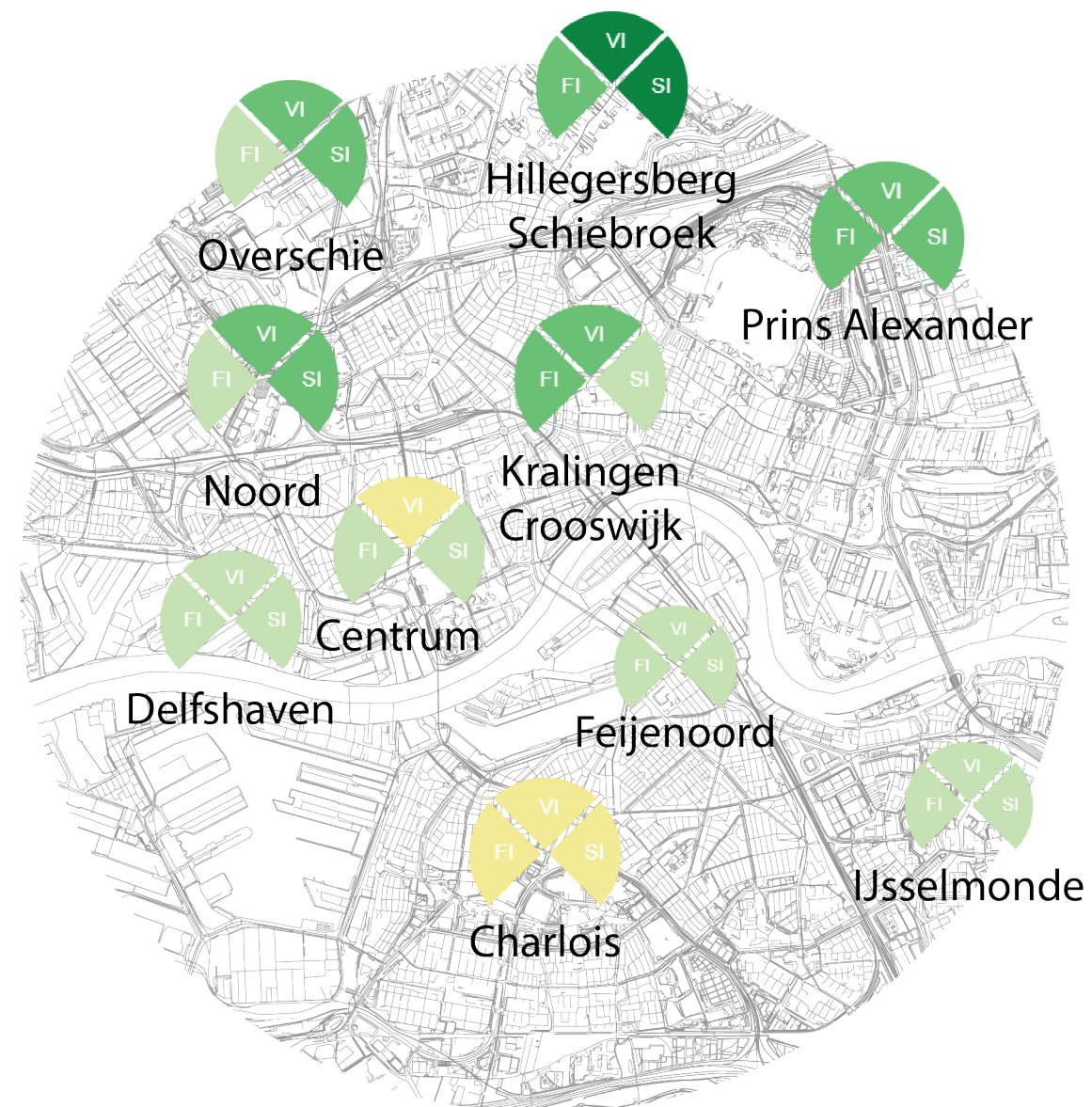
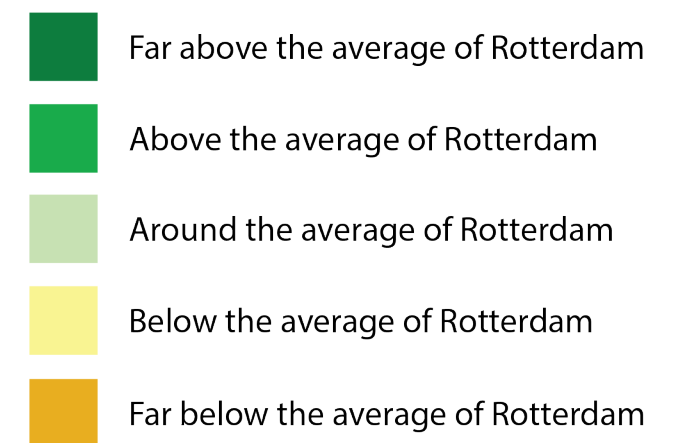


Rotterdam

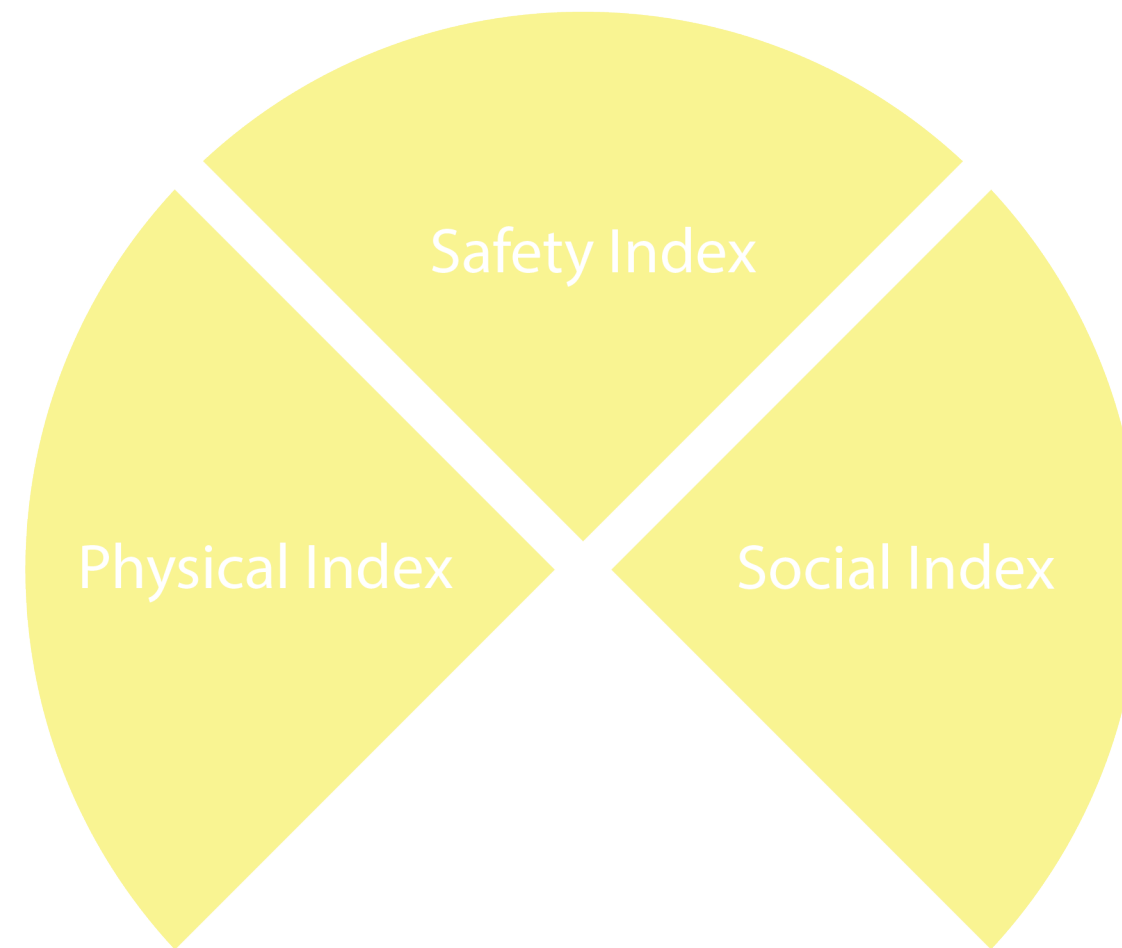
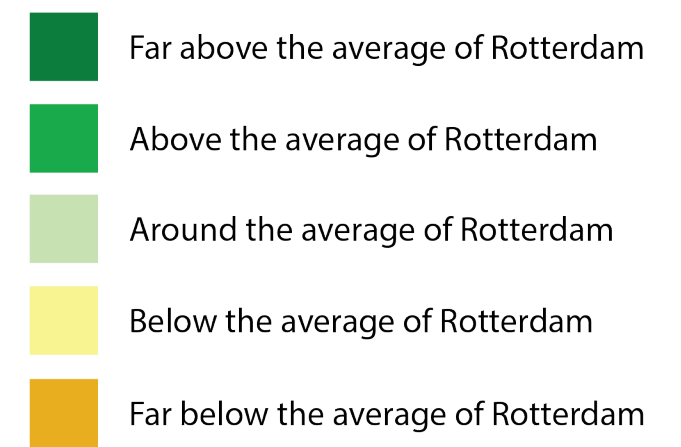


Rotterdam





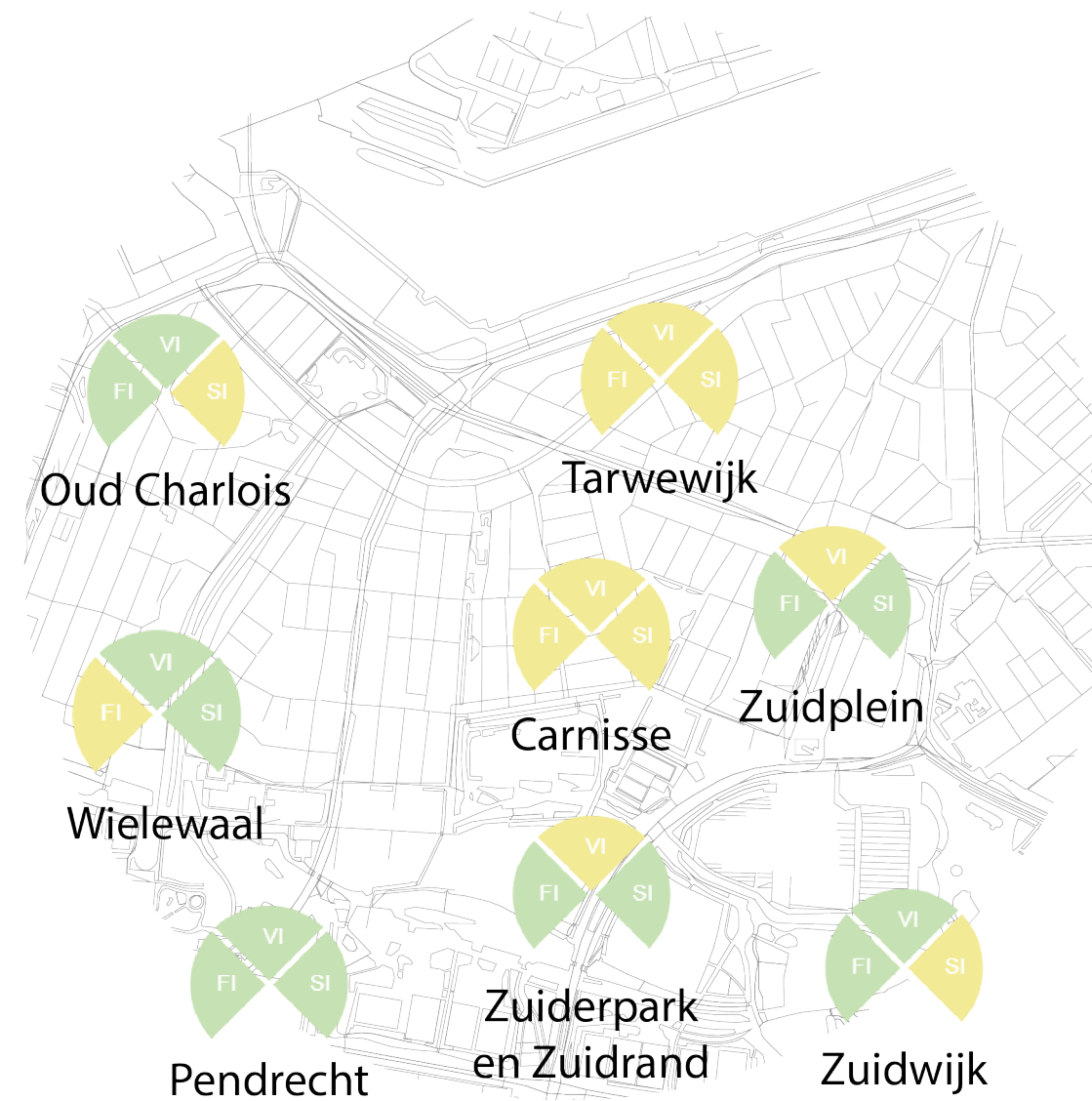
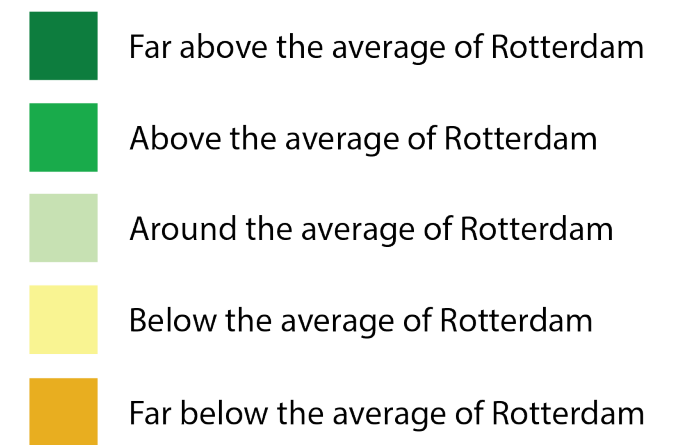
Neighborhoods



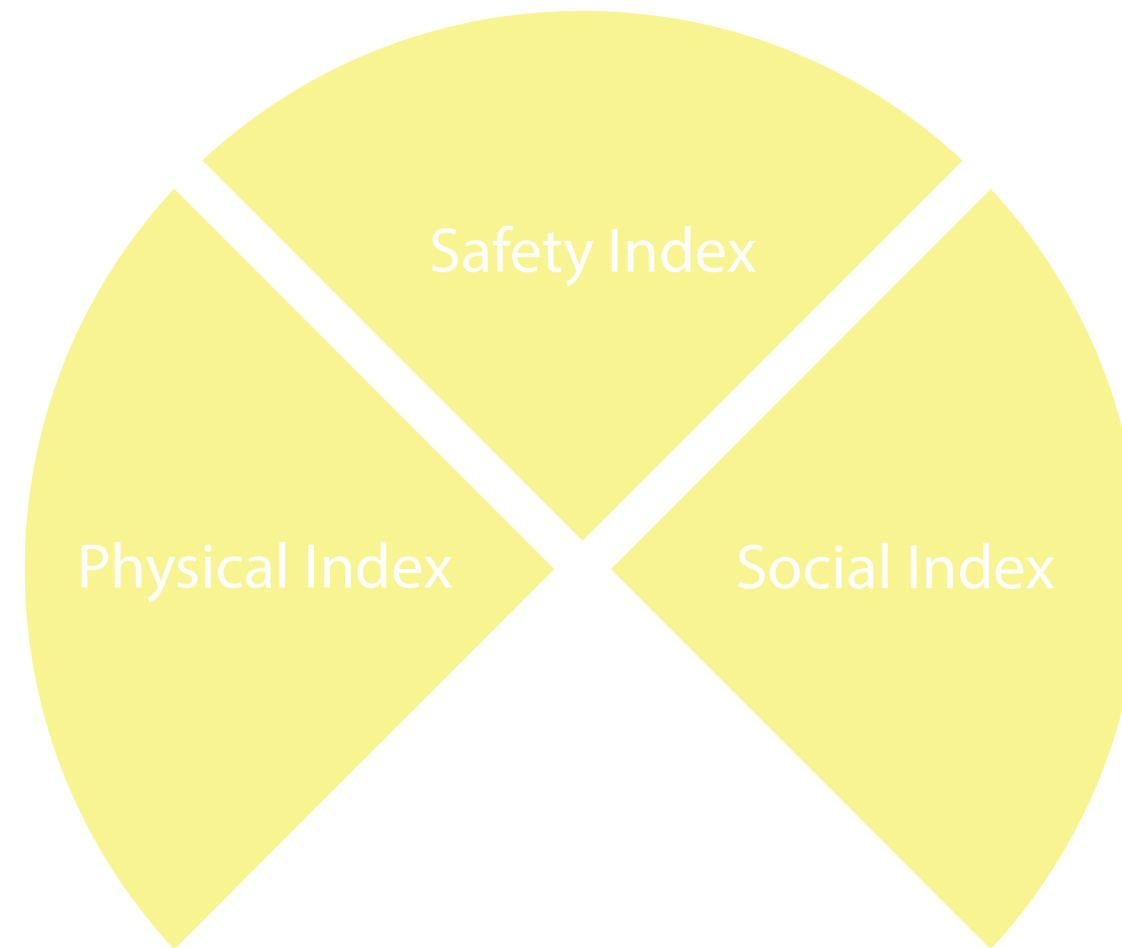
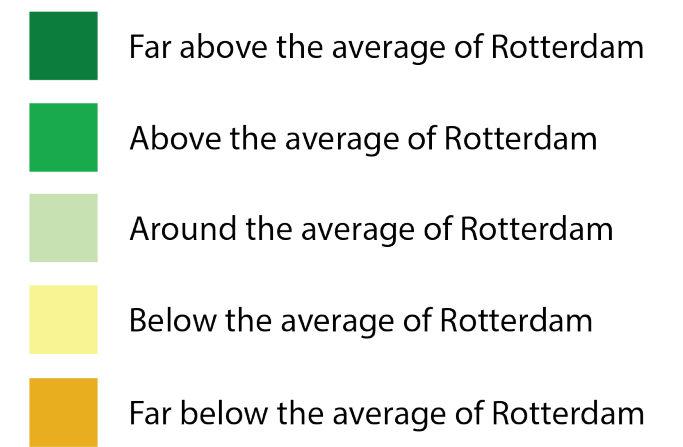
Charlois



Charlois



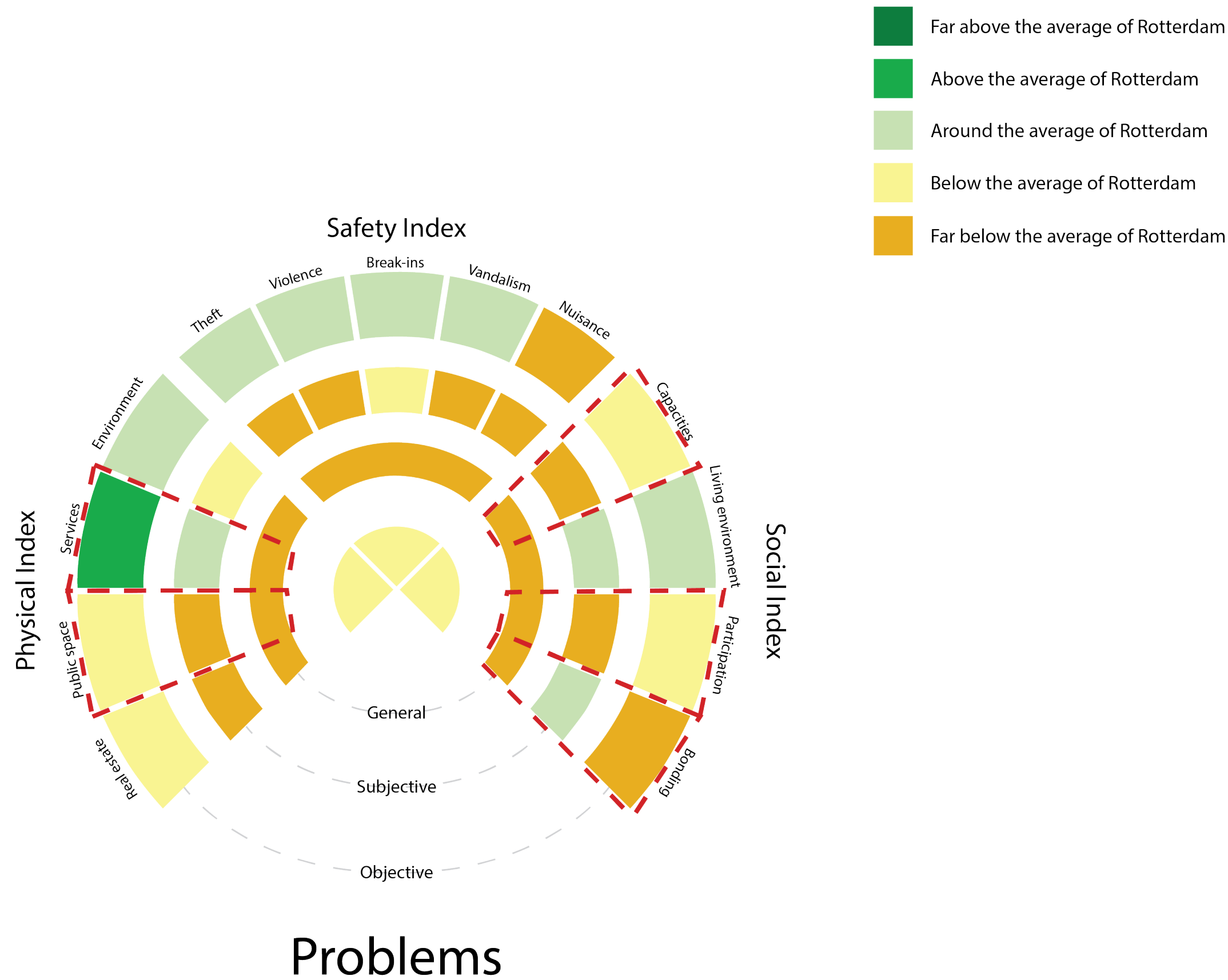
Charlois neighborhoods



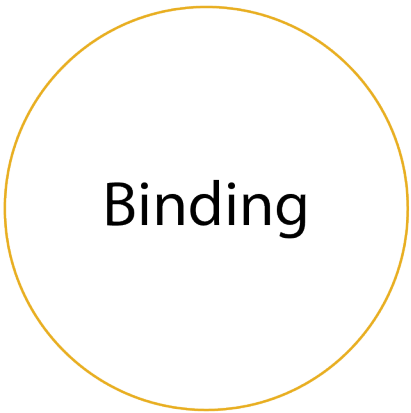
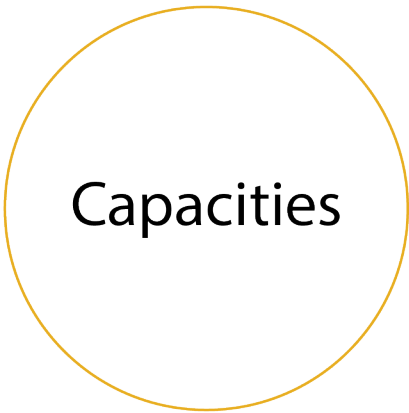
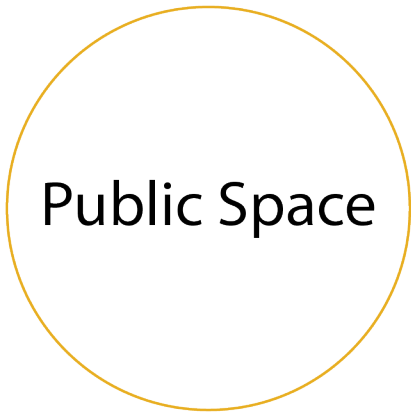
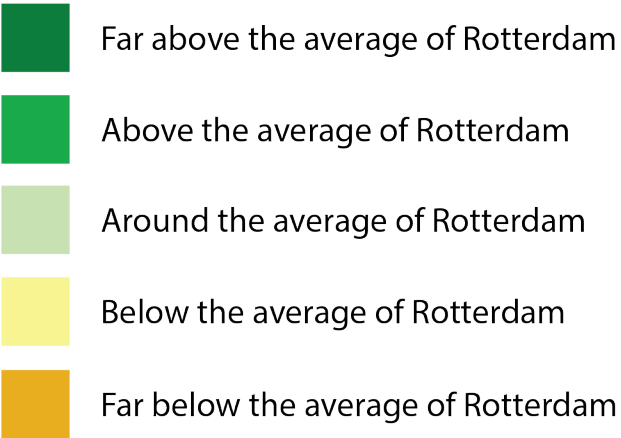
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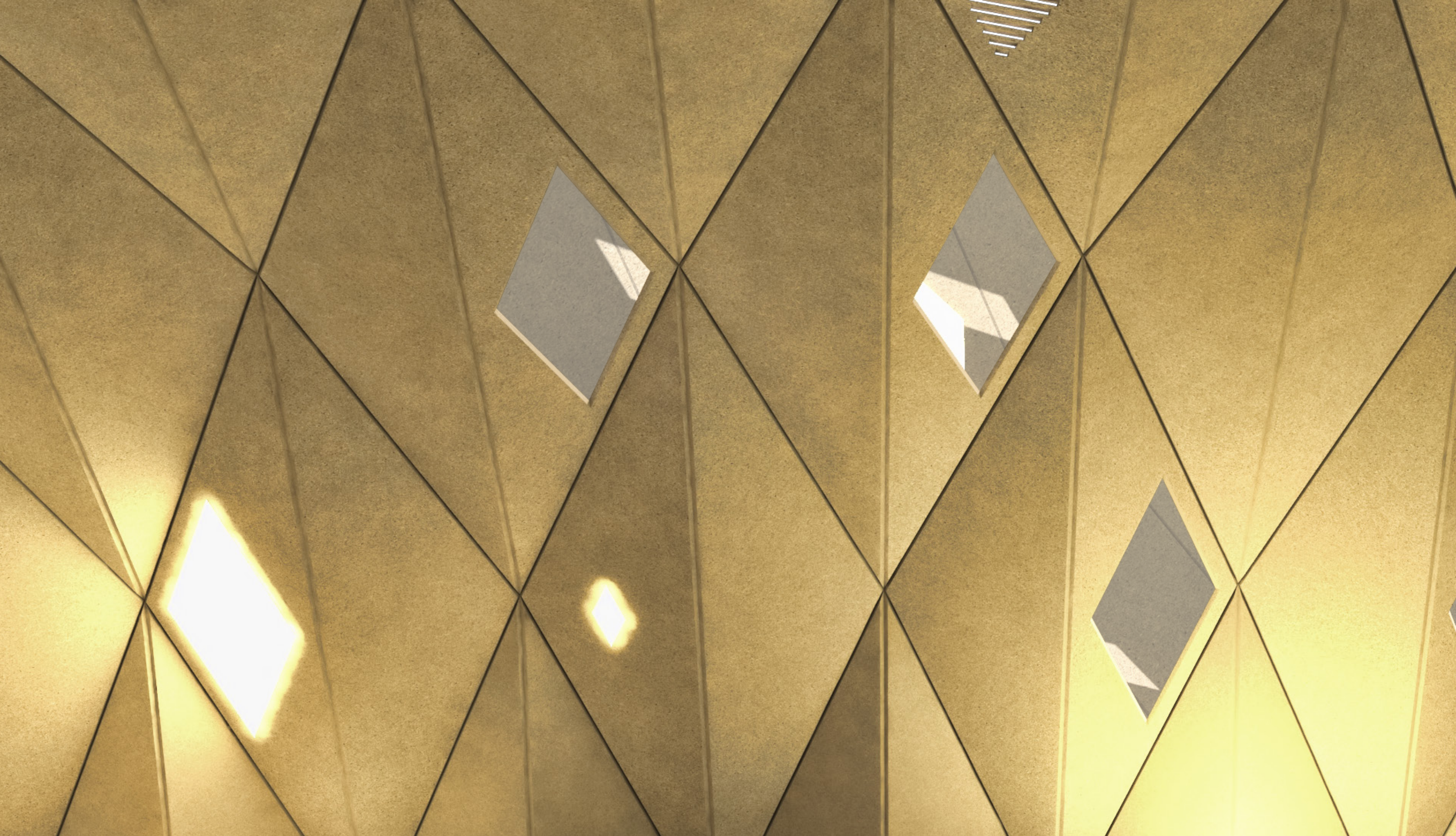


Problems



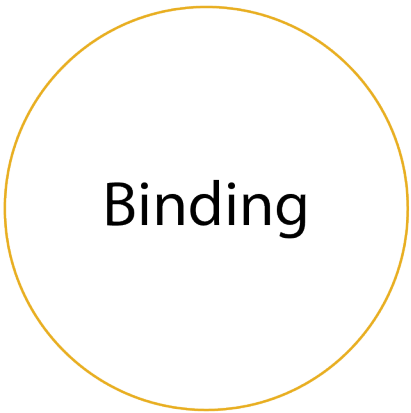
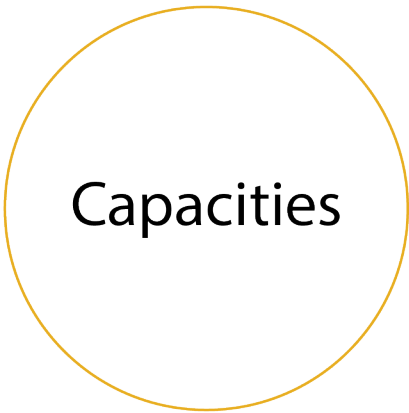
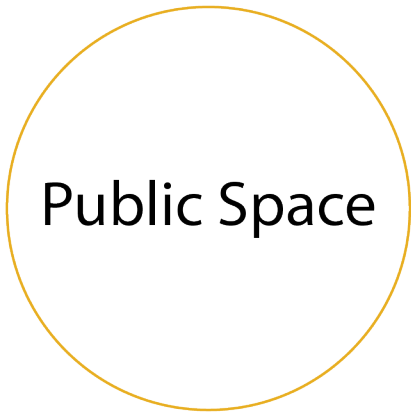
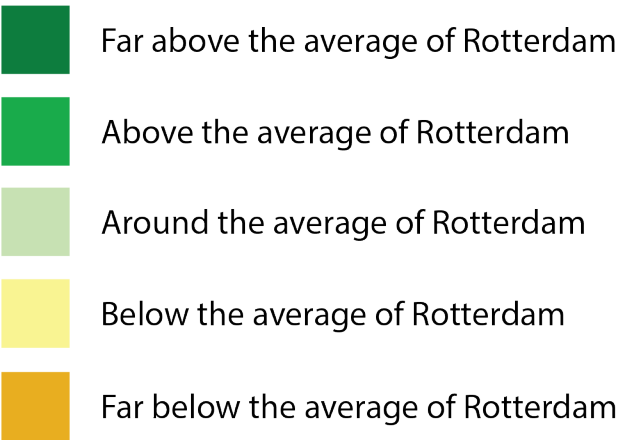
Problems



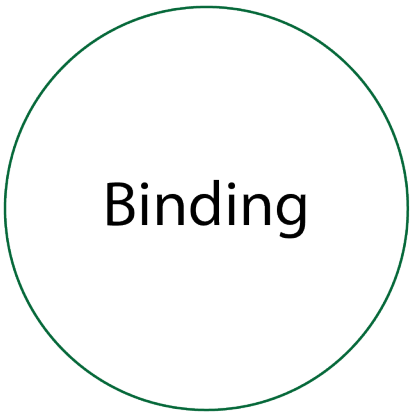
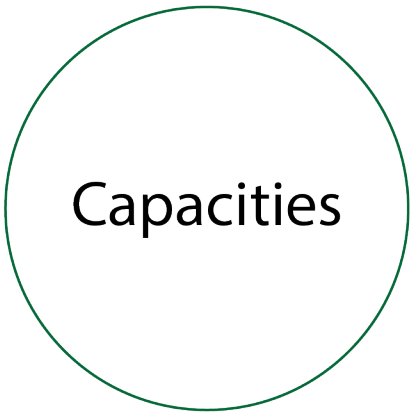
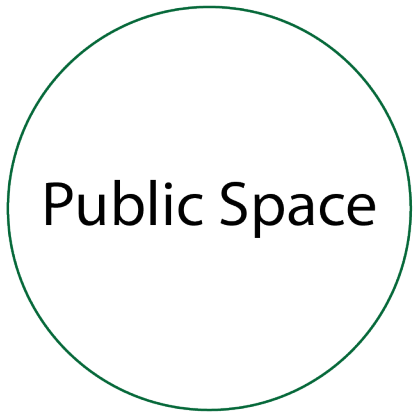
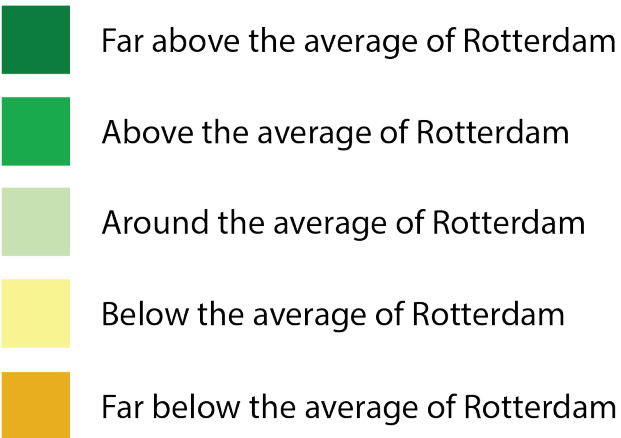


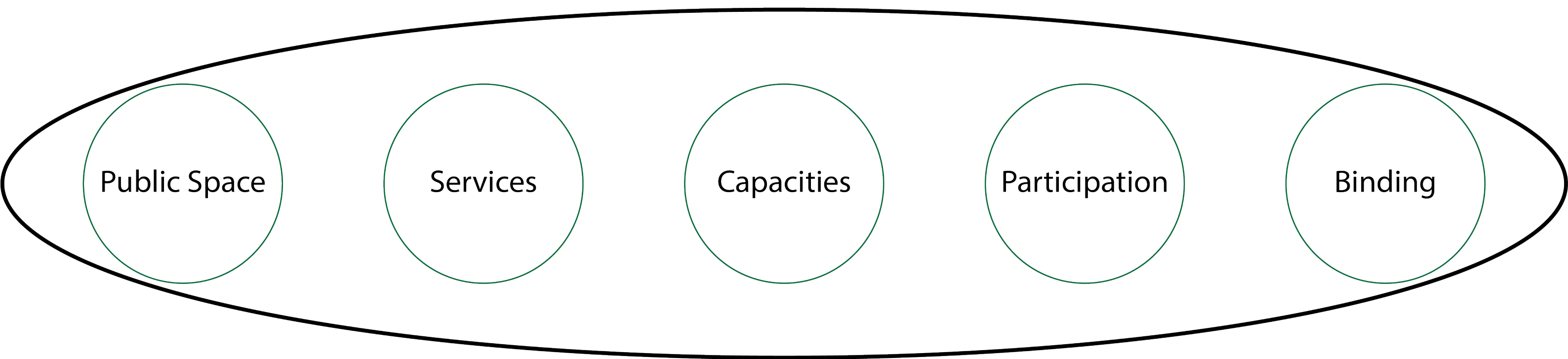
HOW

Problems

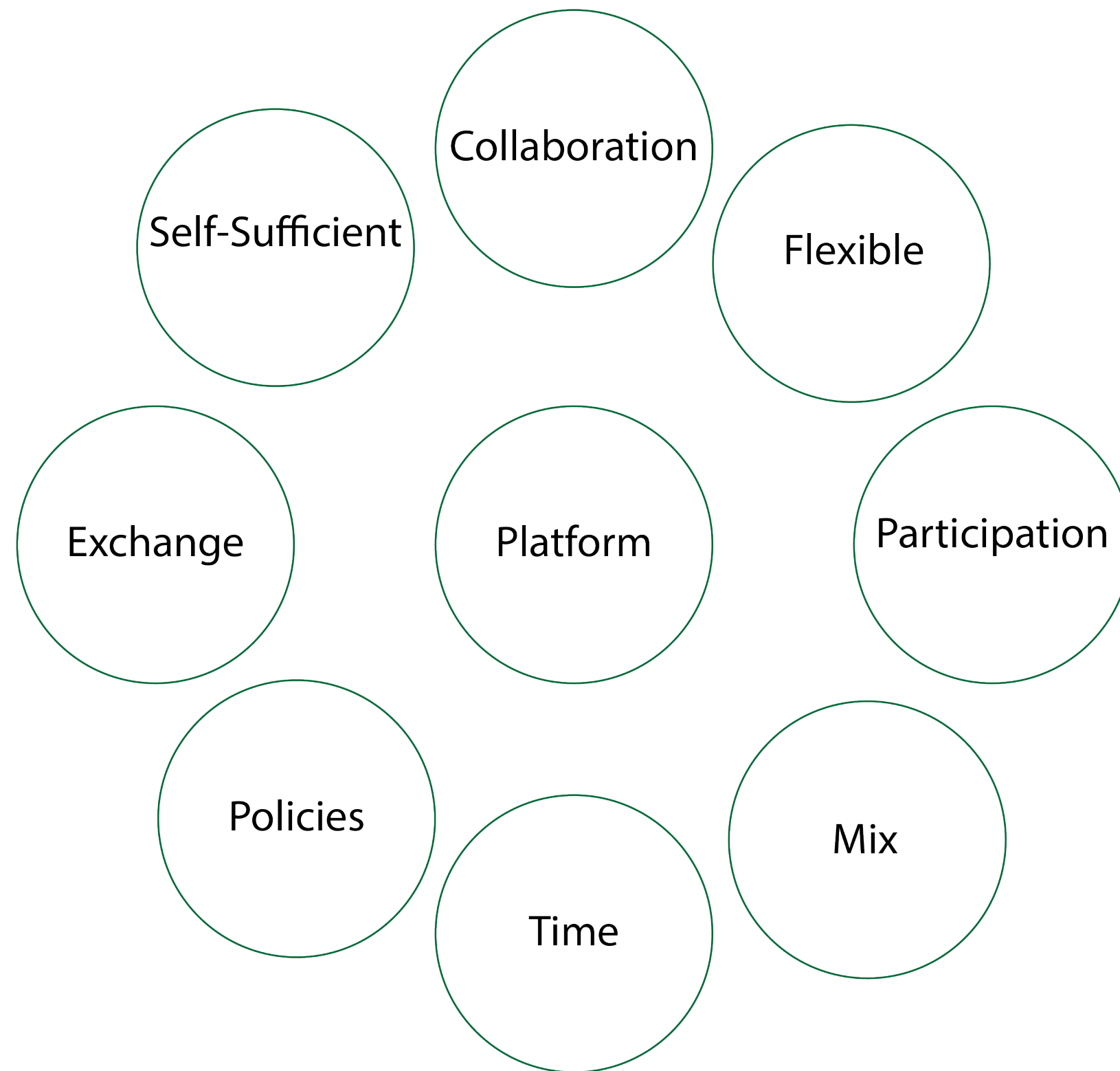


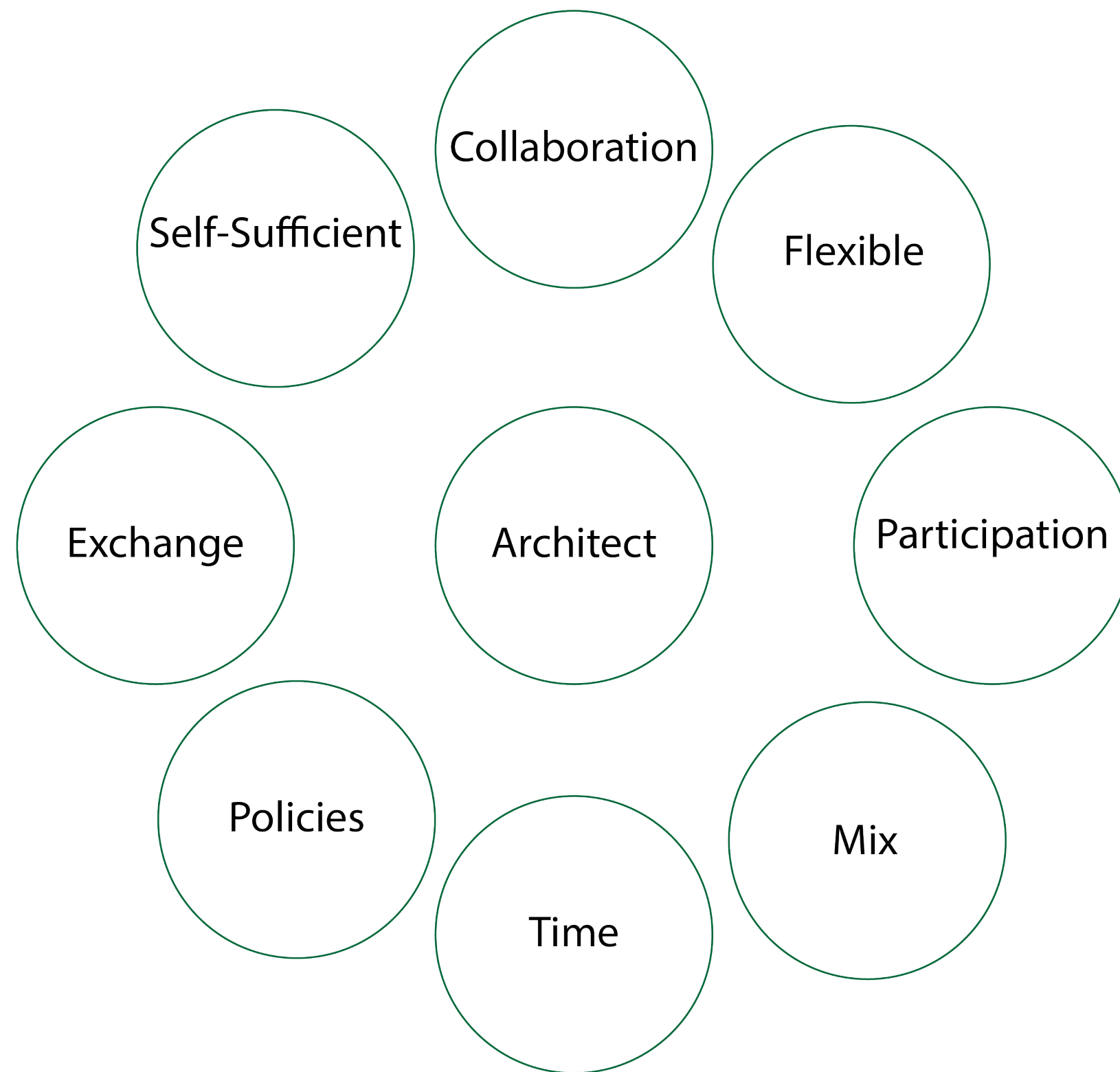
Objectives

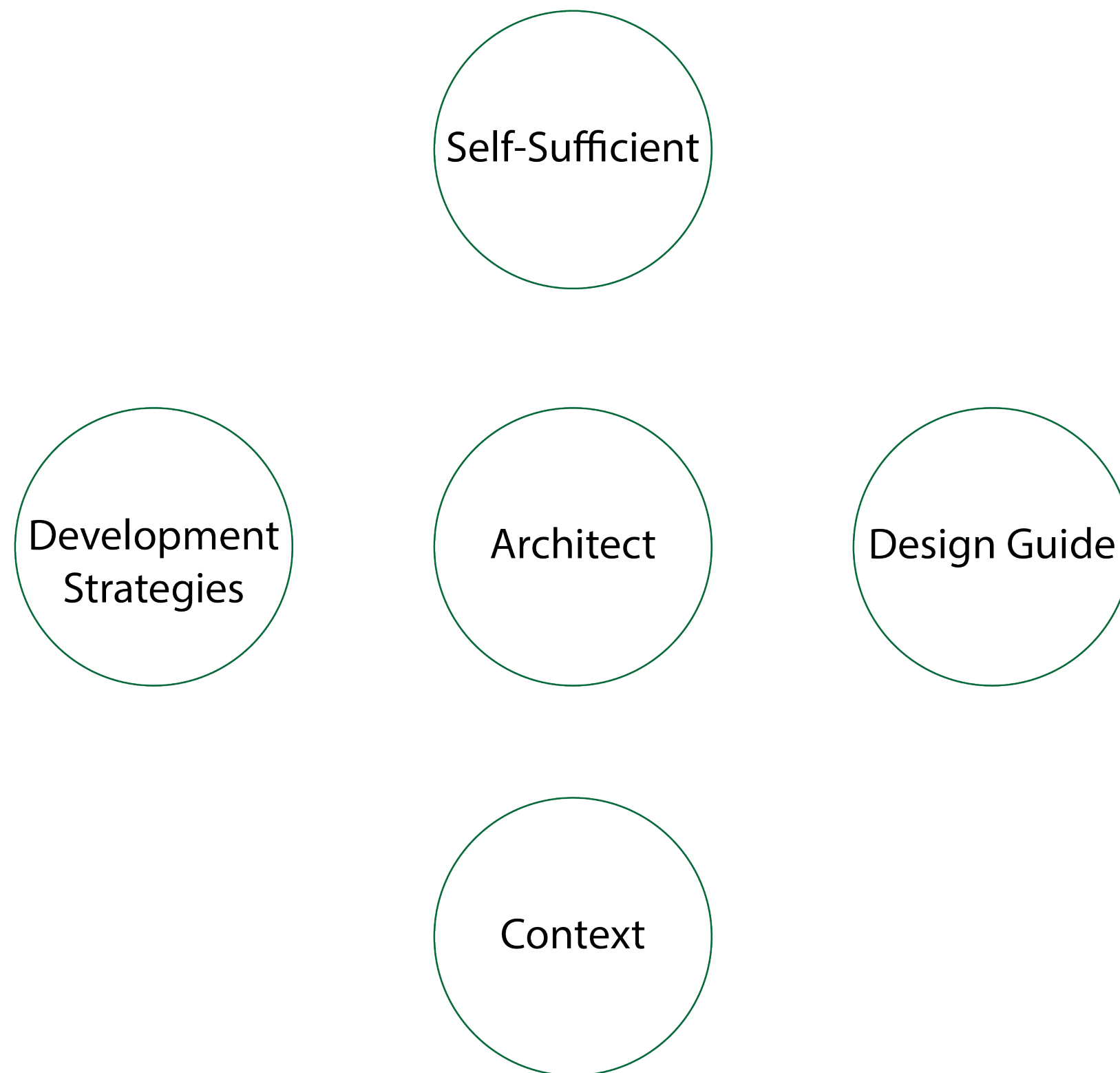




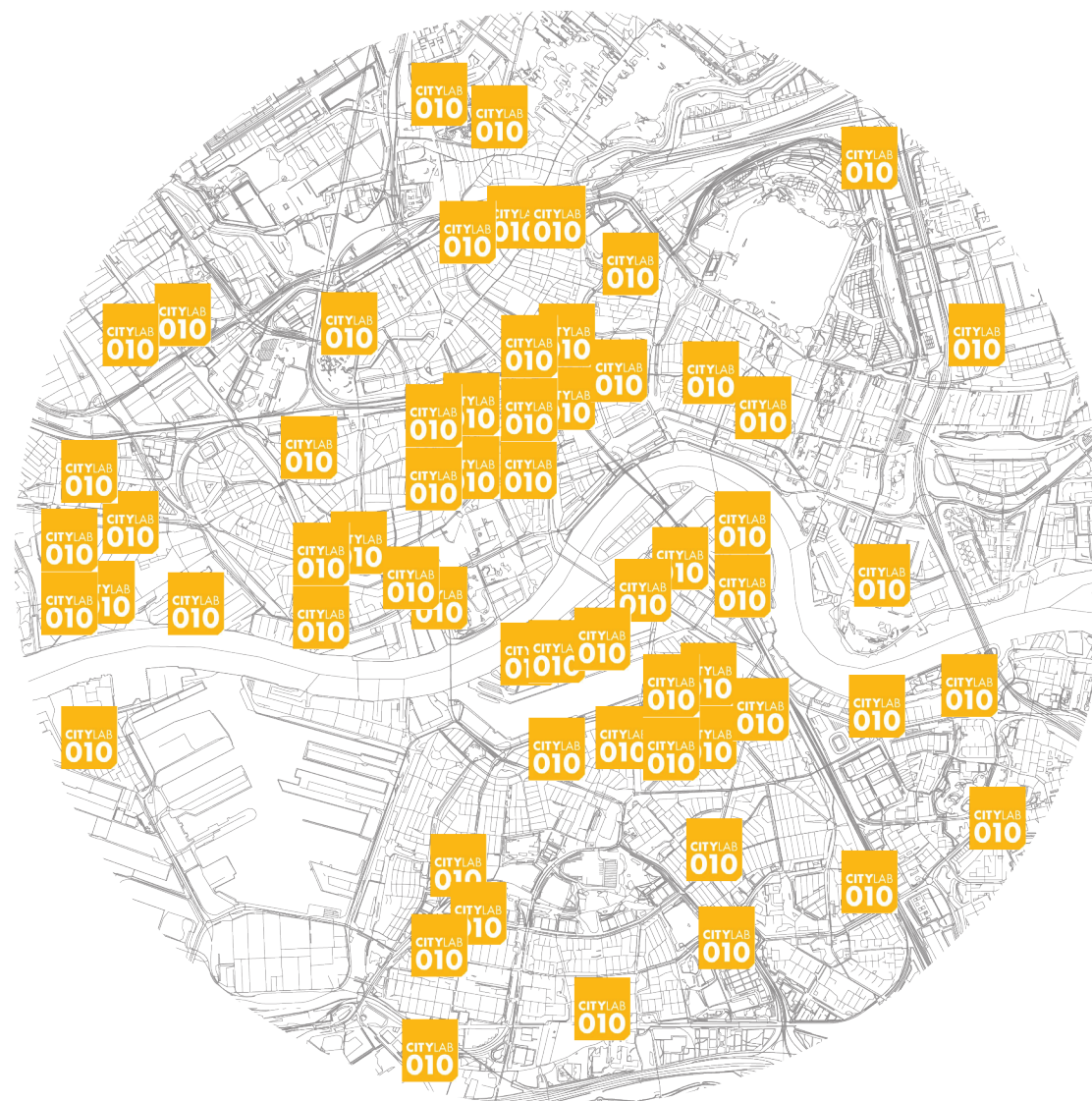
Platform







CITYLAB
010



CityLab010

Invisible urban layer

CULTUURWERKPLAATS

SUBSIDIE TOEGEKEND € 33.226,00

Aangemaakt: 08 mei 2016
Cultuur als vernieuwende kracht

Het ontwikkelen van het product cultuurwerkplaats middels 2 pilots: Bewoners en culturele ondernemers uit de buurt werken samen aan het verbeteren van de sociale en economische situatie van de wijk en hun bewoners.

Wij, culturele ondernemers van Rotterdam Zuid, zijn in contact gekomen met 2 groepen actieve bewoners. In Carnisse met een groep voornamelijk blanke Nederlanders en in de Tarwewijk met 3 verschillende initiatieven (allochtone vrouwen, geëngageerde mediakunstenaars, in literatuur en geschiedenis van de wijk geïnteresseerden). Beide groepen willen zowel afzonderlijke privé-situaties als het klimaat van hun woonomgeving verbeteren. Om samen met deze bewoners die doelen te verwezenlijken zijn wij in beide wijken een cultuurwerkplaats gestart. Het zijn onze laboratoria. Door middel van deze testcases onderzoeken wij het effect (sociaal en economisch) van een langdurige samenwerking tussen buurtbewoners en cultureel ondernemers uit dezelfde wijk. Het onderzoek resulteert in het prototype van een cultuurwerkplaats. Dit prototype kan vervolgens ingezet worden in andere wijken van Rotterdam en geëxporteerd worden naar andere steden.

Waarom goed voor Rotterdam?

Het project levert een bijdrage aan de samenhang binnen de 2 buurten in kwestie en aan de creatieve/culturele bagage van hun bewoners. Na de geslaagde ontwikkeling kan het product cultuurwerkplaats ook in andere wijken ingezet worden. Hierdoor krijgt Rotterdam een betaalbaar instrument in handen om middels cultuur de sociale en economische situaties van wijken en individuen te verbeteren. Rotterdam zet zich op de kaart met een product wat zij naar andere steden kan exporteren.

Waarom vernieuwend?

Projectleider en deelnemer zijn bureaus van elkaar en zien zich voor dezelfde (wijk-)problemen gesteld. Zij gaan een langdurige relatie aan en leren van elkaar. De verhouding projectleider en projectdeelnemer houdt gedurende het leertraject op te bestaan; beide partijen gaan uiteindelijk gelijkwaardig samenwerken bij het vervaardigen van artistieke producten en het opzetten van educatieve diensten. Dat verbetert de sociale en economische omstandigheden van beide partijen.

URBAN SKILLS

SUBSIDIE TOEGEKEND € 125.000,00

Aangemaakt: 29 april 2016
Dus echt iedereen aan het werk

Leren voor jongeren. Werken voor jongeren.

Onze aanpak is tweeledig en heeft een preventief deel gericht op jongeren van 16 tot 18 jaar en een curatief deel gericht op jongeren van 18 tot 27 jaar, en bestaat uit een combinatie van training op houding en gedrag en bemiddeling / begeleiding naar werk waarin gebouwd wordt aan het ontwikkelen van vaardigheden voor leven, leren en werken. Beide trajecten bieden een traject aan binnen de context waarin de doelgroep moet leren functioneren. Het curatieve traject biedt training en coaching binnen een werkgerichte omgeving en ligt in het verlengde van het preventieve traject binnen een onderwijssetting plaats vindt. Deze combinatie werkt als een multiplier voor de output en is daarom in onze visie onontbeerlijk voor een effectieve aanpak. Onze ambitie is om jongeren die in principe in staat zijn om zelfstandig een succesvol economisch onafhankelijk bestaan op te bouwen, al vroegtijdig in hun kracht te zetten zodat bijsturing in een later stadium.

Waarom goed voor Rotterdam?

Resultaten:
Preventief - De ervaring van de afgelopen jaren is dat van leerlingen die het Urban Skills programma hebben gevolgd 80 procent het diploma behalen en daarmee de startkwalificatie hebben verworven. Deze groep zal dankzij het gevolgde programma zelfstandig een werk kunnen vinden.
Curatief - Ervaringscijfers: 80 procent zal het programma met goed gevolg doorlopen en het certificaat ontvangen. 50 procent hiervan zal werk vinden en 50 procent zal een participatiebaan vinden.

Waarom vernieuwend?

Het unieke van dit project is de samenwerking tussen enerzijds de scholing en vorming van een kwetsbare groep van leerlingen en jong volwassenen en anderzijds de gerichte toeleiding naar de arbeidsmarkt. Verborgene talenten is in het kort de brug tussen beiden domeinen.

- Een vormende instelling die werkzoekenden met een afstand tot de arbeidsmarkt traint en begeleidt;
- Een arbeidsbemiddelingsbureau dat actief vacatures zoekt, contacten heeft met het bedrijfsleven en zelf formeel als werkgever

MENTALE VEERKRACHT ALS PIJLER VAN DE HEF

SUBSIDIE TOEGEKEND € 34.000,00

Aangemaakt: 10 mei 2016
Heb hart voor onderwijs

Ons plan is om mentale veerkracht en welbevinden tot belangrijke pijlers van ons schoolbeleid te maken

Dit doen we middels een innovatieve "whole-school" approach op basis van de wetenschappelijke inzichten uit de Positieve Psychologie, begeleid door dr. R.M.P. van Zundert en drs. Patries Dekkers. Bij een whole-school approach worden zowel de leerlingen als alle teamleden onderwezen in strategieën, vaardigheden en eigenschappen die leiden tot veerkracht en welbevinden. Dit door middel van zowel expliciete training als door het verweven hiervan in de bestaande lesstof, als verdieping van de coaching. Ook de oudercomponent wordt meegenomen in dit traject.

Waarom goed voor Rotterdam?

Van de leerlingen die afkomstig zijn van Rotterdam-Zuid, woont 78% in een Focuswijk: sociaal probleemwijk. Een behoorlijk deel van de leerlingen op RVC De Hef bestaat uit ISK-leerlingen. De problematiek bij dit type leerlingen is zeer divers.

Waarom vernieuwend?

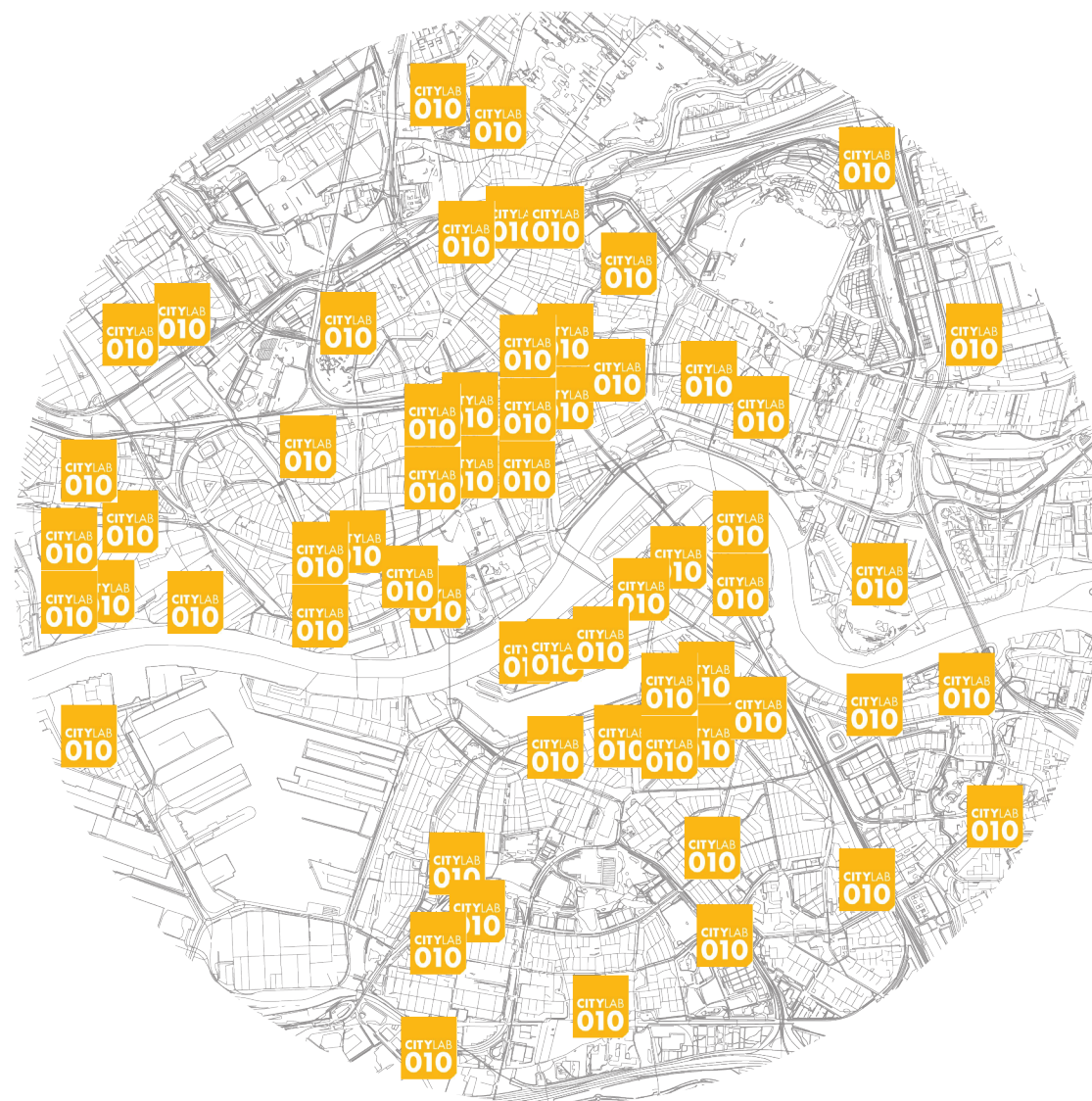
Tot nu toe is er geen andere partij die een dergelijke whole-school approach aanbiedt in Nederland. Het verweven met de lesstof is daarnaast een belangrijk vernieuwend aspect.

DOE MEE

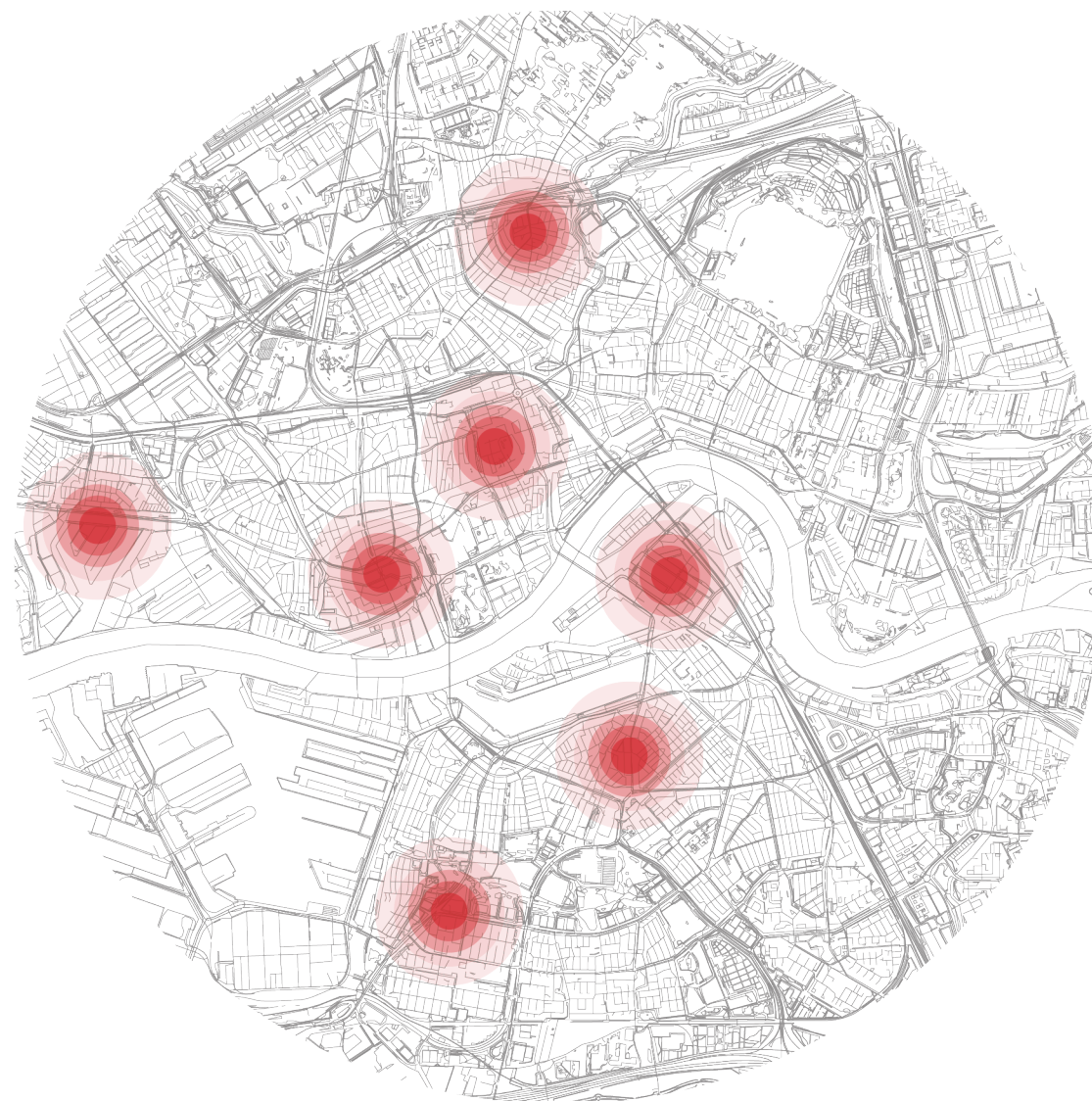
Organisatie: Stichting OffCourse
Contactpersoon: Charlotte van Oostrum

WIJ ZOEKEN

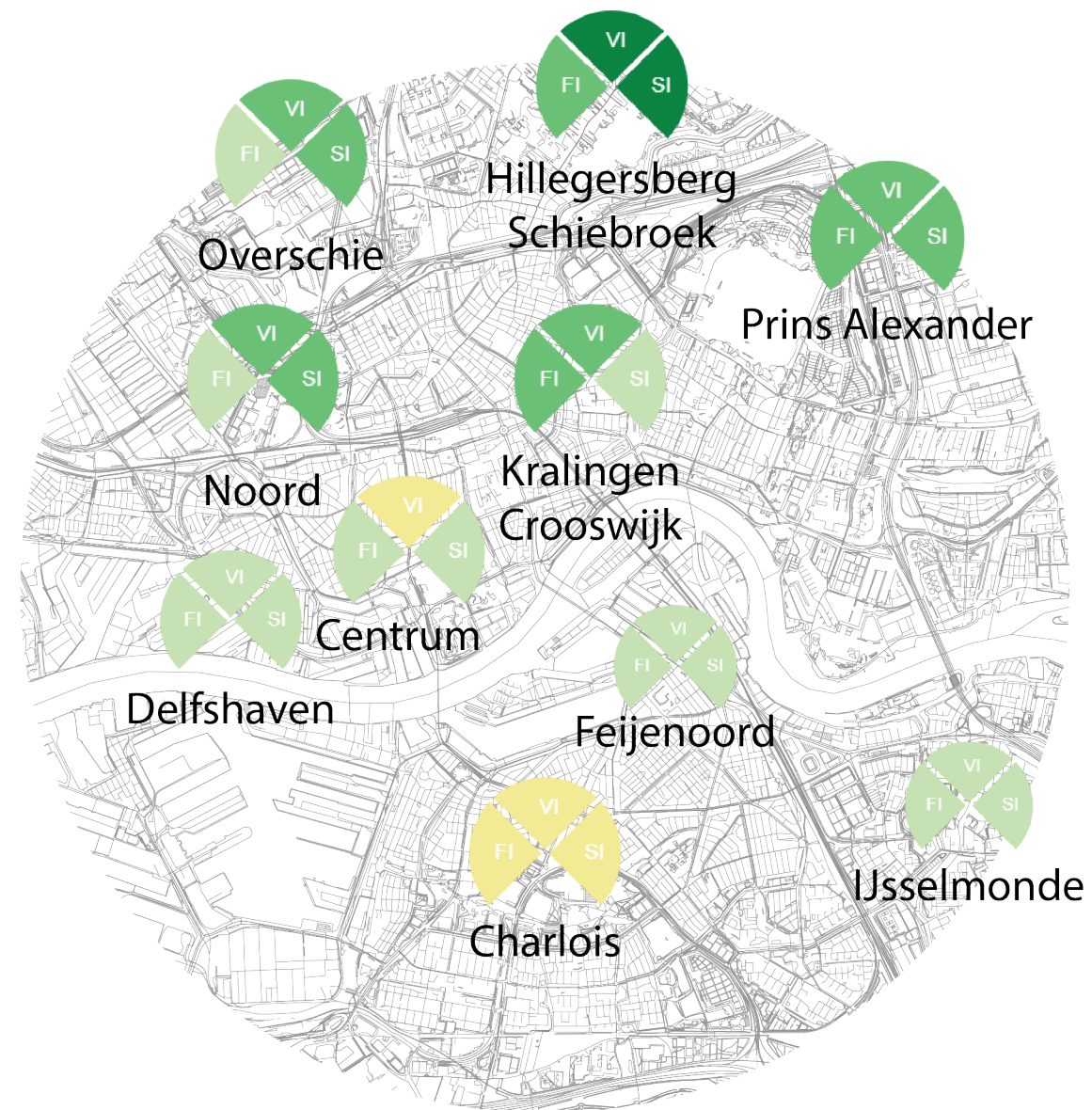
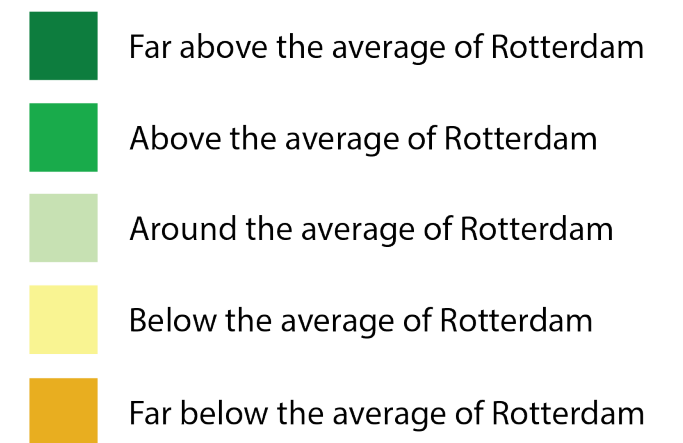
Bedrijven in de IT (voor doorstroming)
Organisaties die kwetsbare doelgroepen willen trainen (leren programmeren)
Financiële ondersteuning



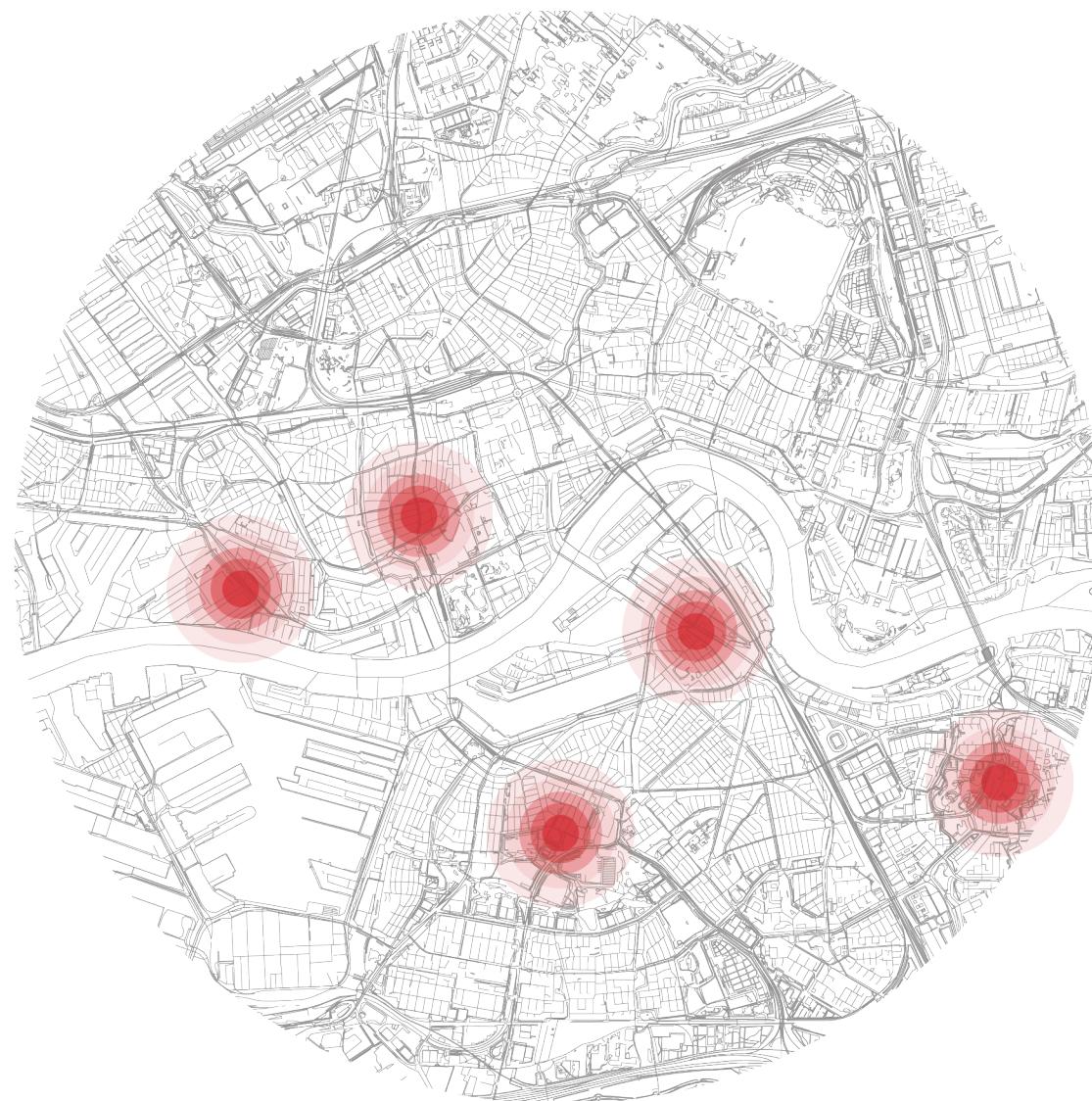
CityLab010



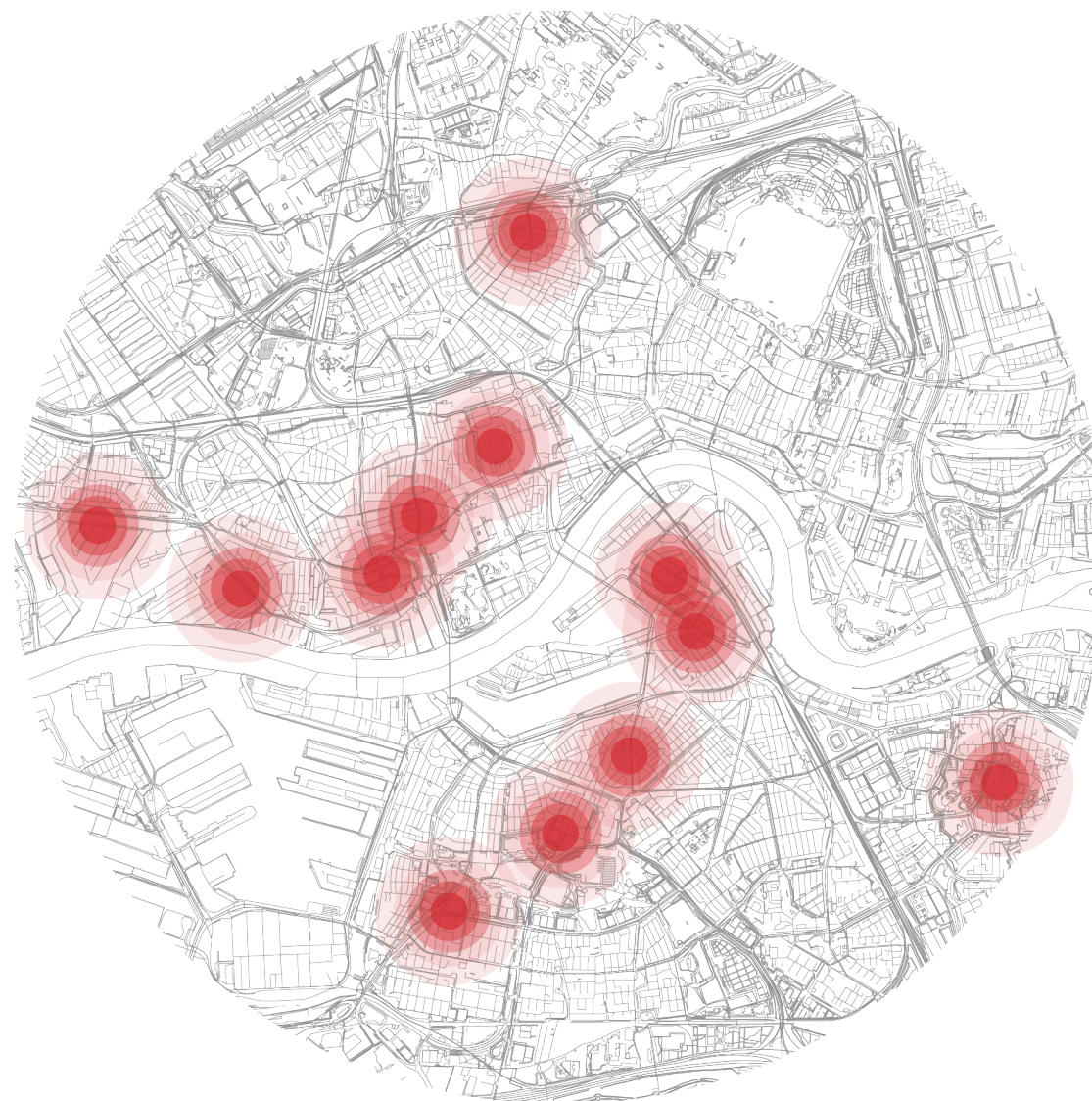
CityLab010 clusters



Neighborhoods



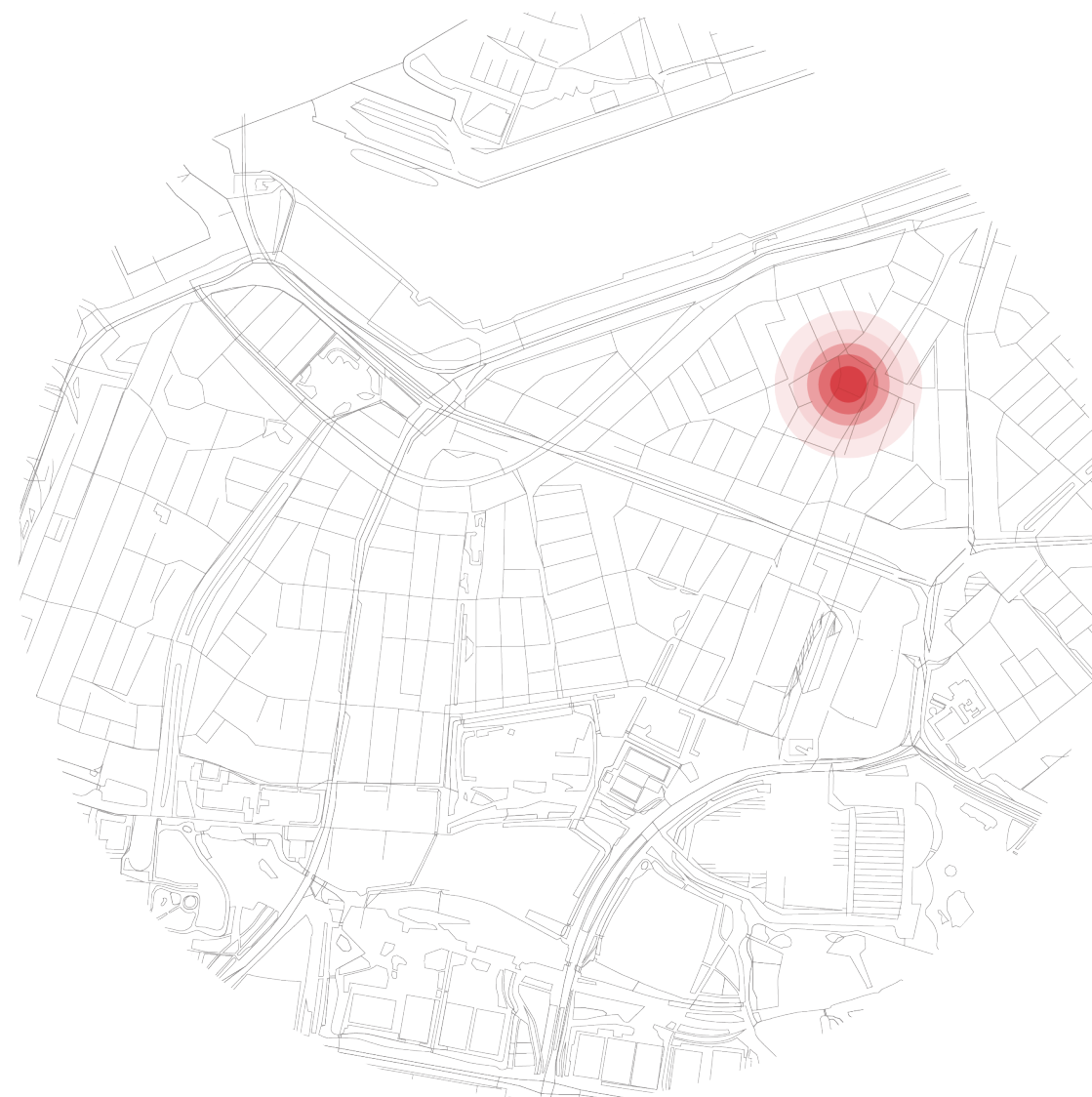
Neighborhoods \leq average



Clusters & Neighborhoods



Charlois



Mijnsherenlaan, Tarwewijk



Mijnsheerenlaan, Tarwewijk

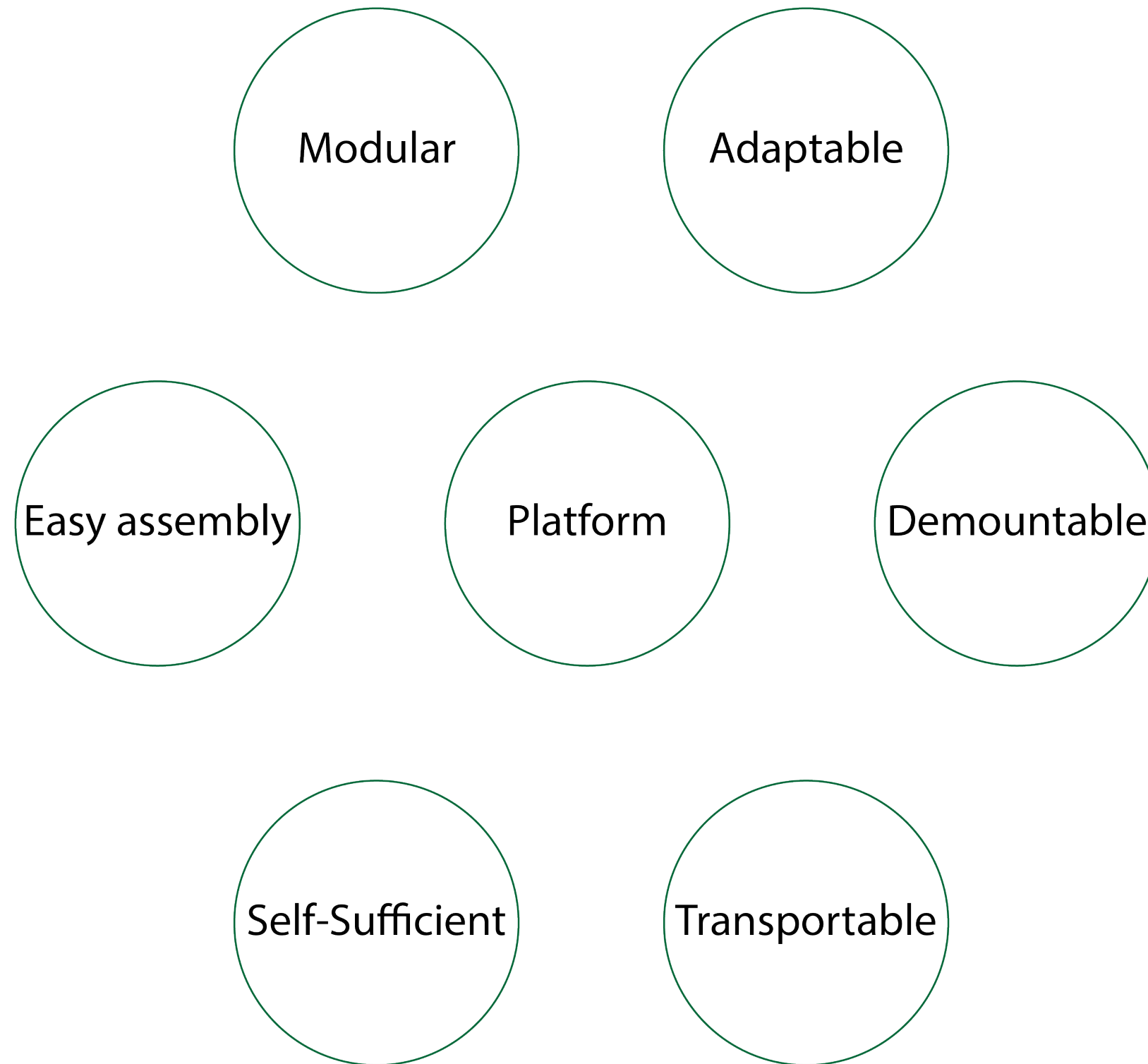


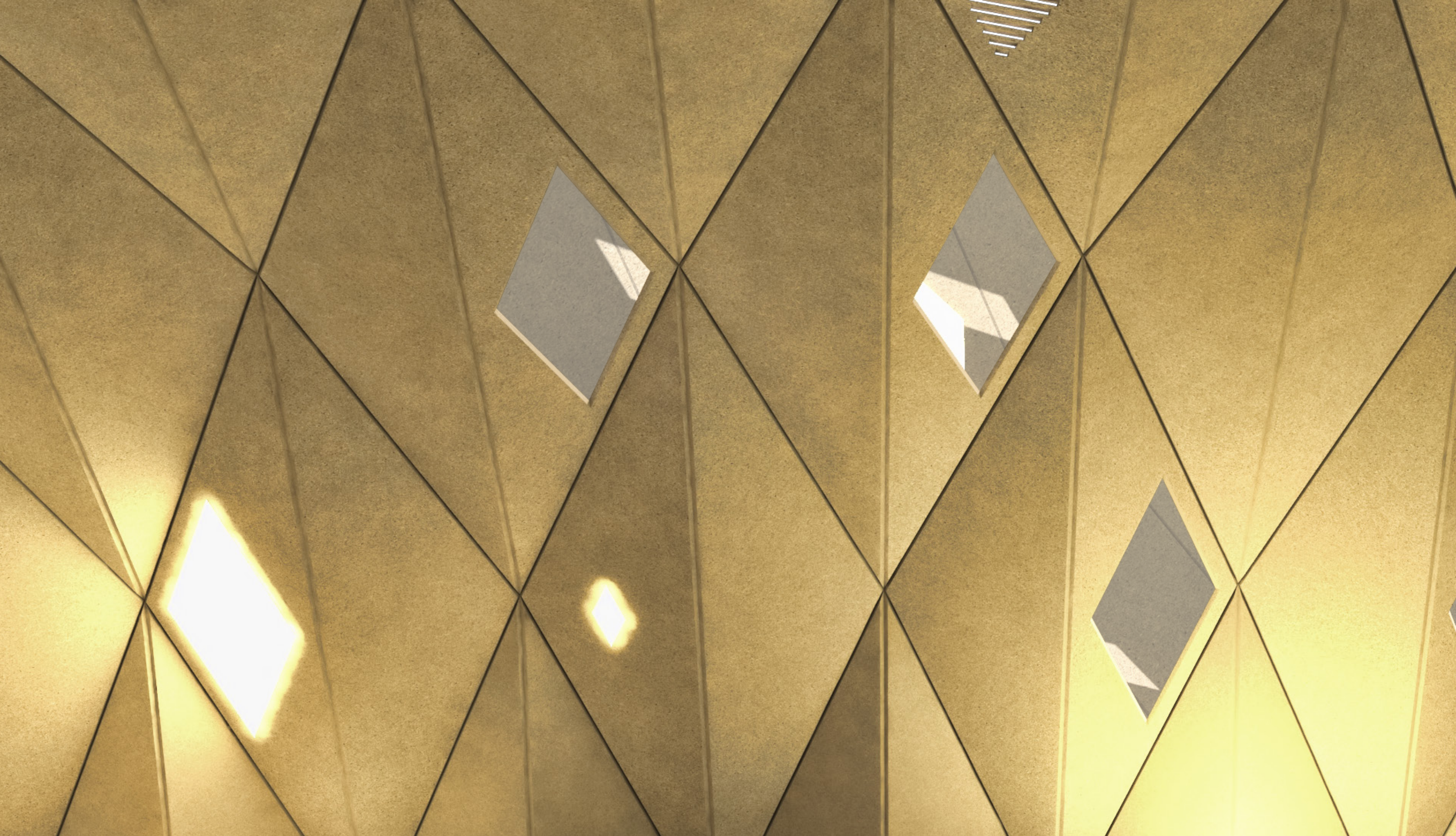
Mijnsherenlaan, Tarwewijk

Overall design question

How could a multipurpose, temporary and economically circular community platform be designed to stimulate participation and awareness in order to reactivate depreciated area's in the urban fabric of Rotterdam?

Design requirements





WHAT

Research

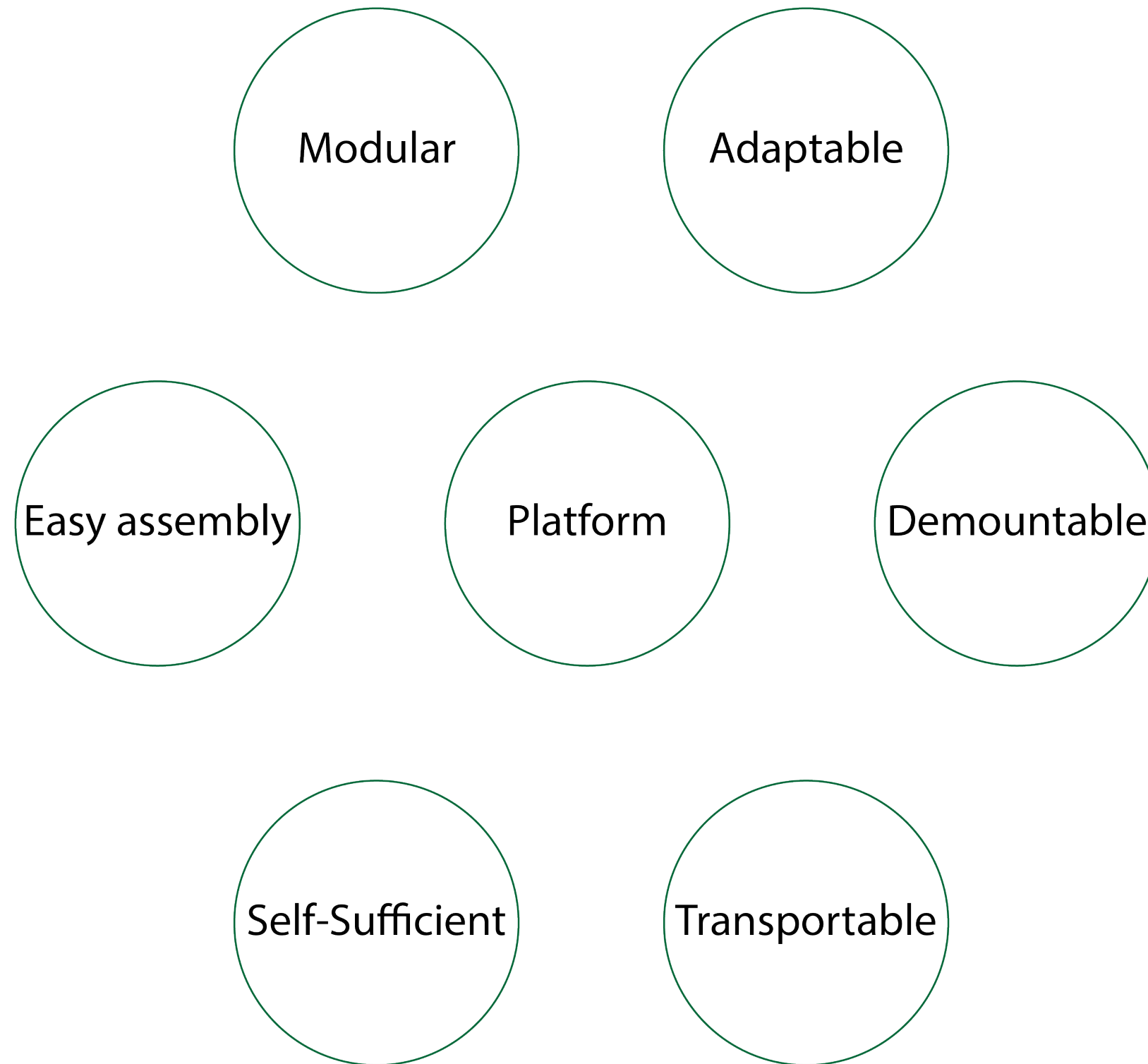
Thematic research question

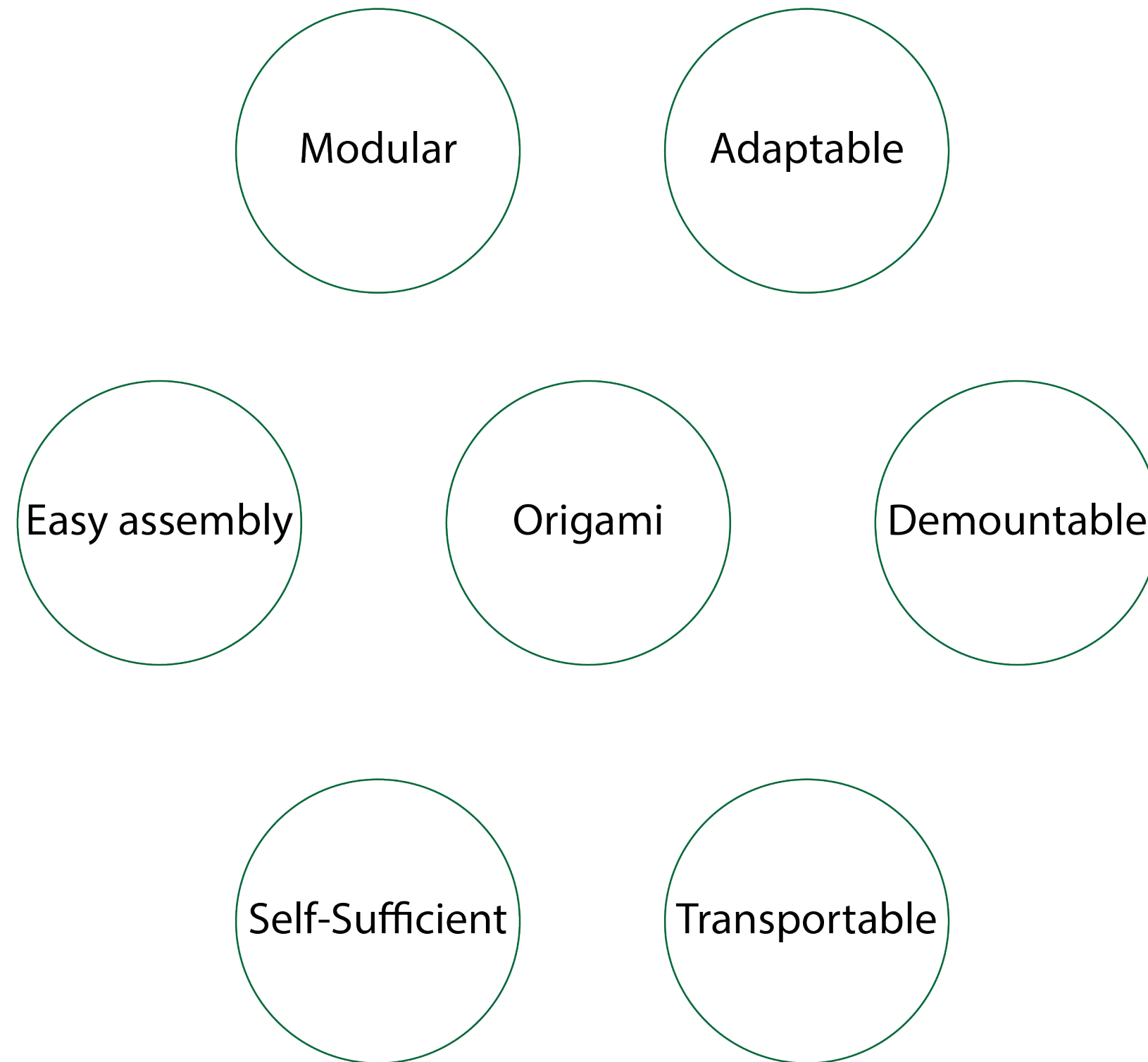
How to develop a modular building system which is adaptable, demountable, transportable, self-sufficient and easy to assemble?

Research method

Literature studies in combination with research by design

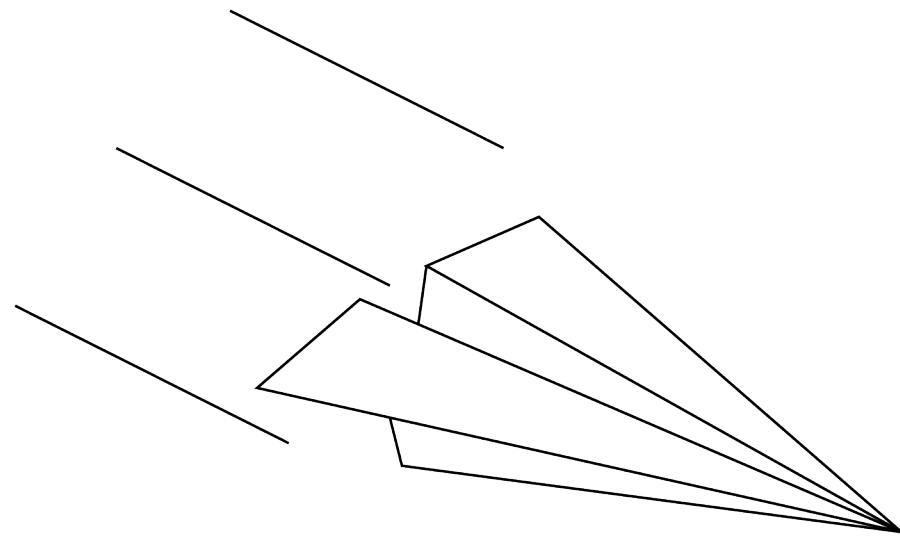
Design requirements

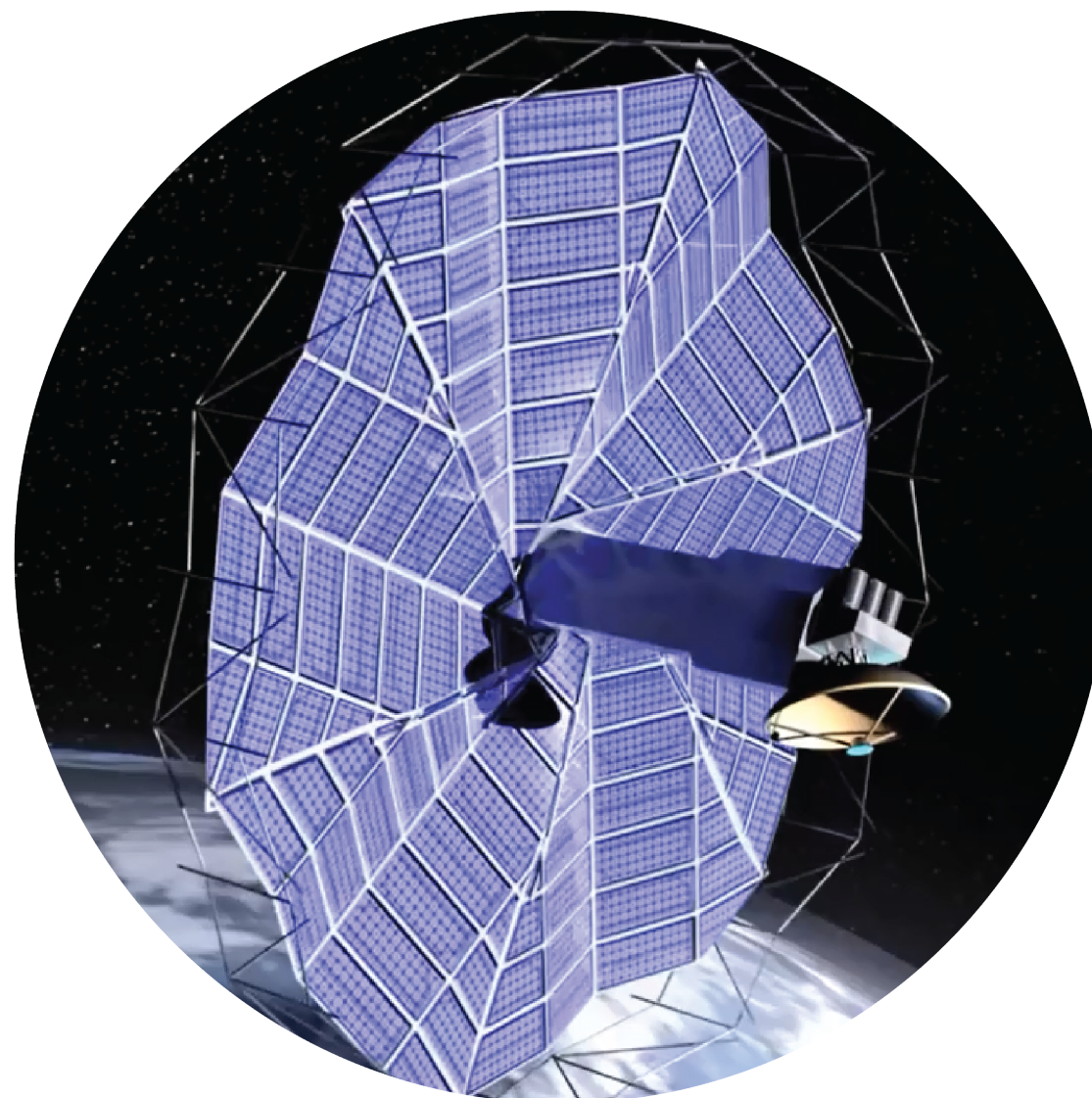




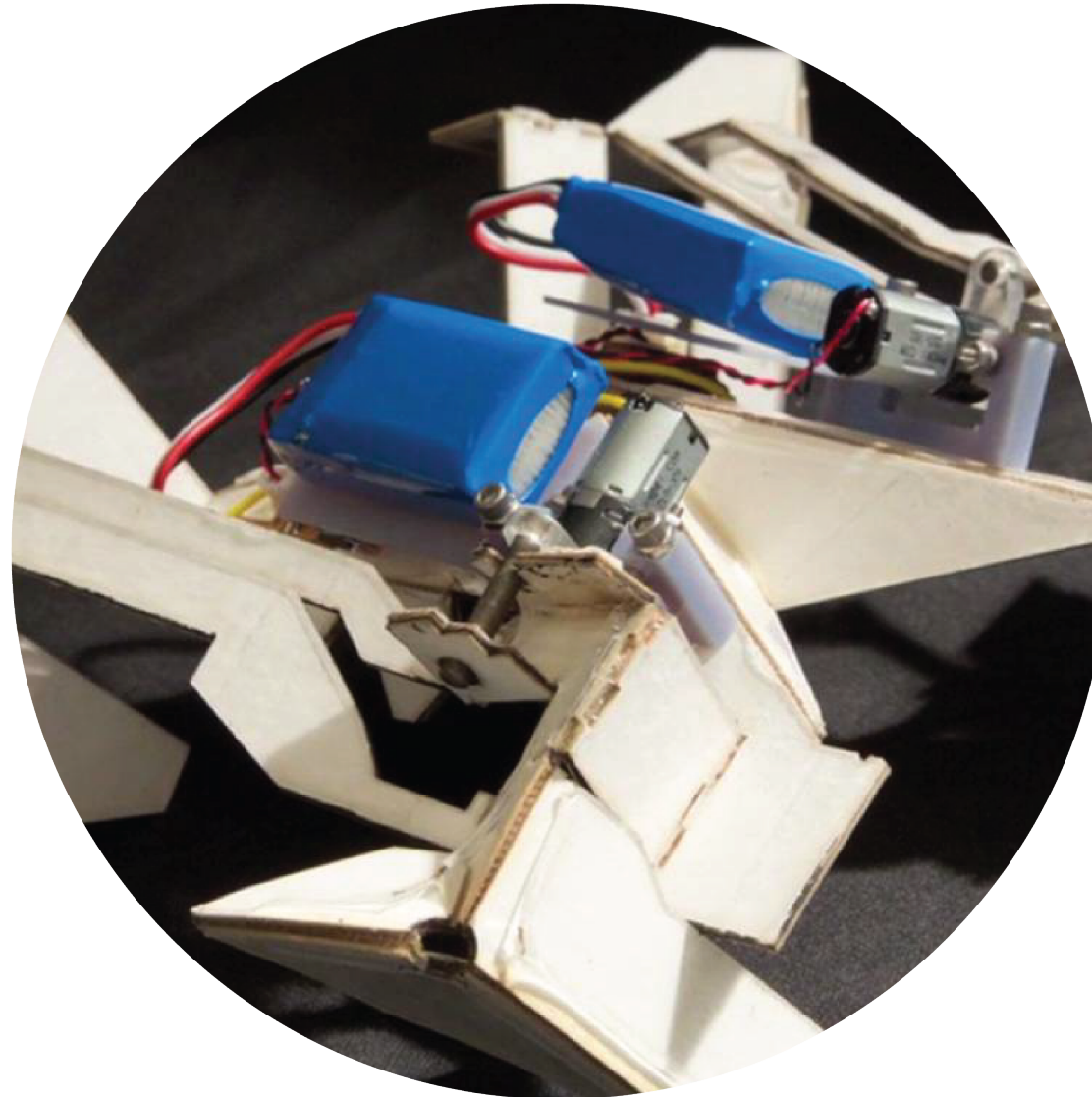


Origami

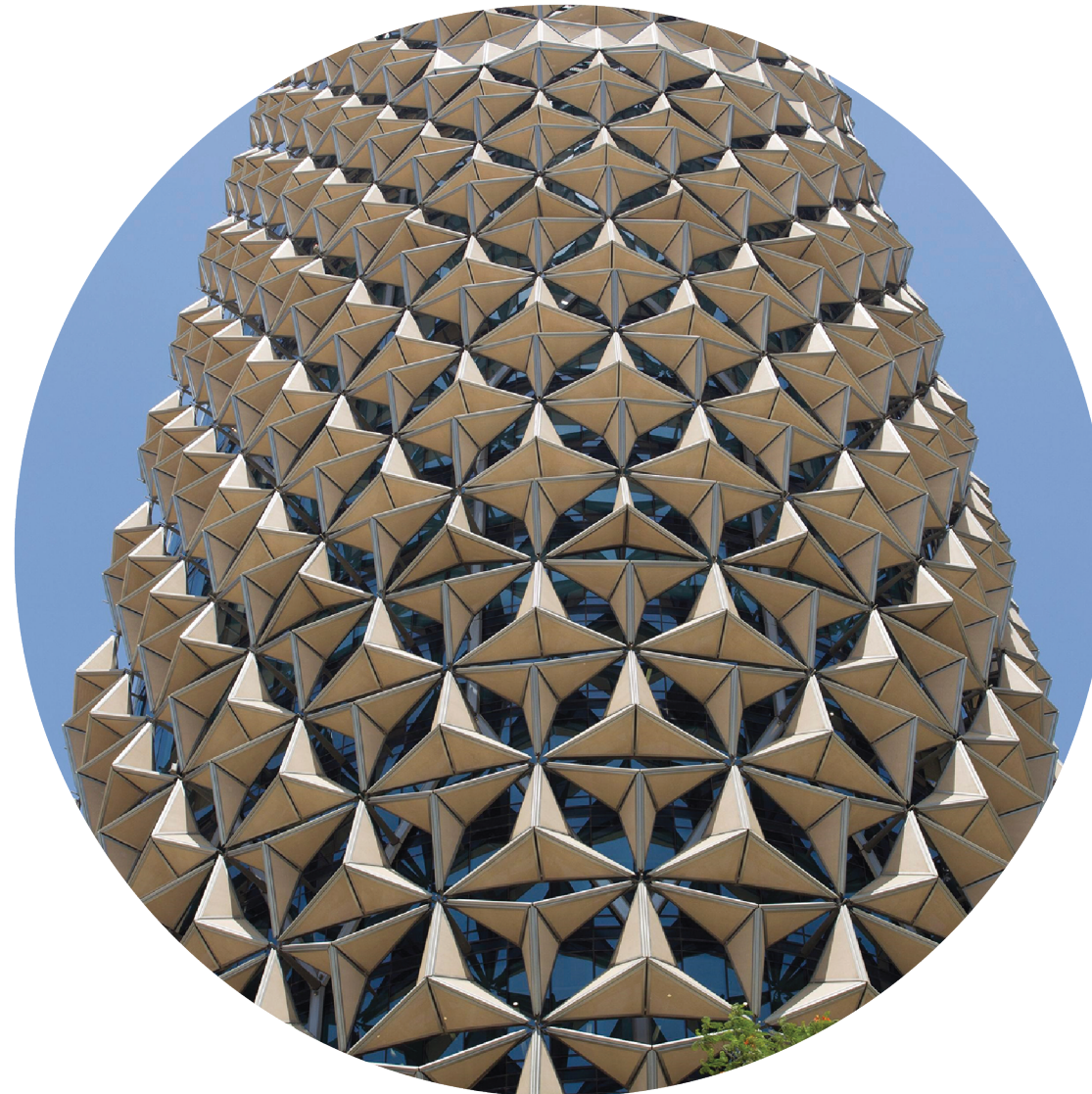




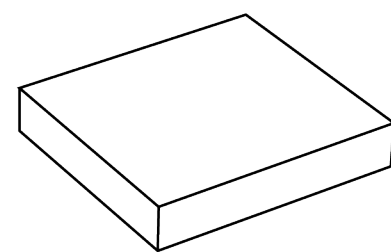
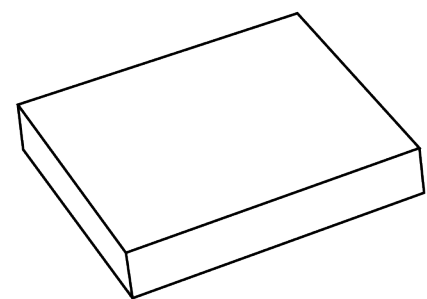
Origami engineering

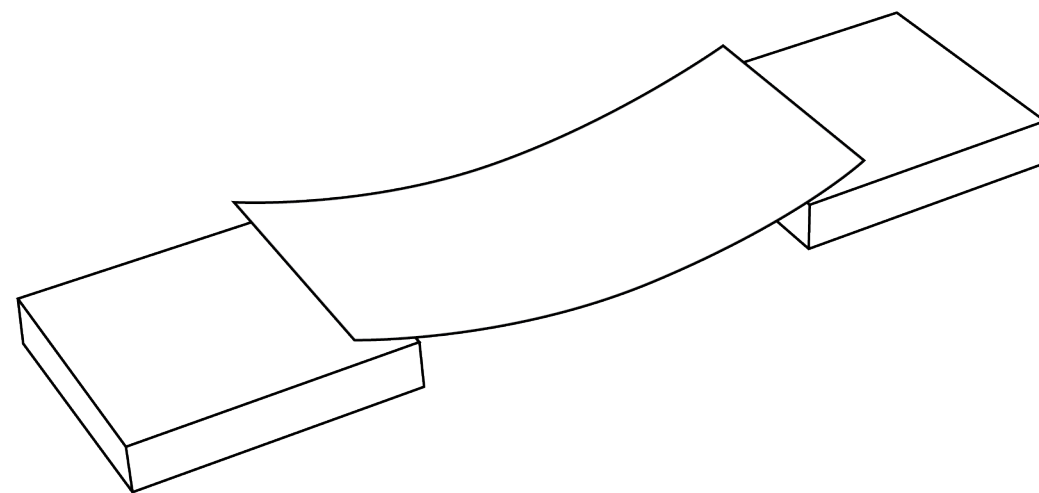


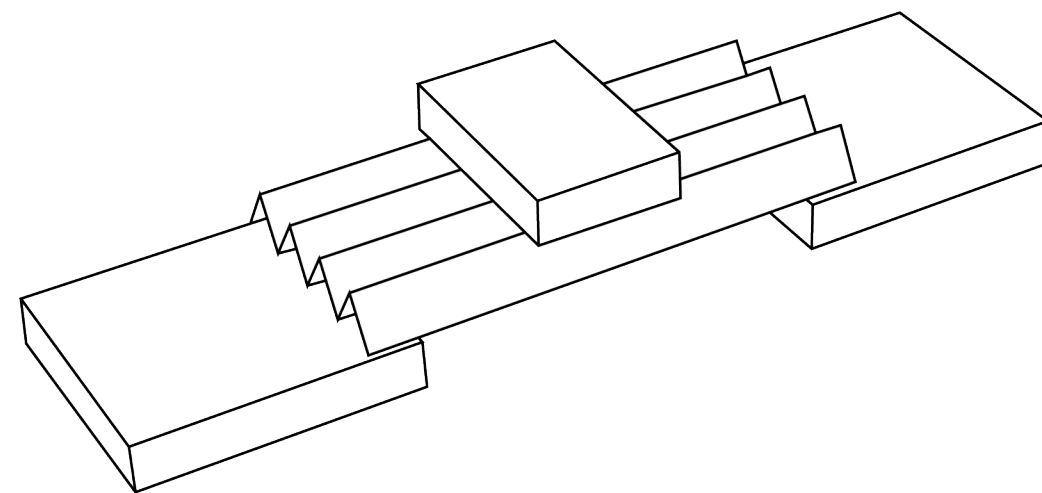
Origami engineering

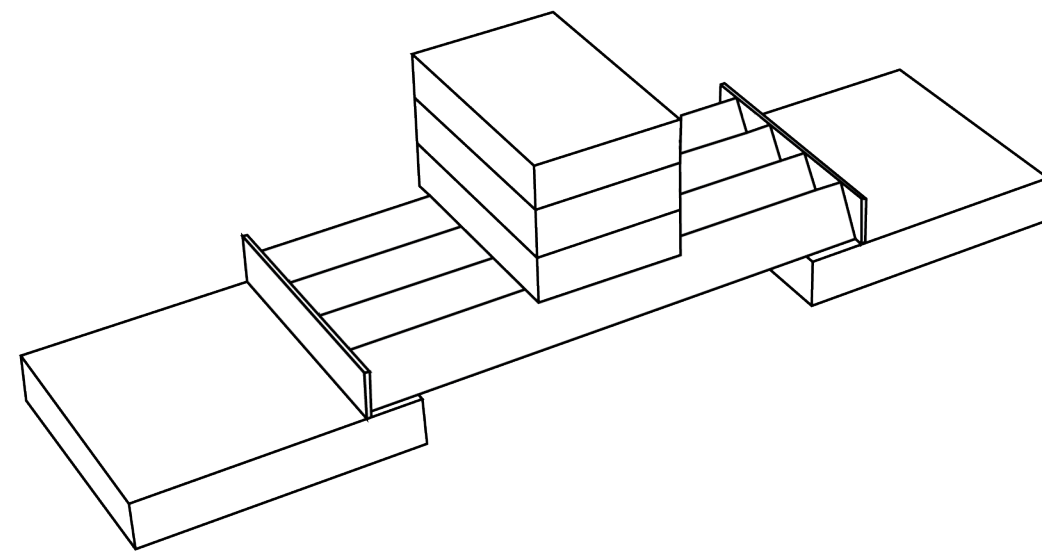


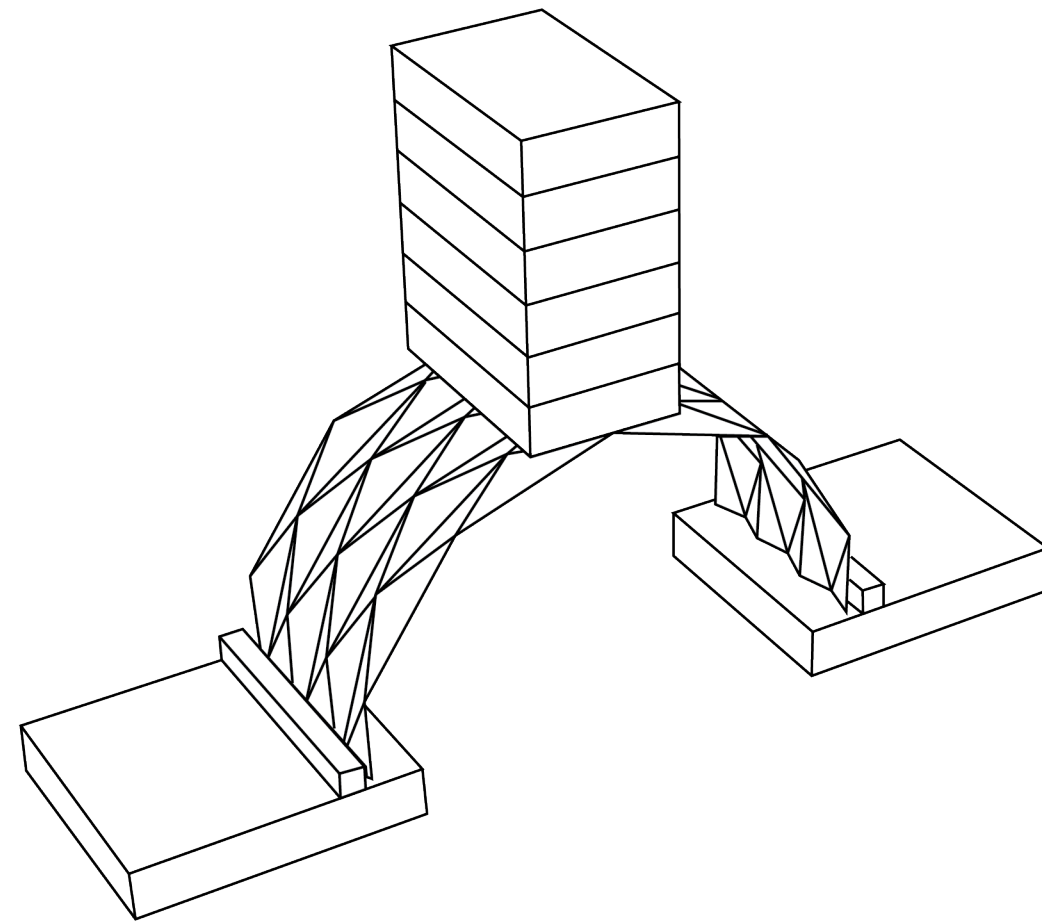
Origami engineering









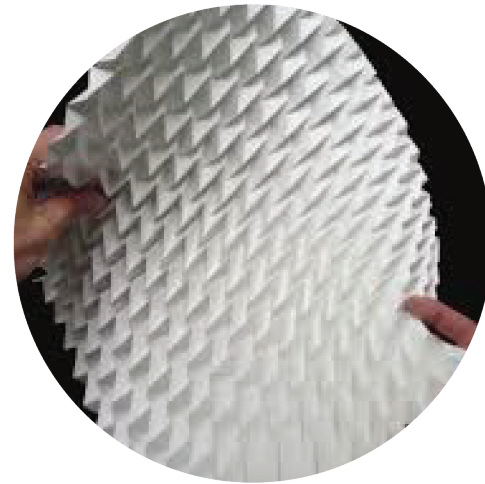




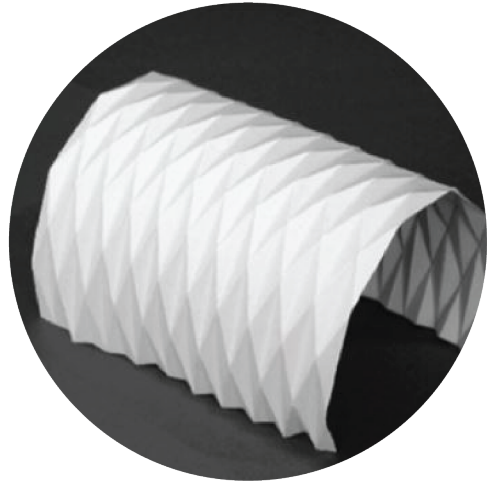
Yokohama International Cruise Terminal - FOA



Miura Ori



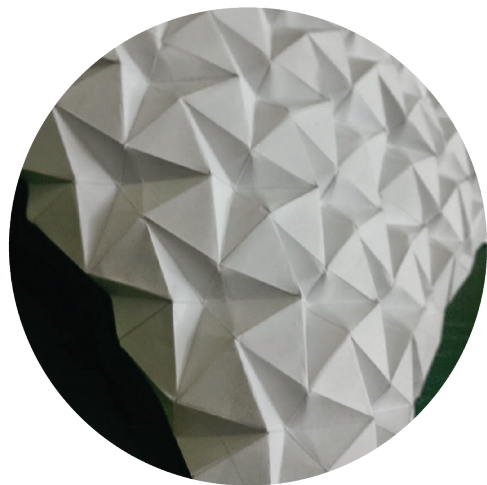
Miura Ori alteration



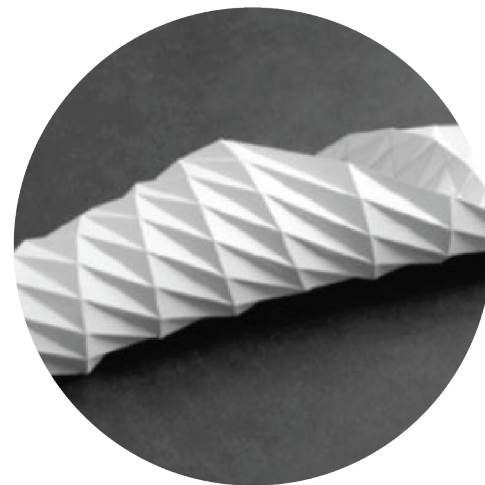
Yoshimura



Waterbomb



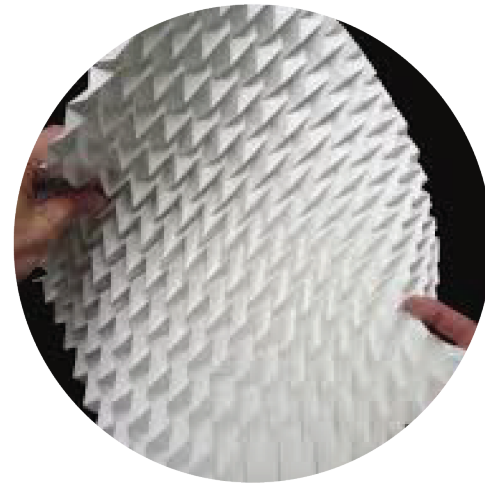
Ron Resch



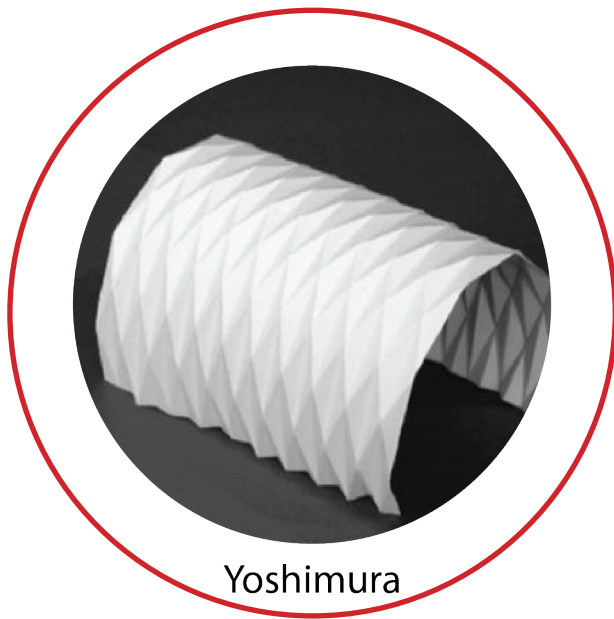
Diagonal



Miura Ori



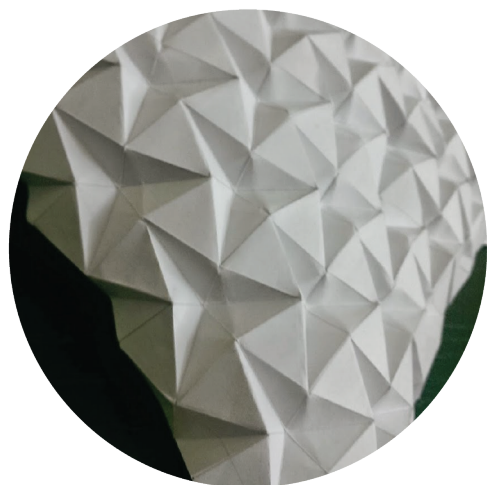
Miura Ori alteration



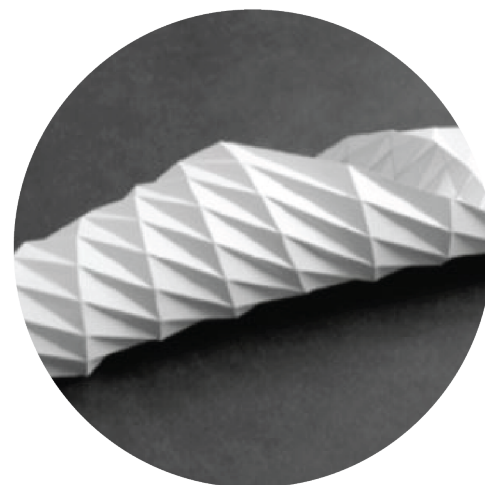
Yoshimura



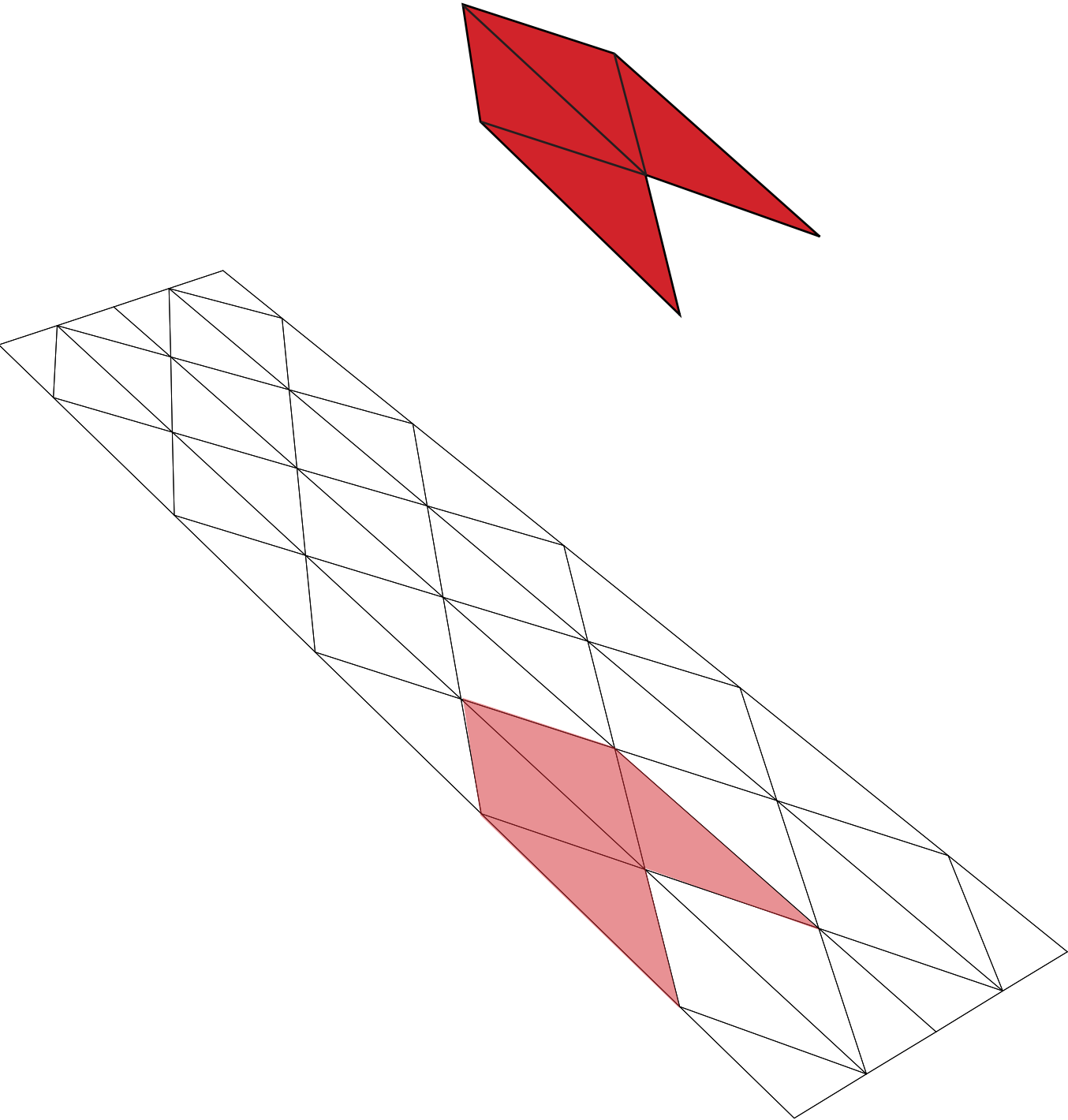
Waterbomb

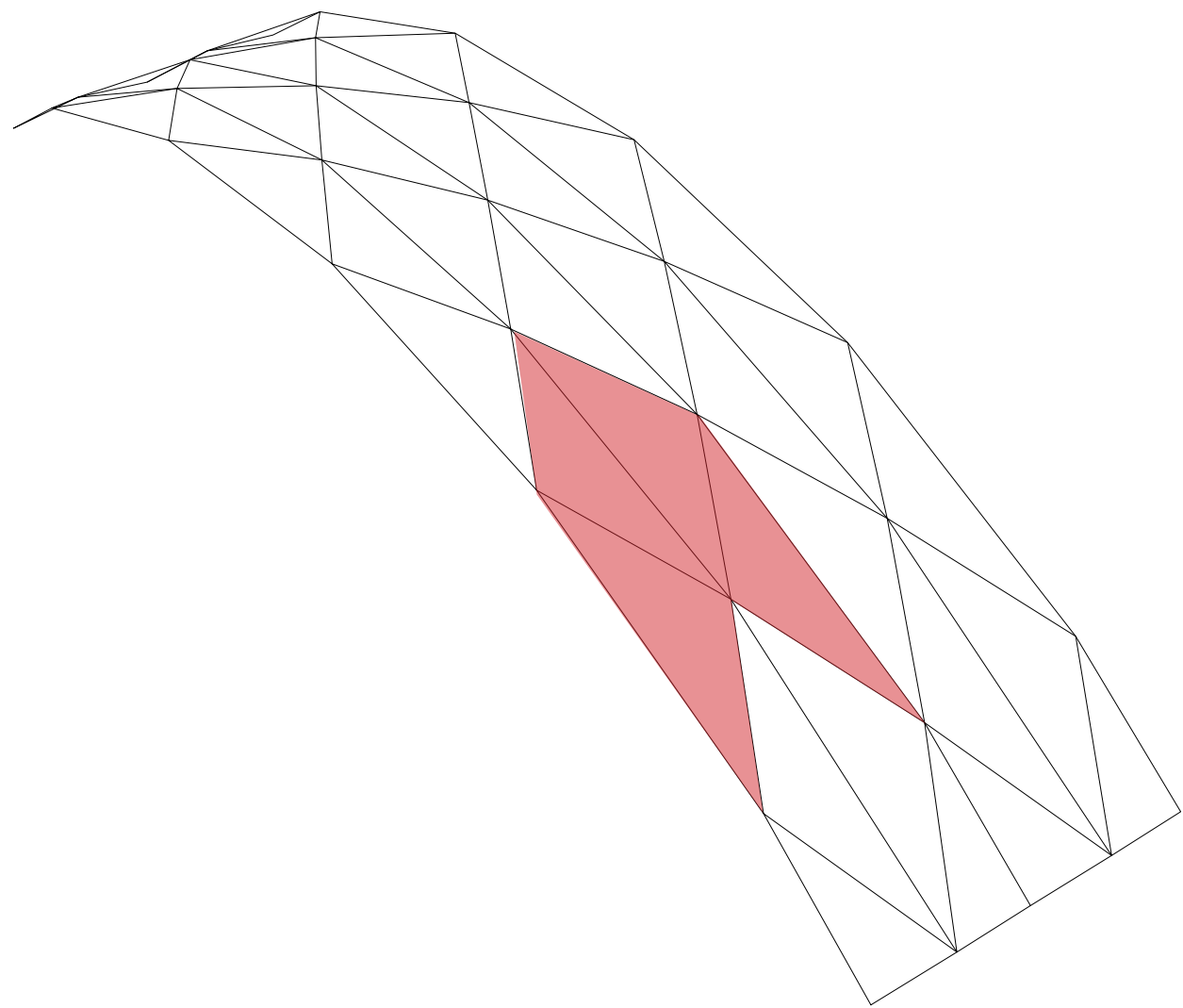


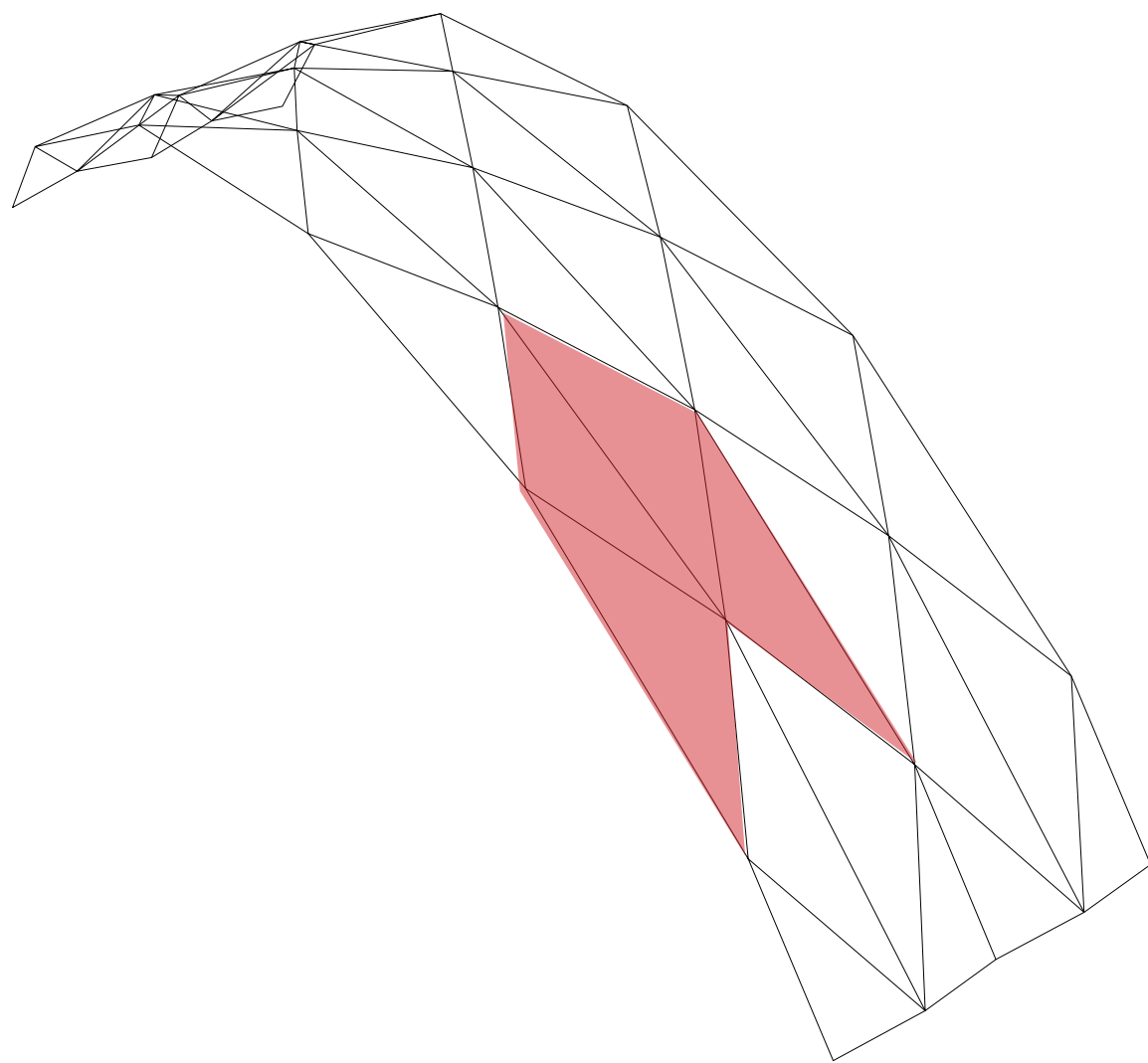
Ron Resch

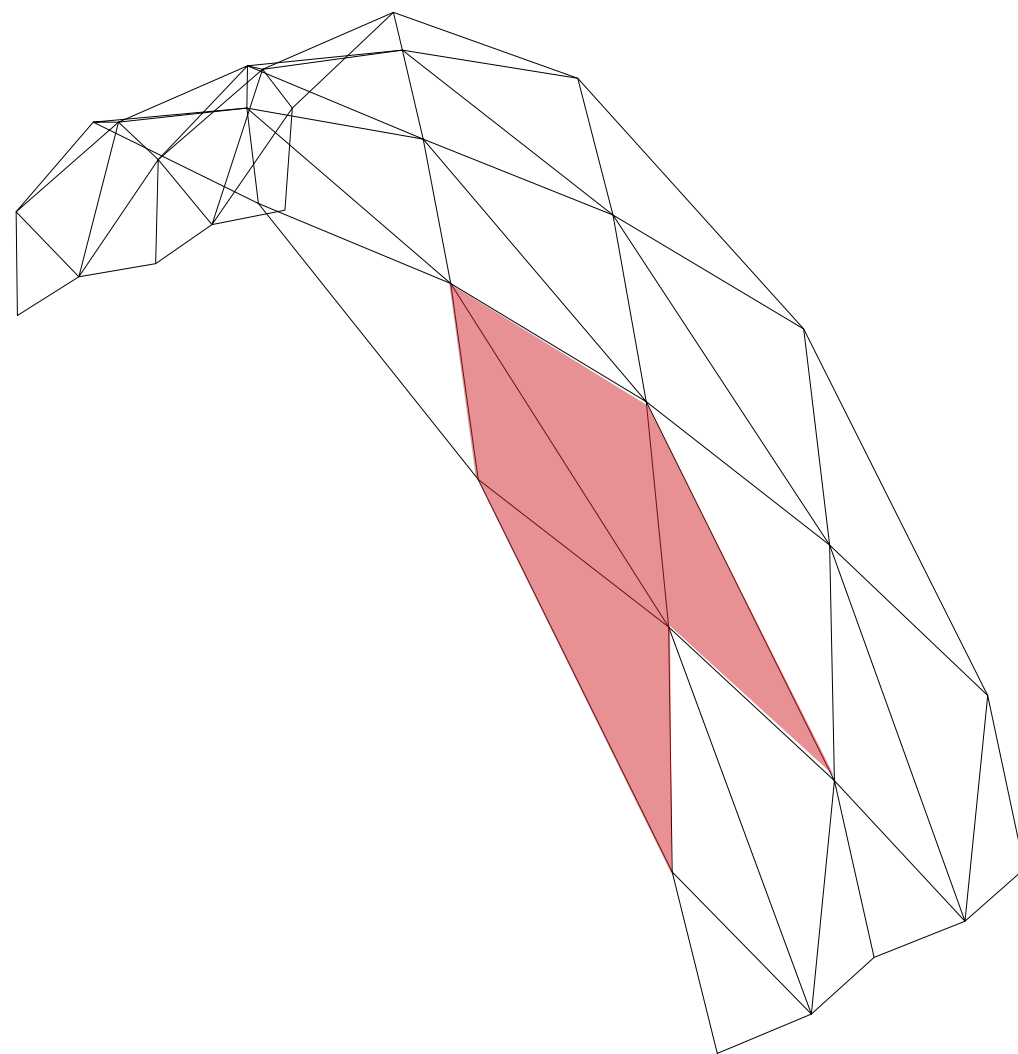


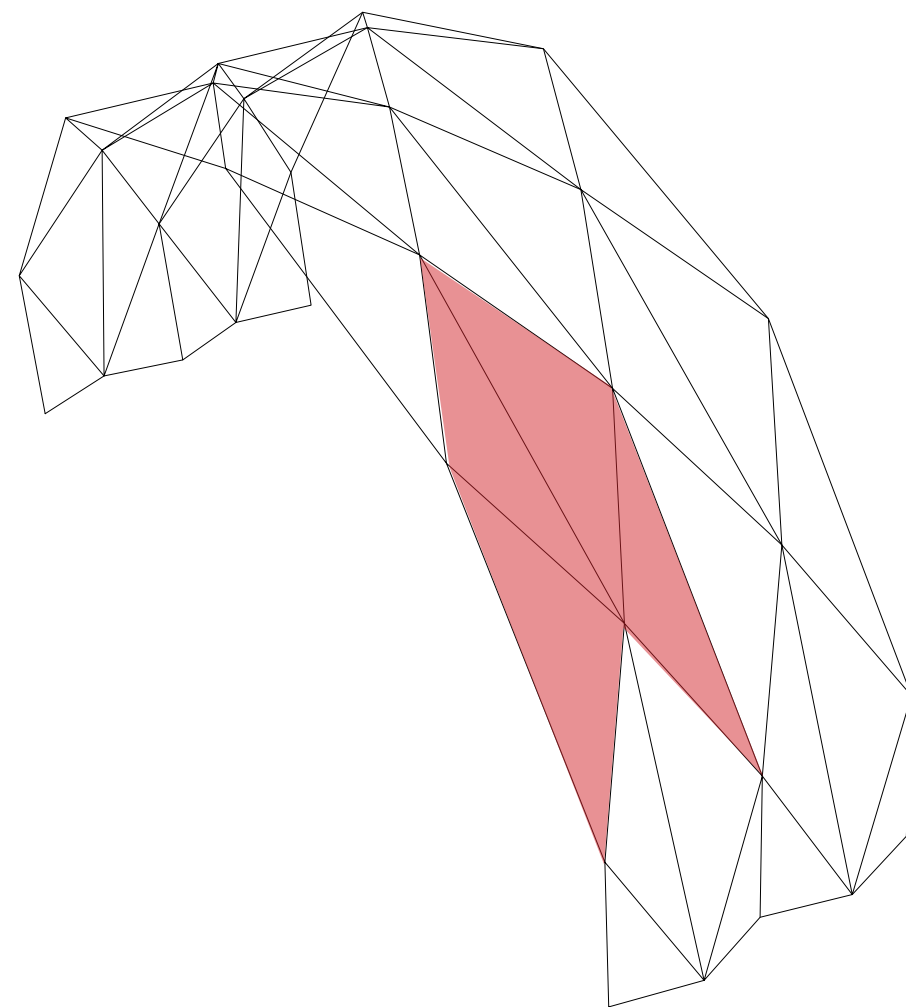
Diagonal



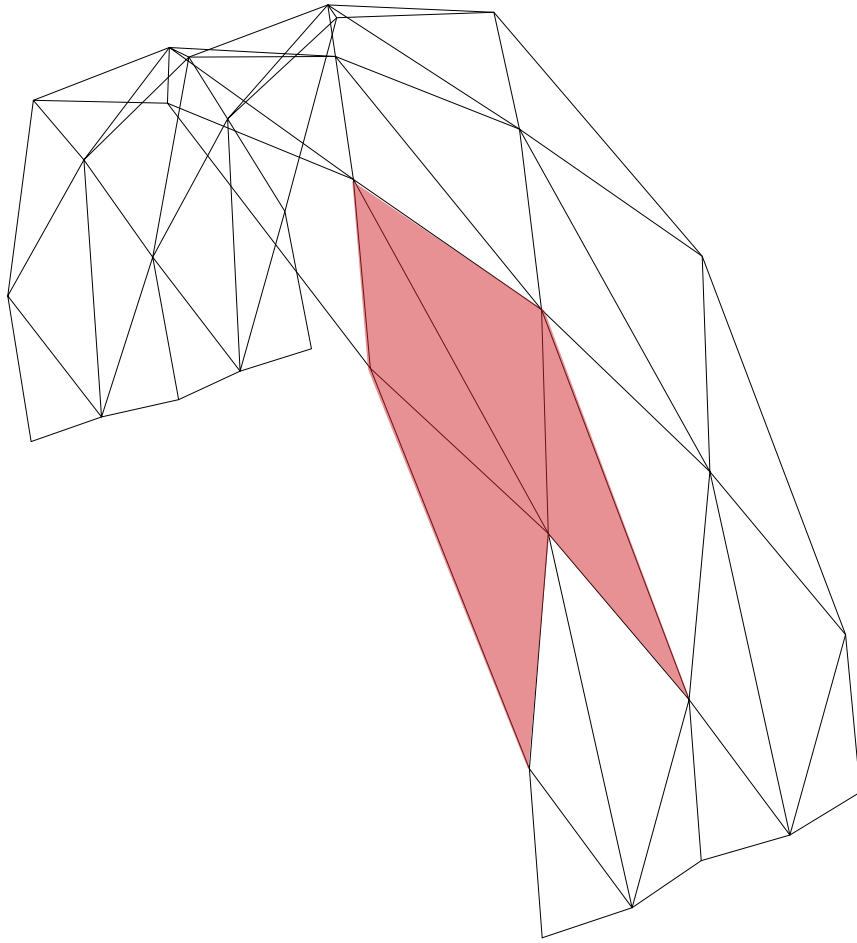


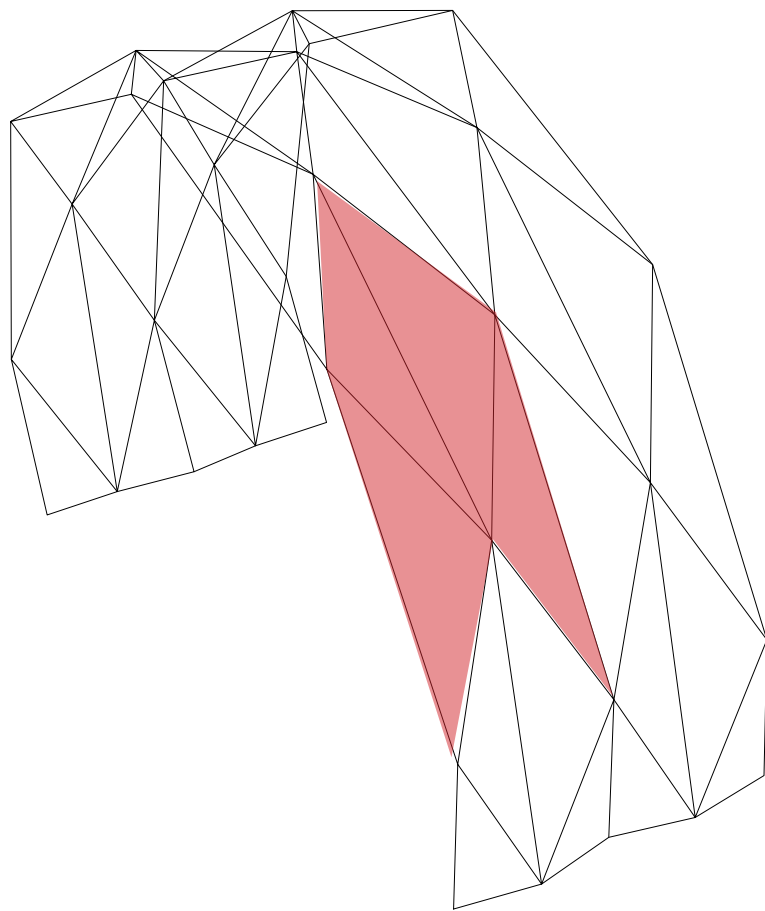


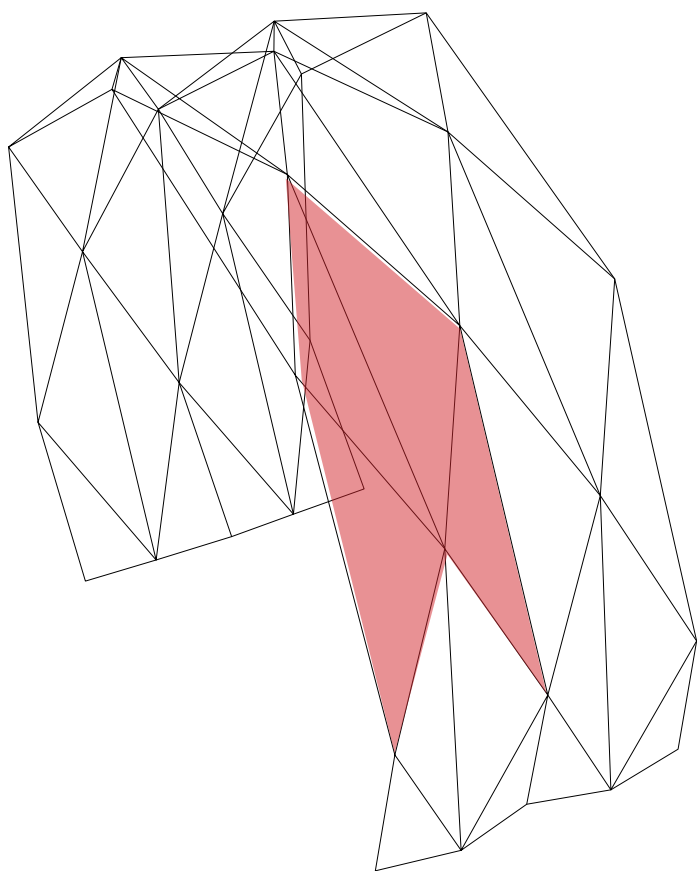


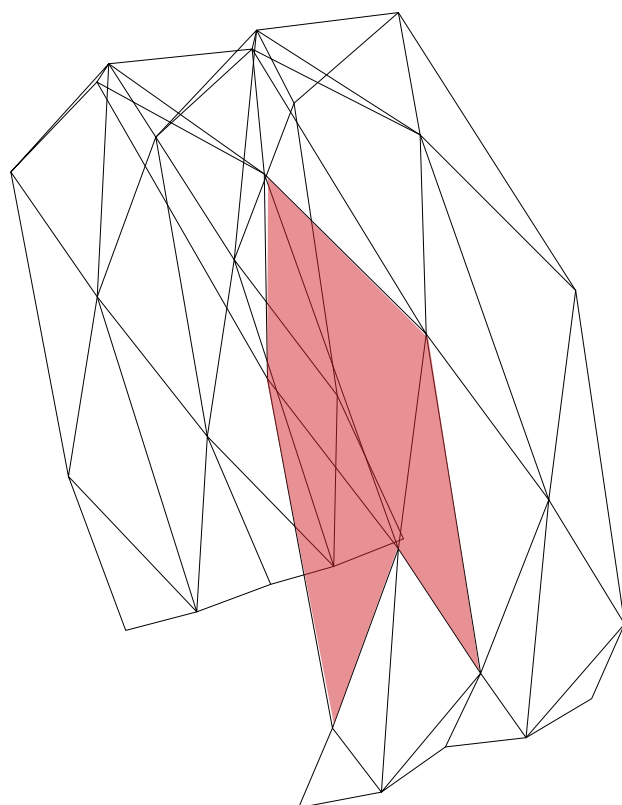


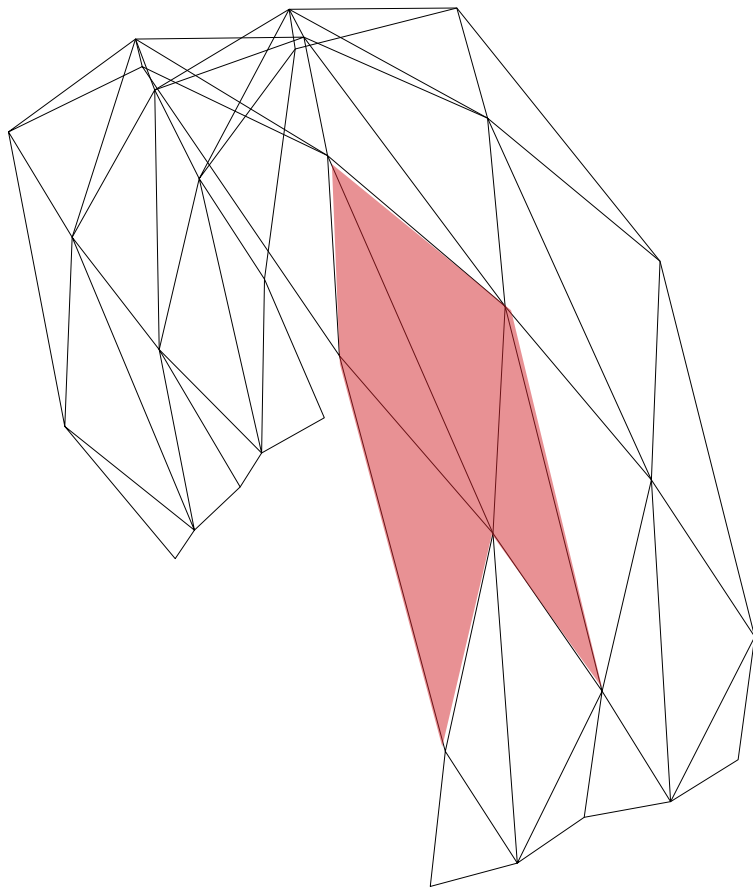
Fold-finding

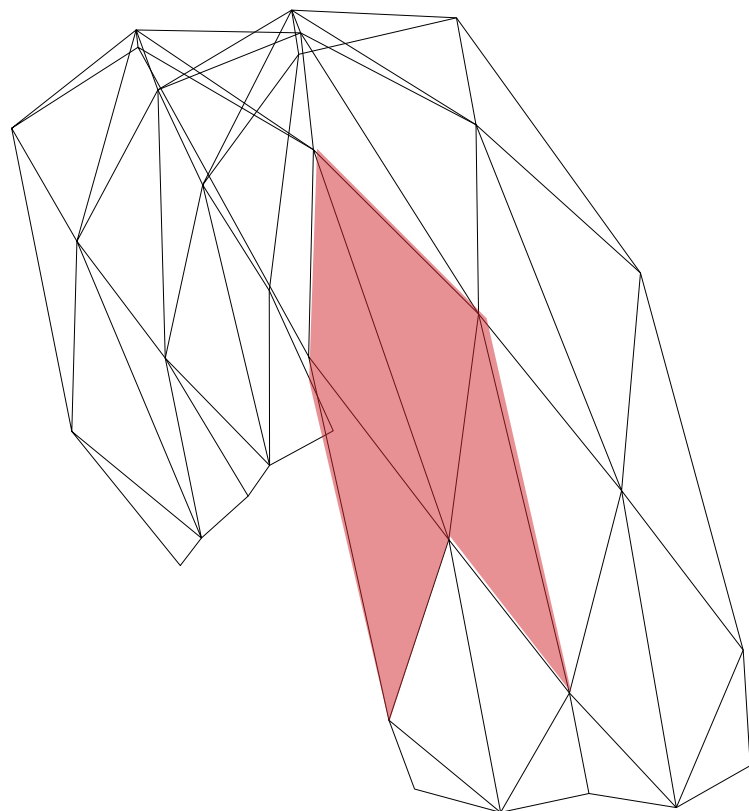


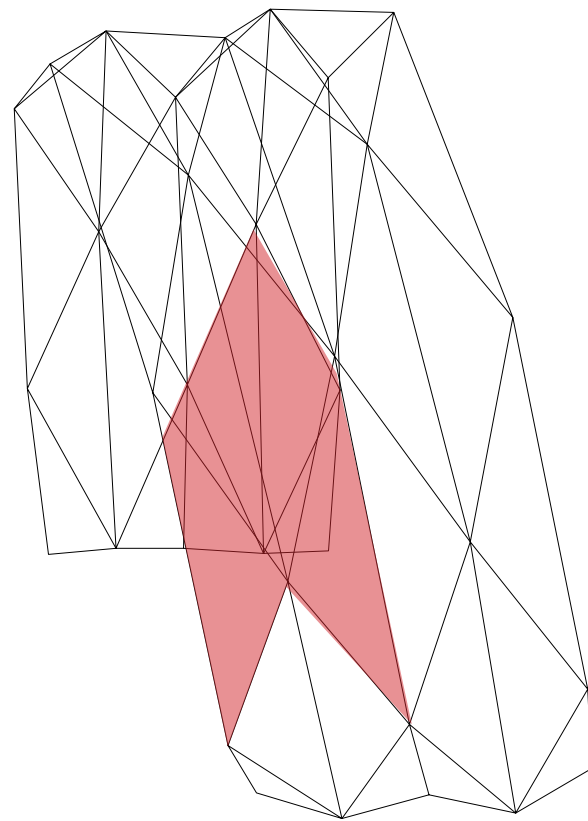


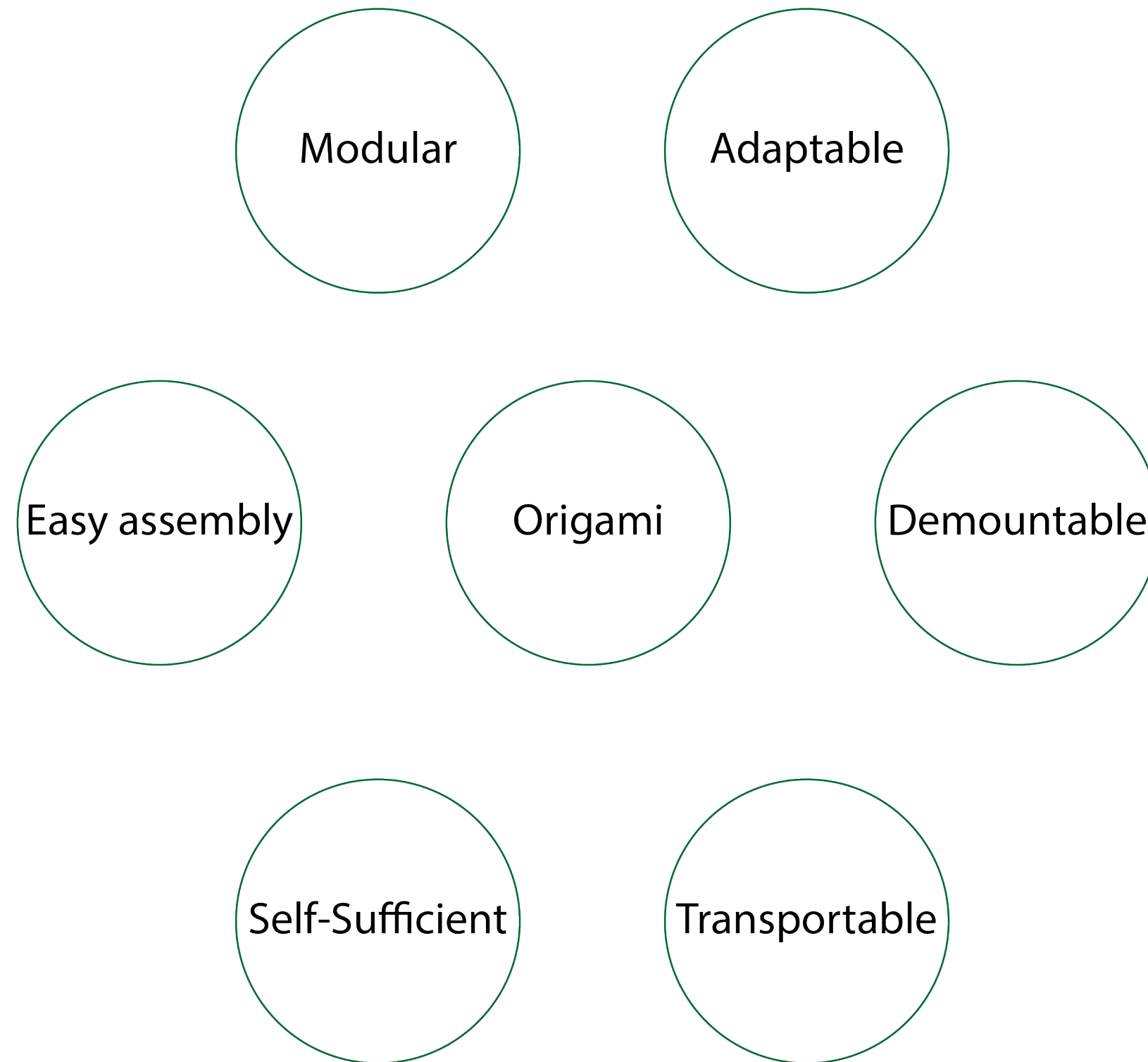




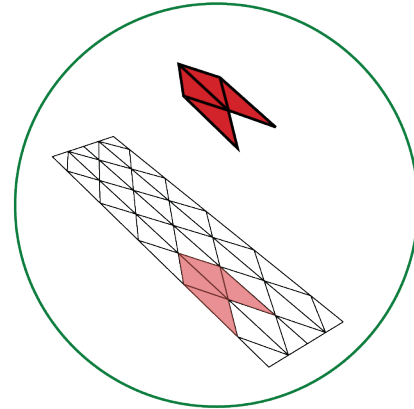




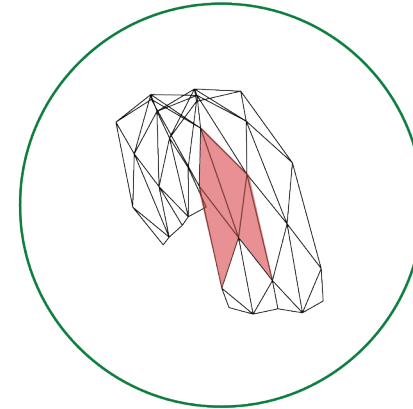




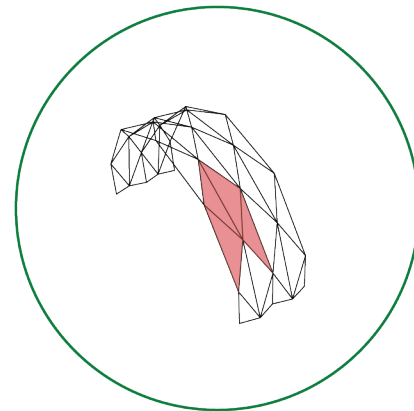
Modular



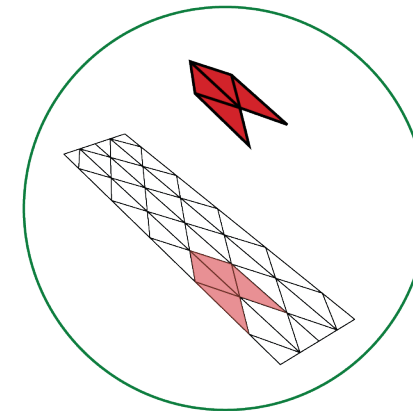
Adaptable



Easy assembly

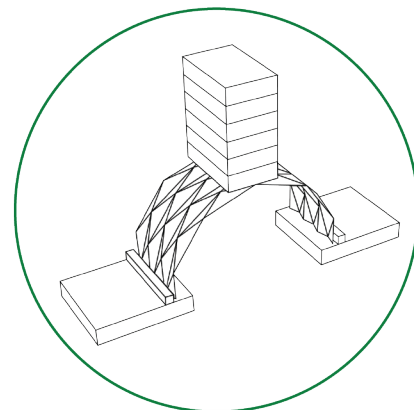


Demountable

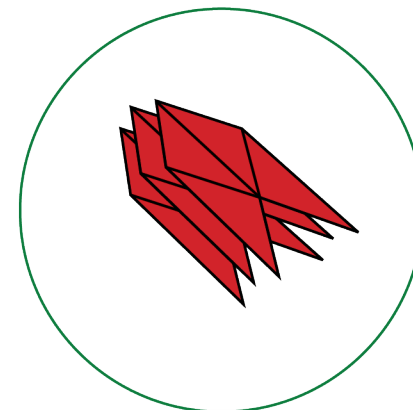


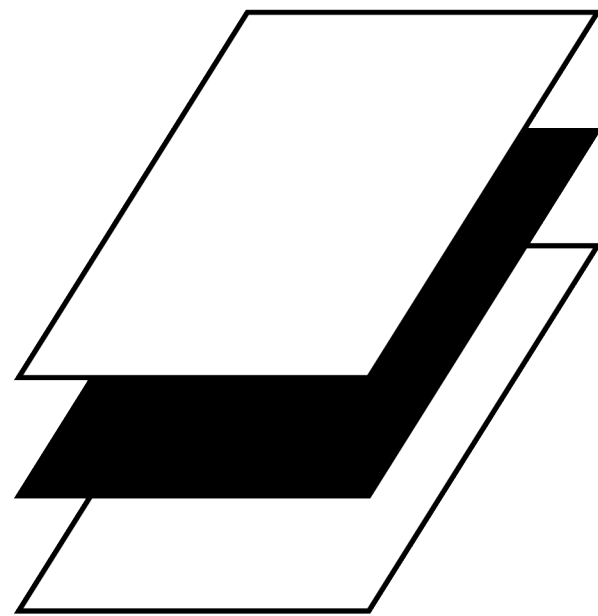
Yoshimura

Self-Sufficient



Transportable

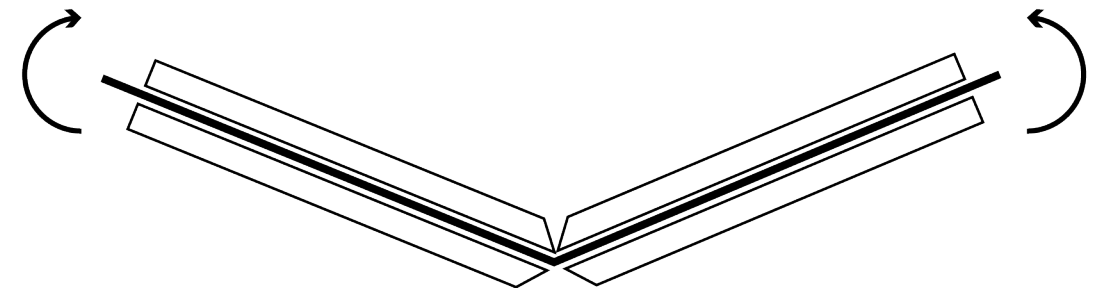
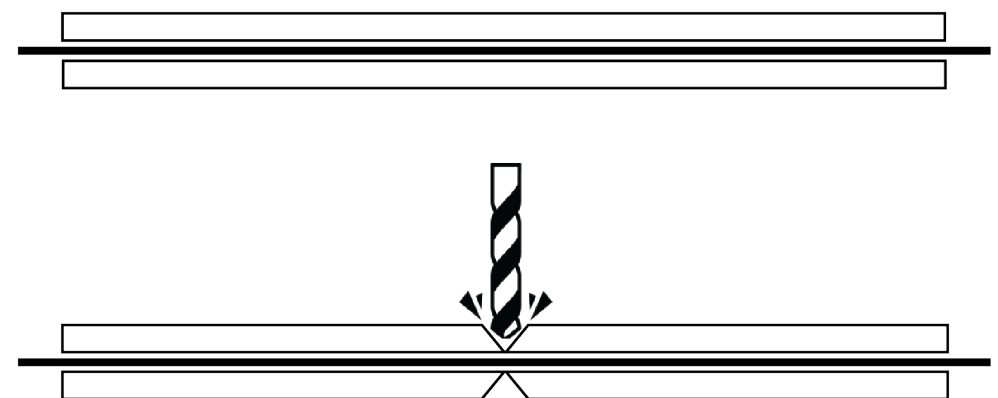




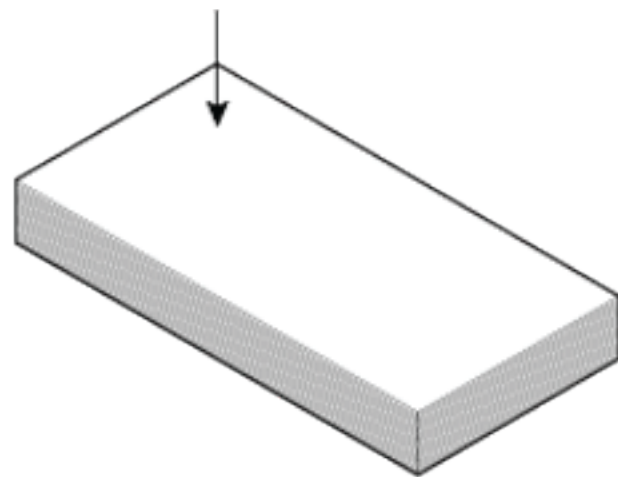
Layer 1: structural

Layer 2: flexible

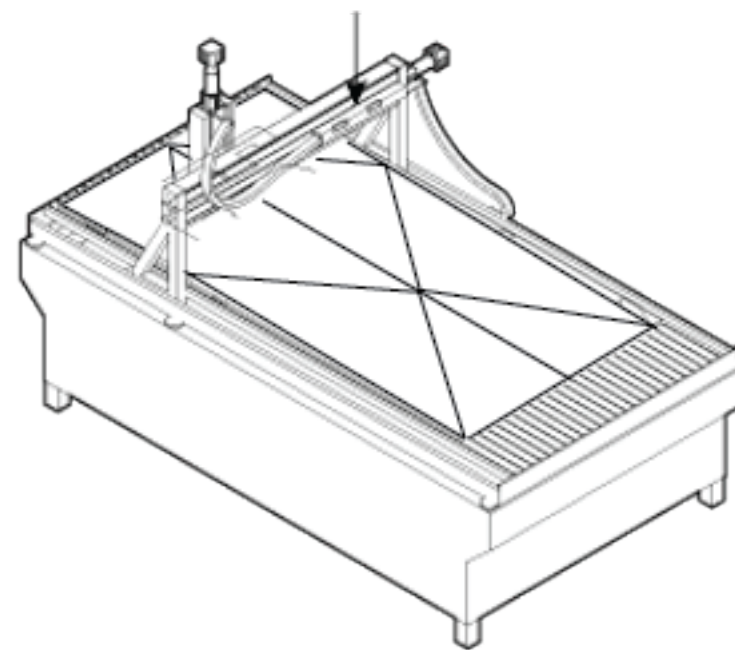
Layer 3: structural



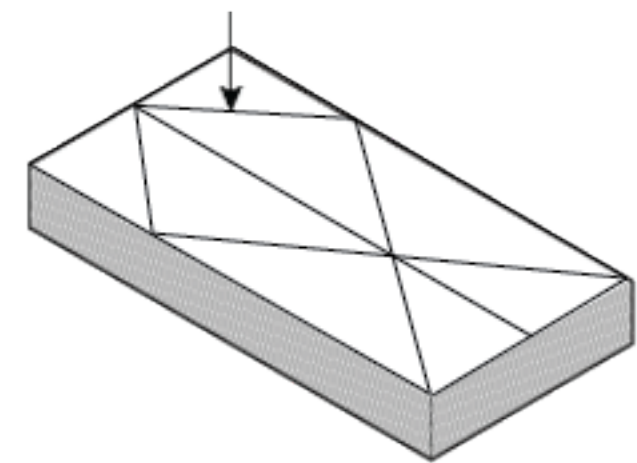
Laminated plates



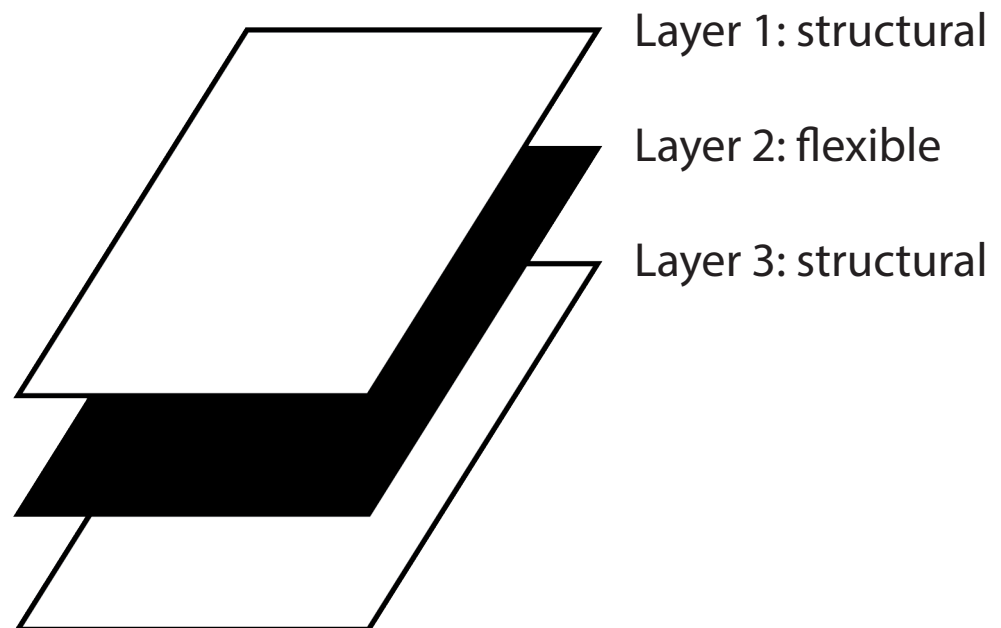
CNC Mill

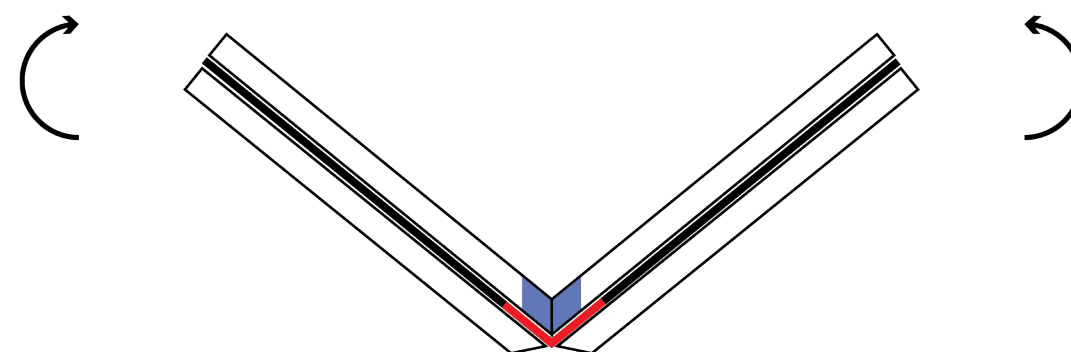
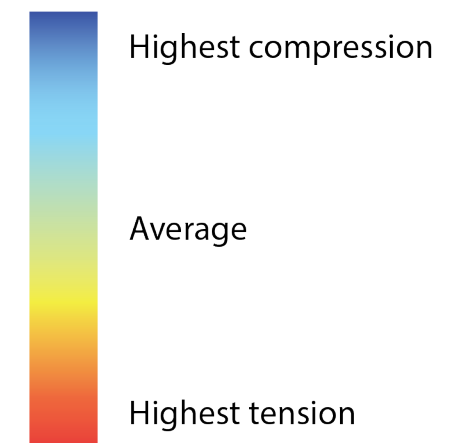


Origami Modules



Material





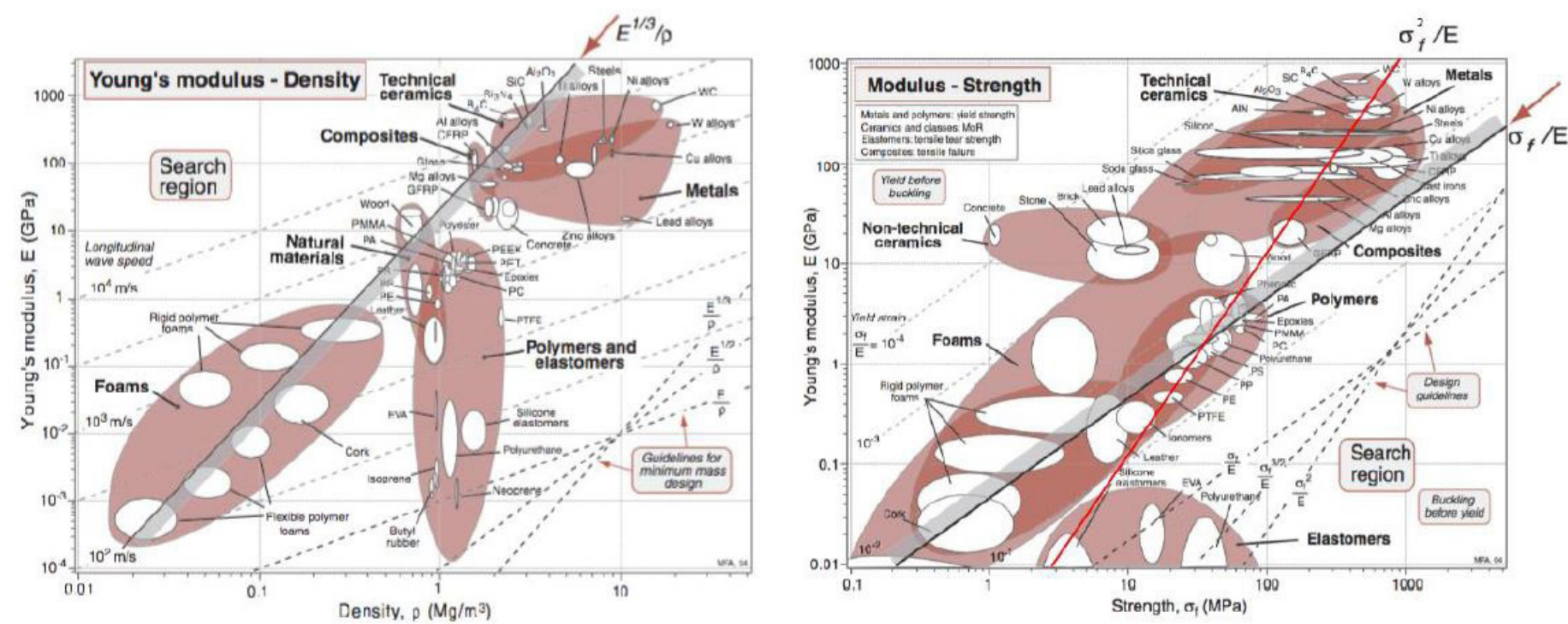


Figure 10. Material selection in CES, left: Structural material, right: elastic hinge (Ashby, 1999).

Structural

- Lightweight
- High stiffness

Flexible

- High tensile strength
- Low stiffness

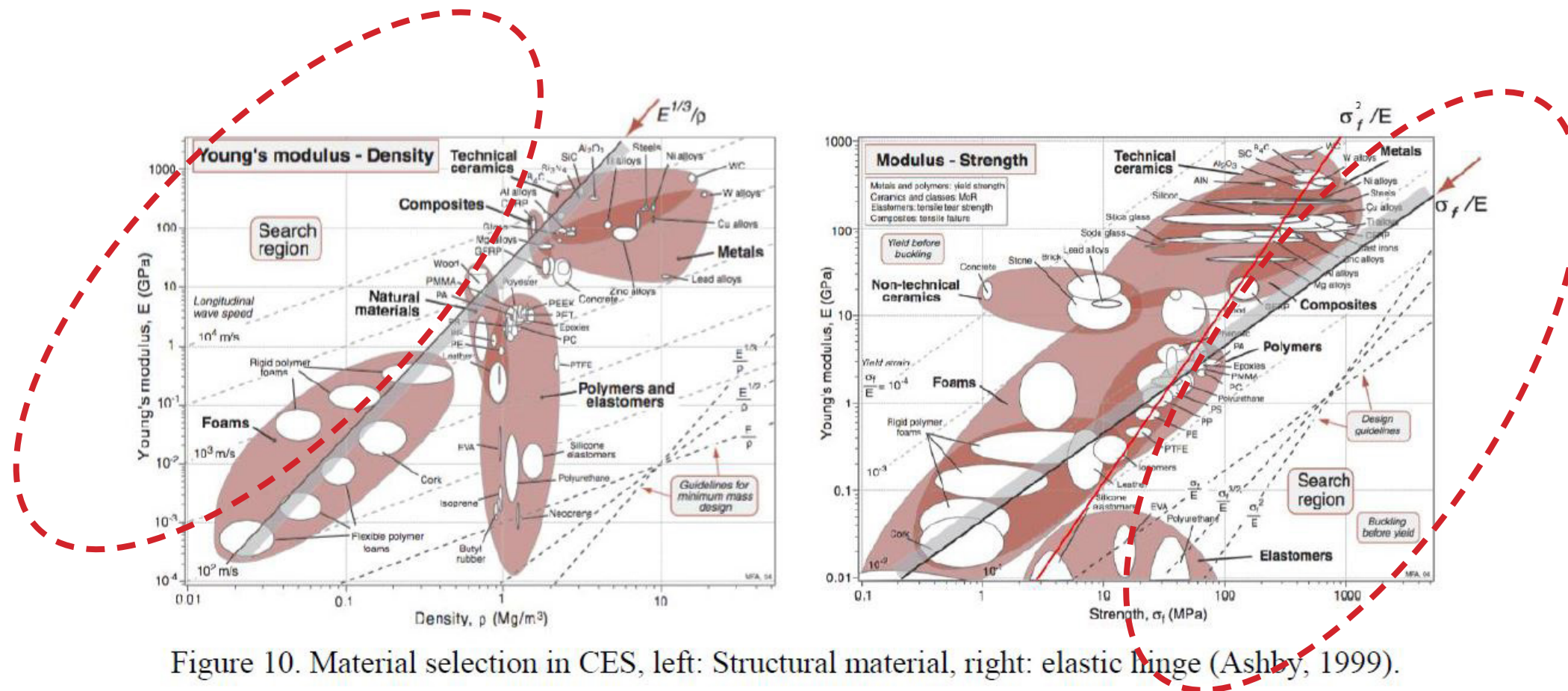
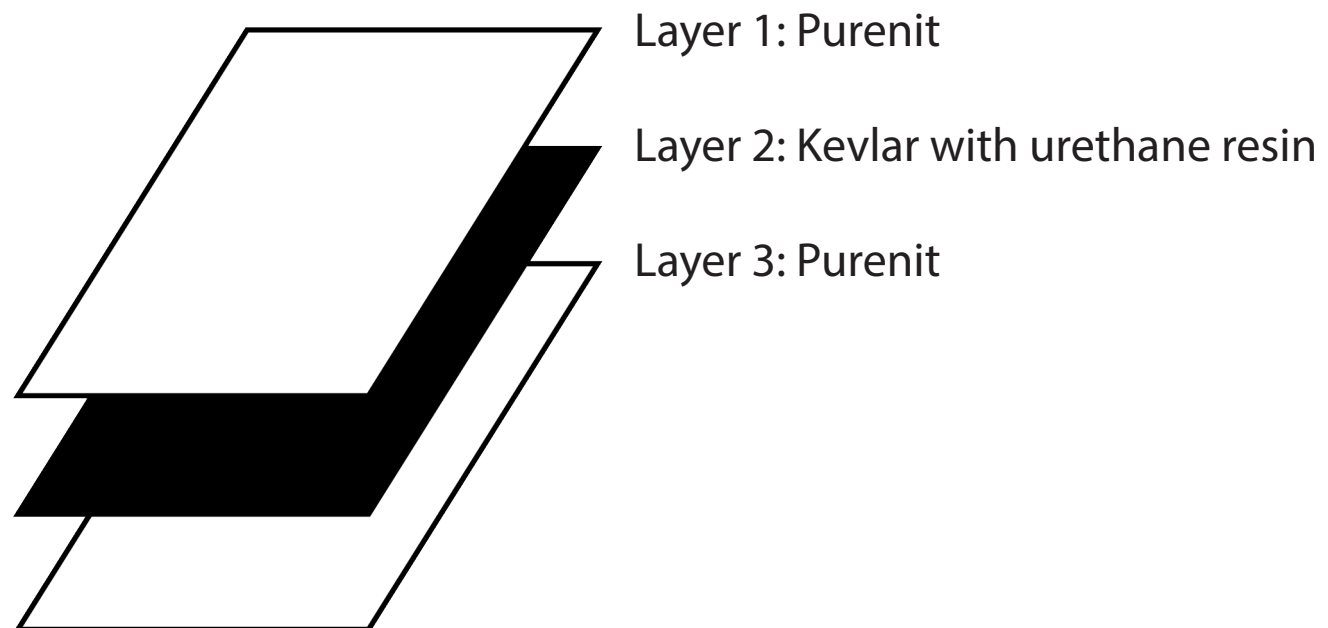
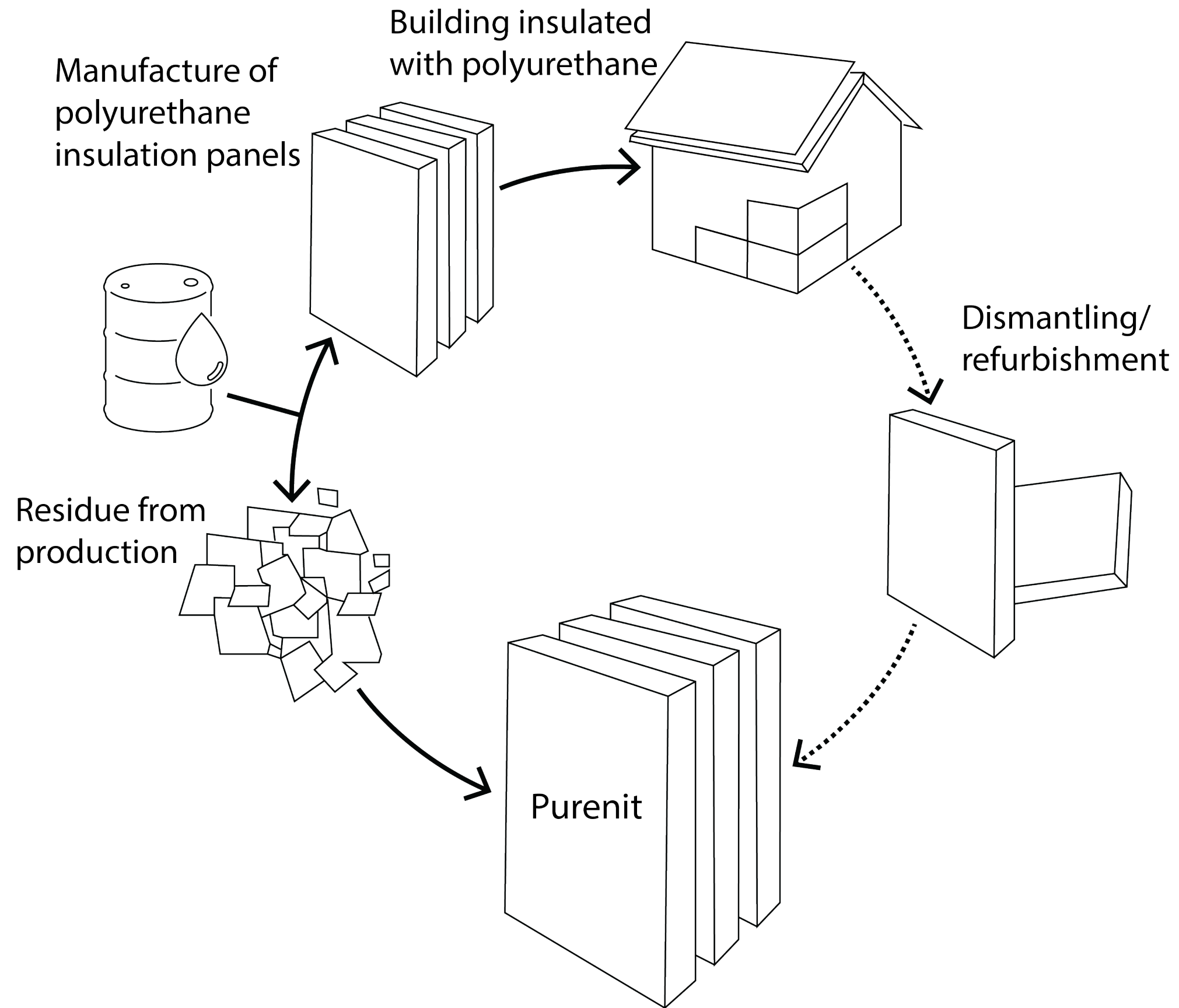


Figure 10. Material selection in CES, left: Structural material, right: elastic hinge (Ashby, 1999).

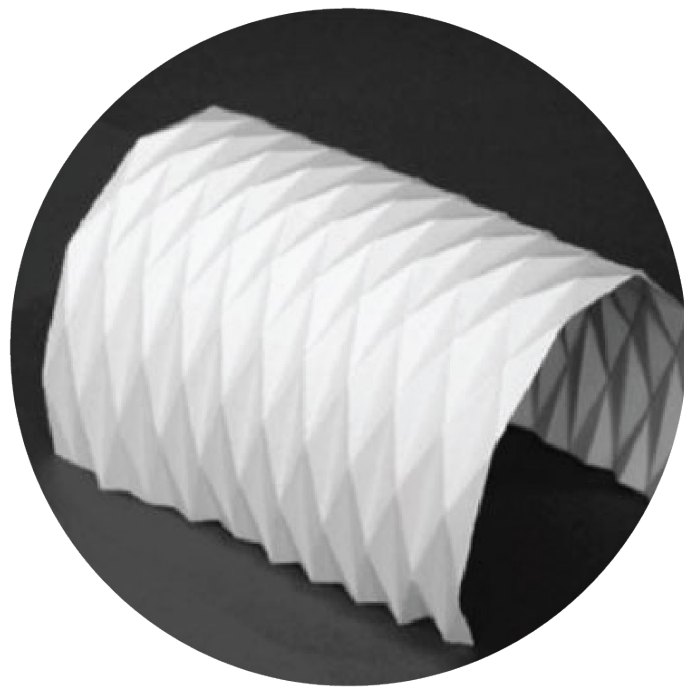




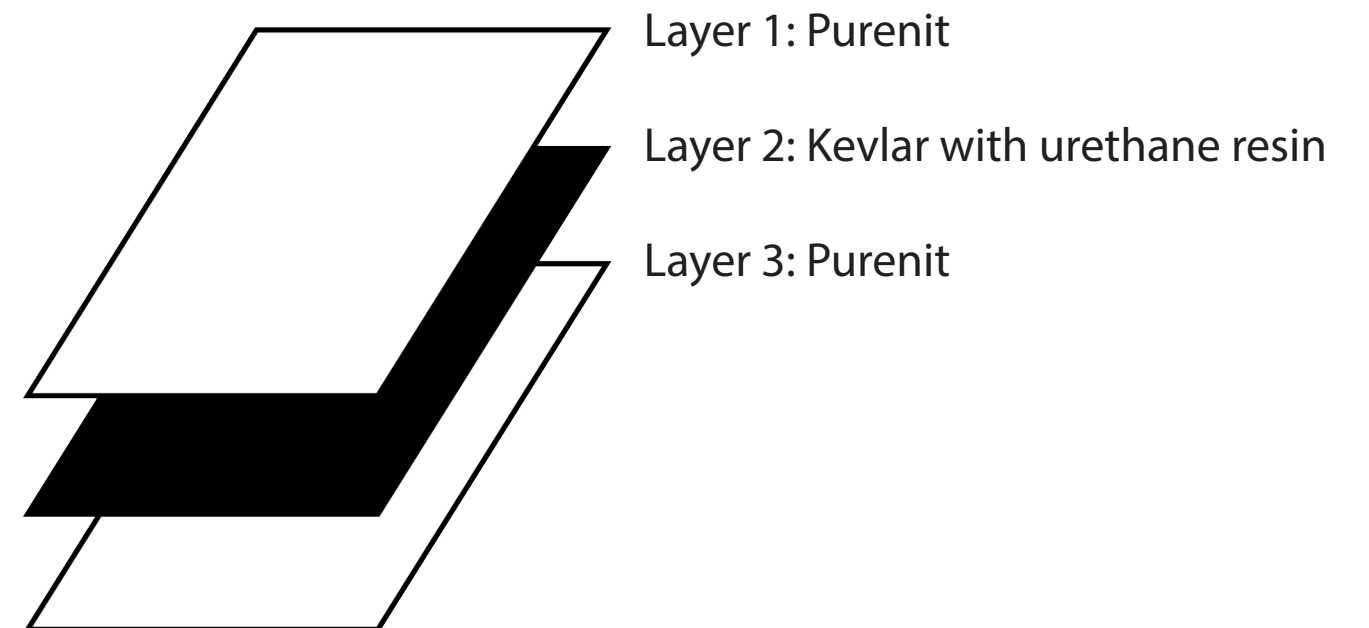


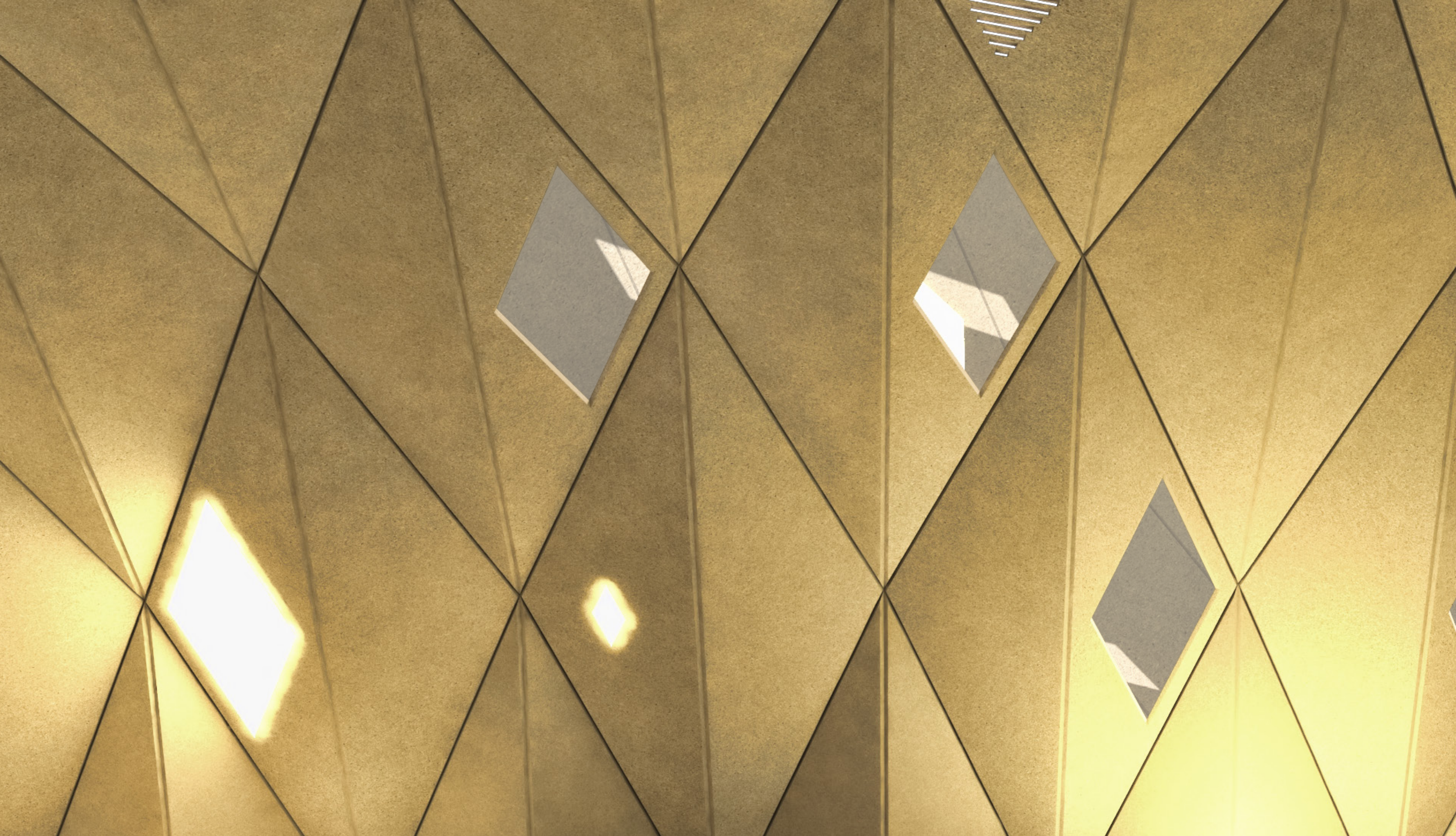
Kevlar

Conclusions



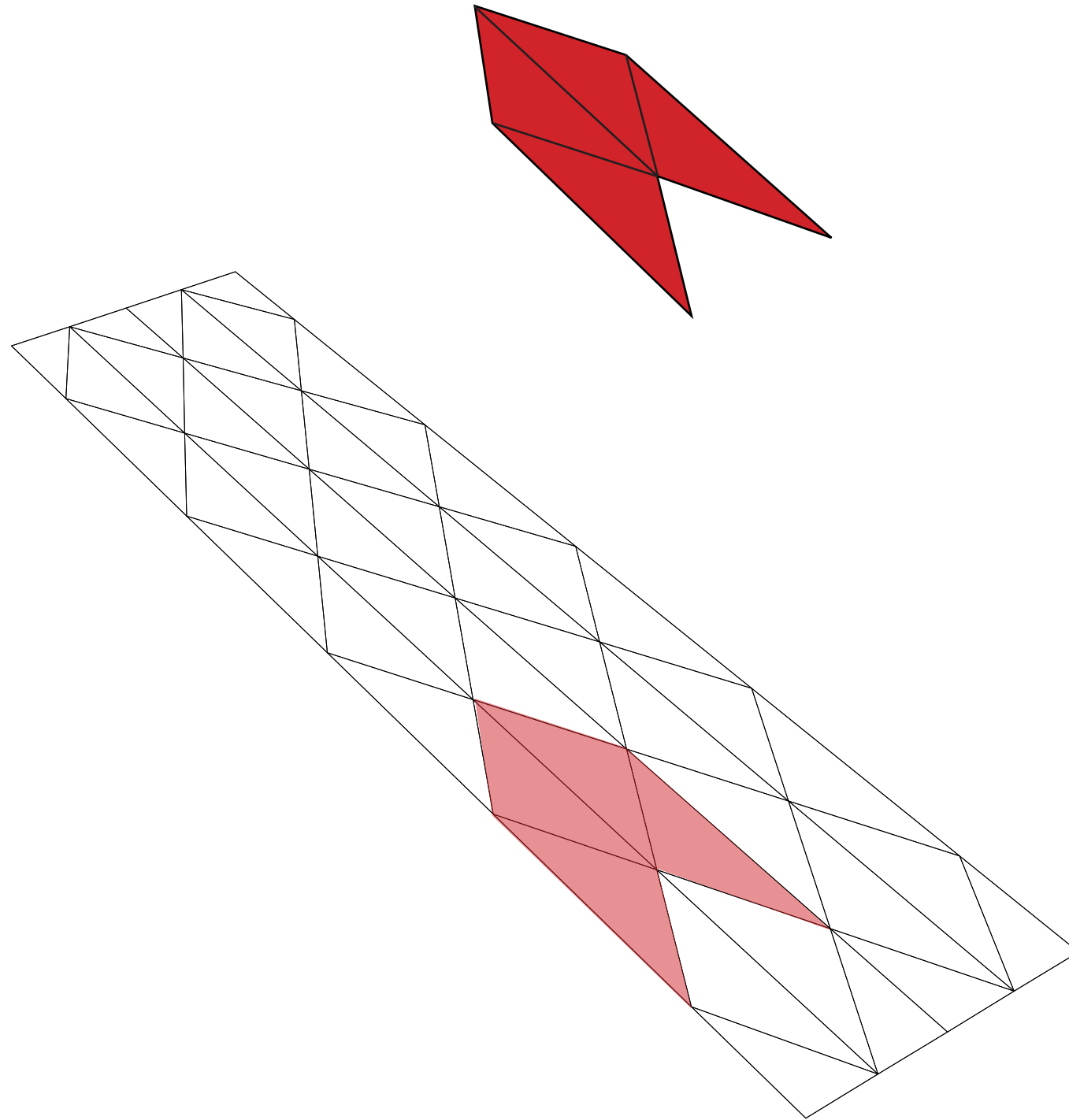
Yoshimura

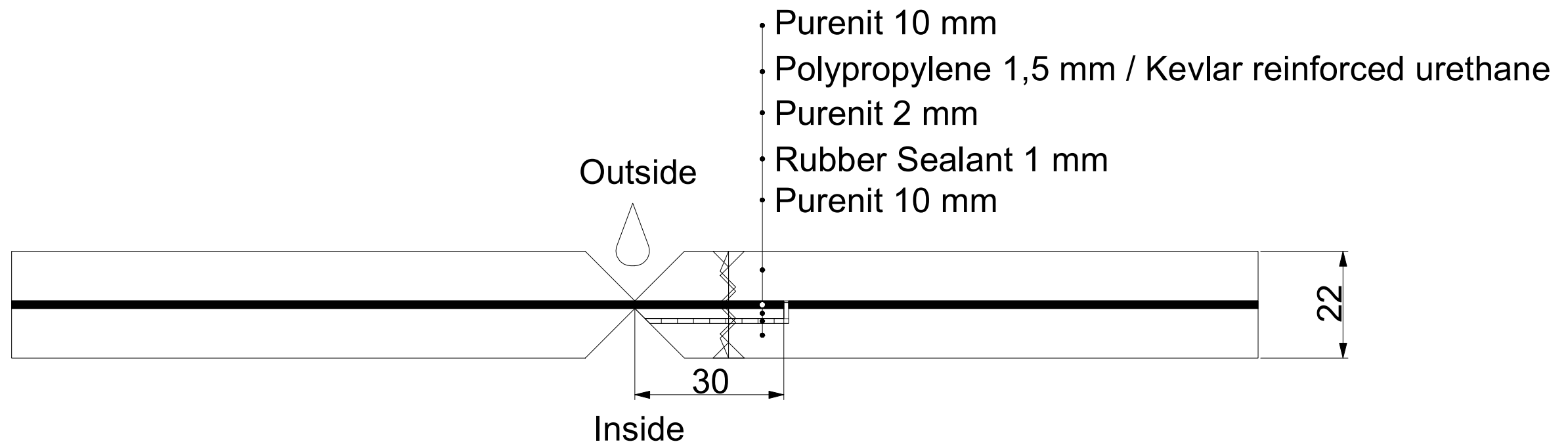




HOW TO USE THIS SYSTEM?

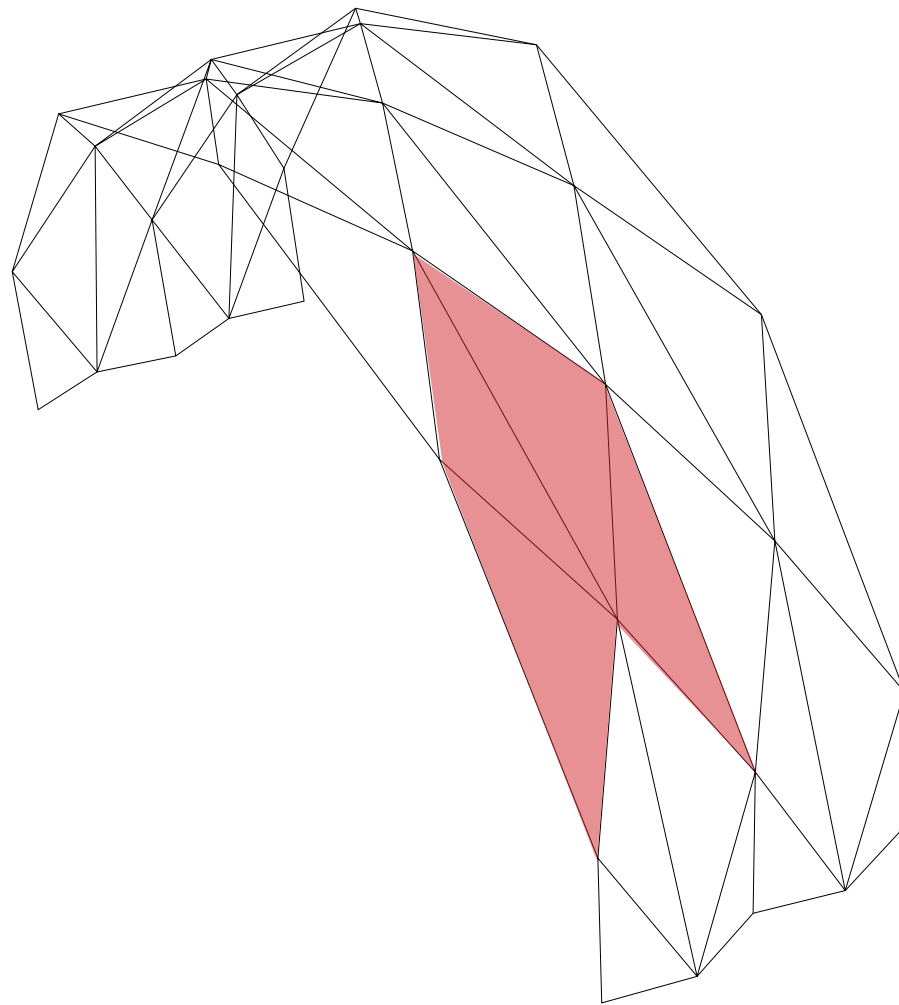
Build-up





1:1

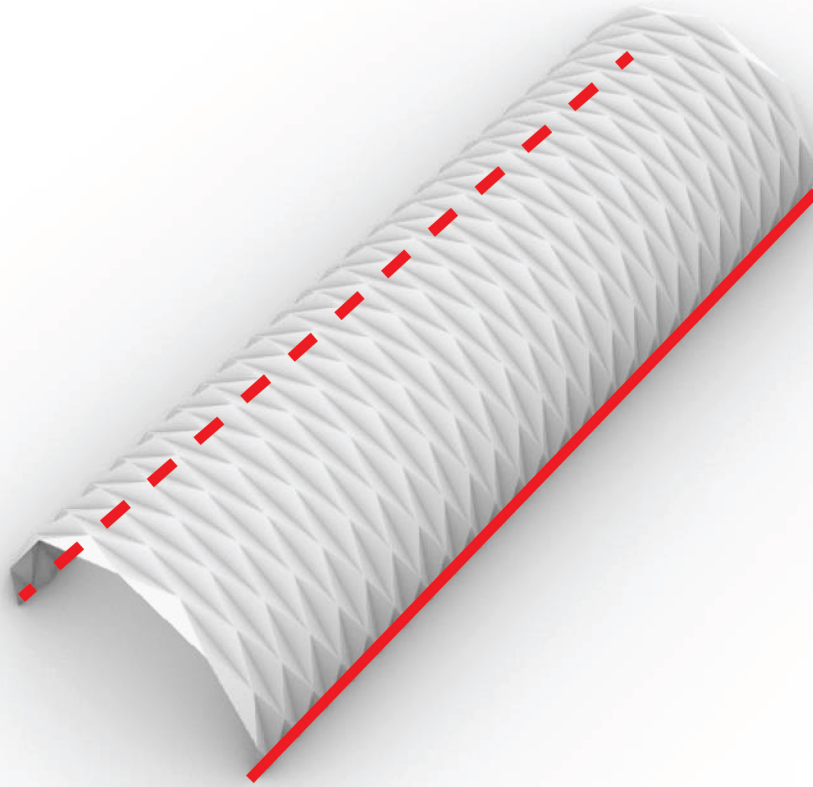
Fold

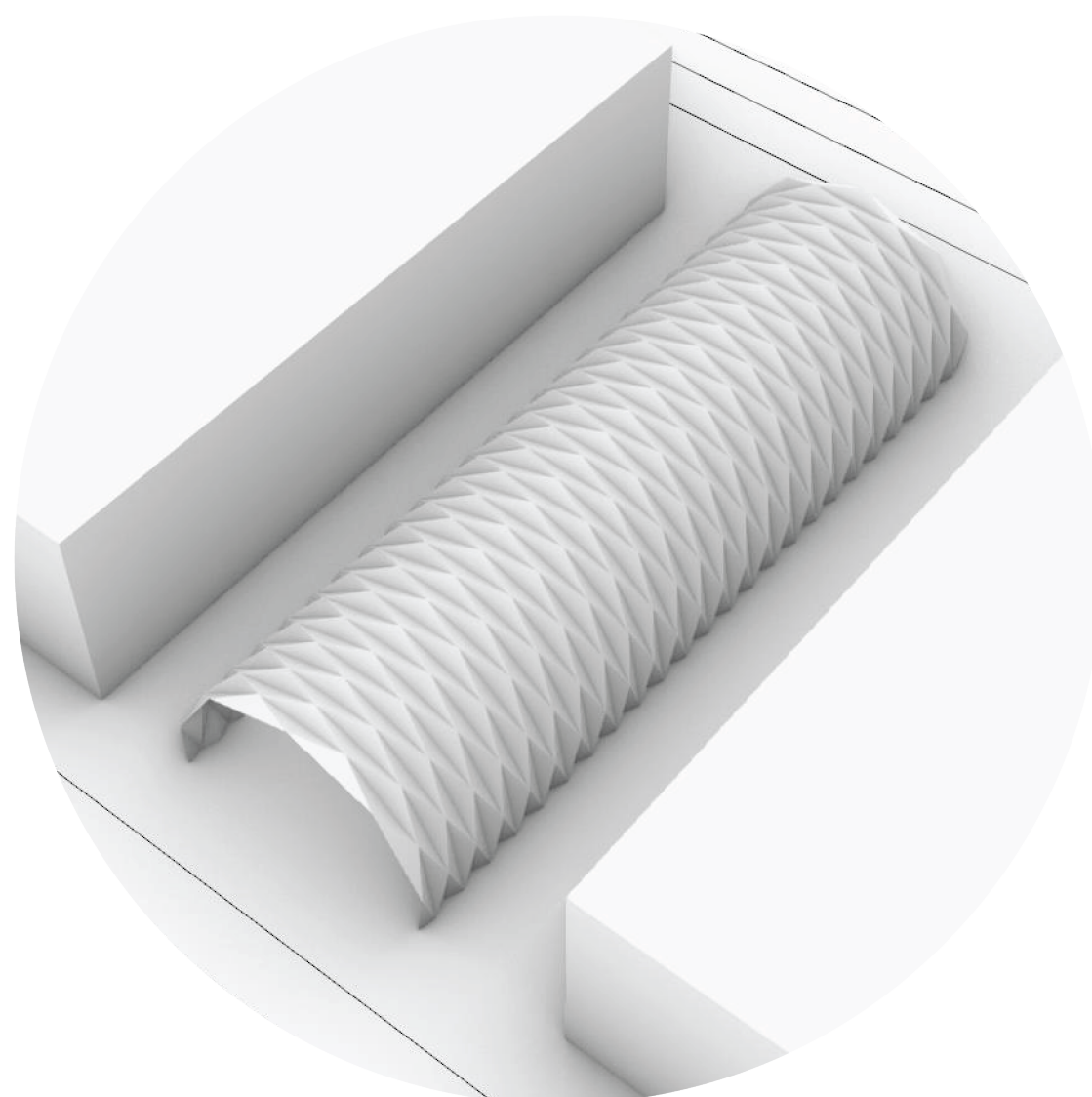


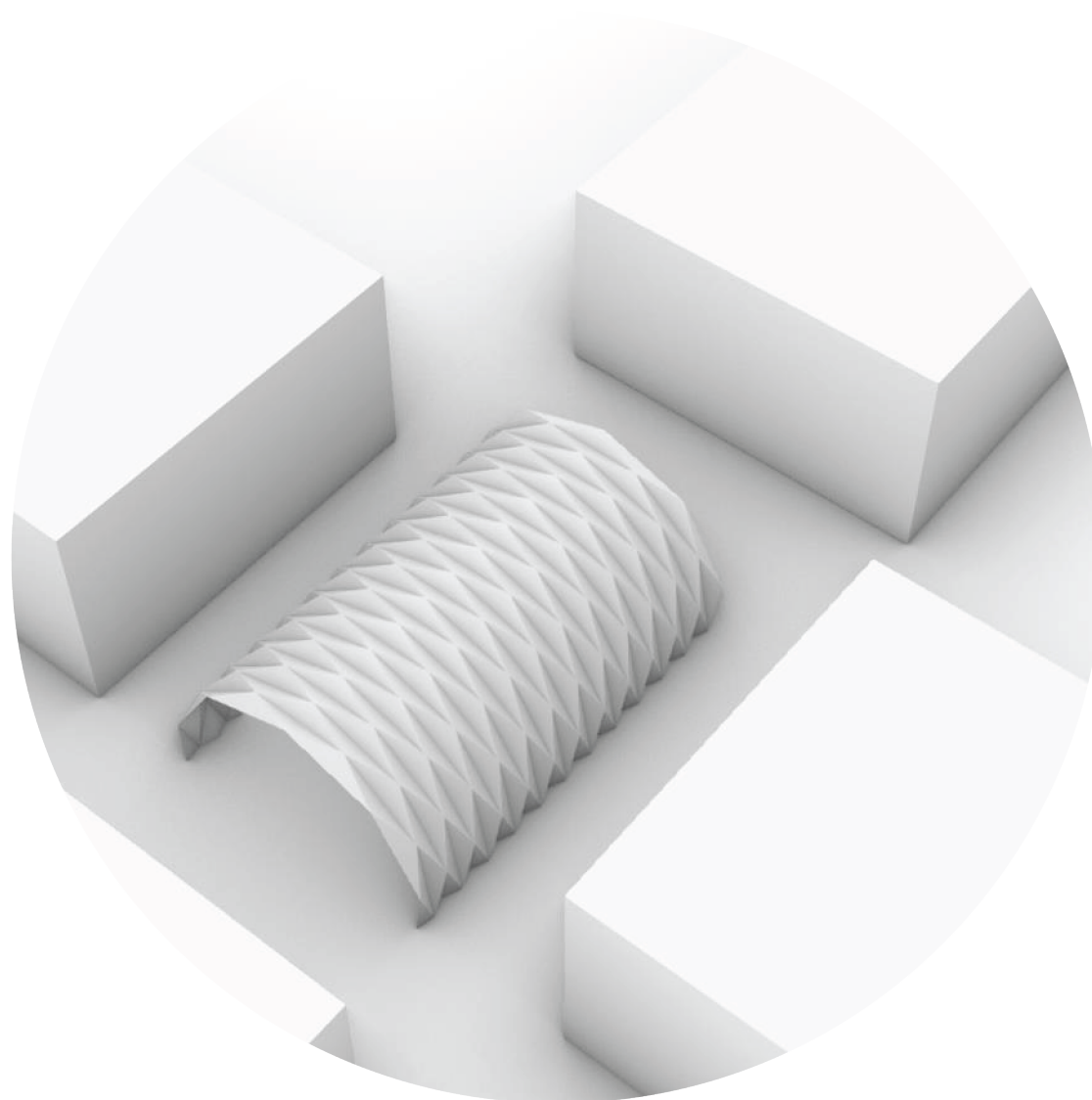
Manipulating the structure

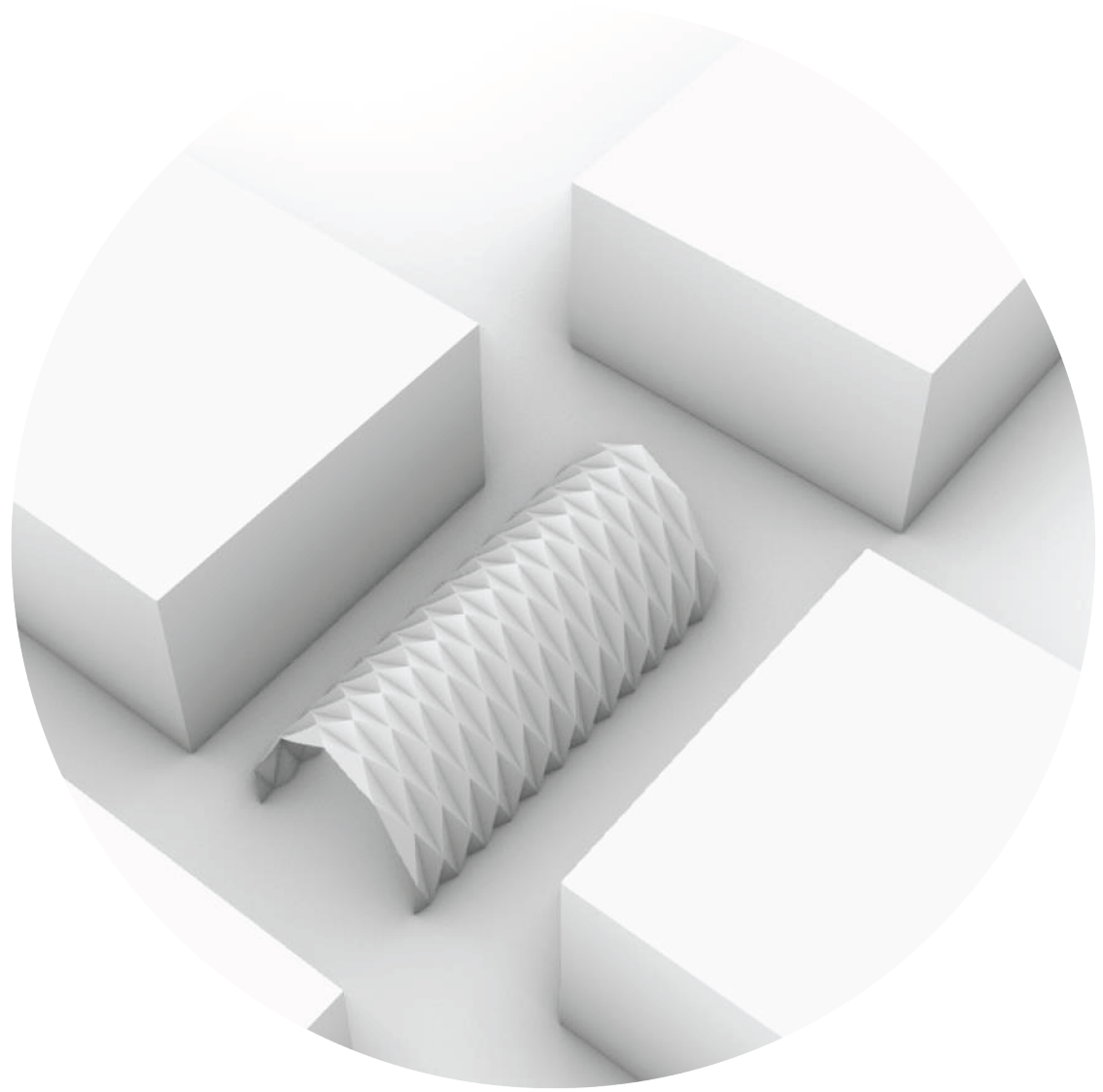
1. Context conditions / site specific input
2. Functional purposes

1. Context conditions / site specific input

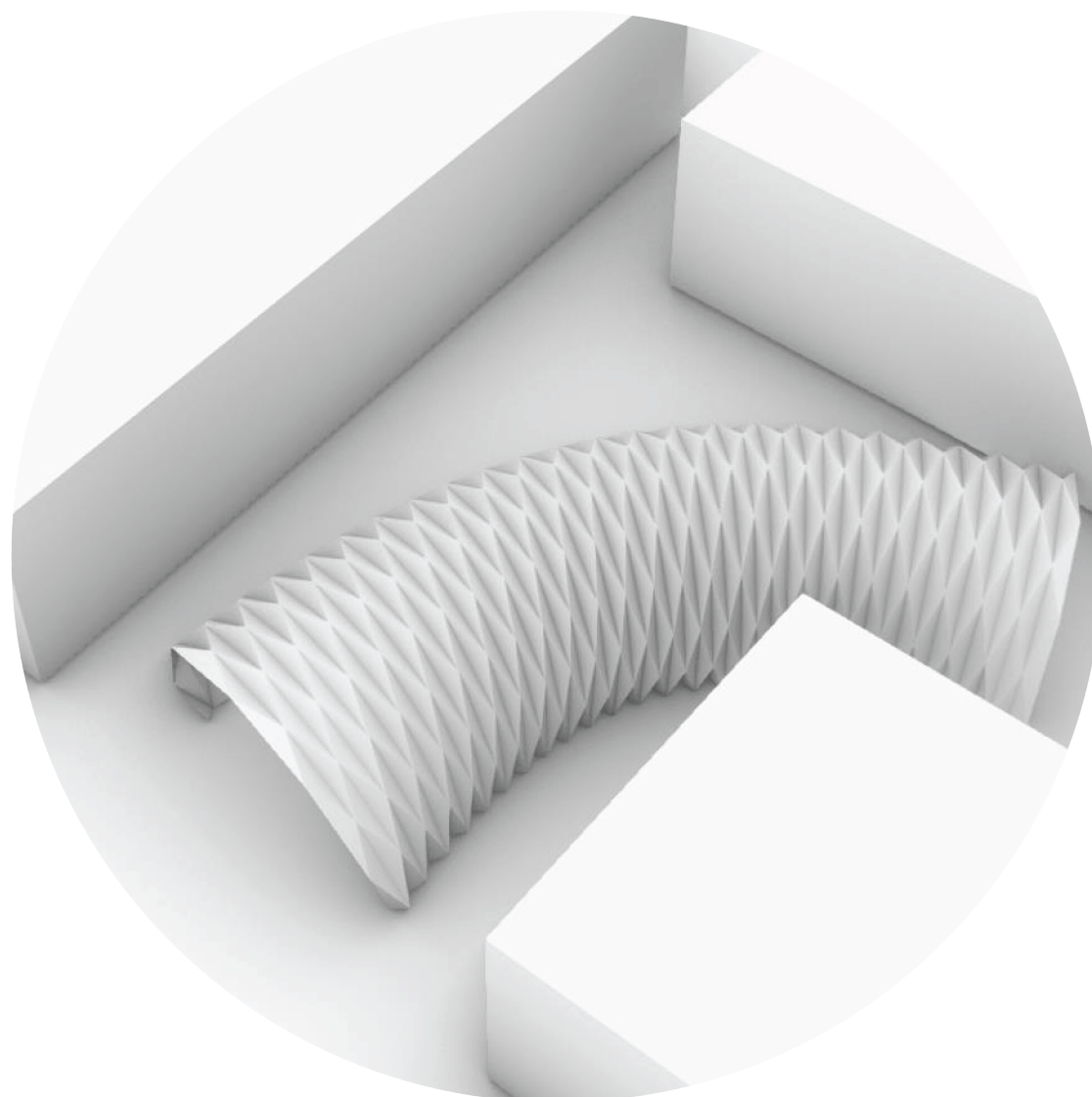


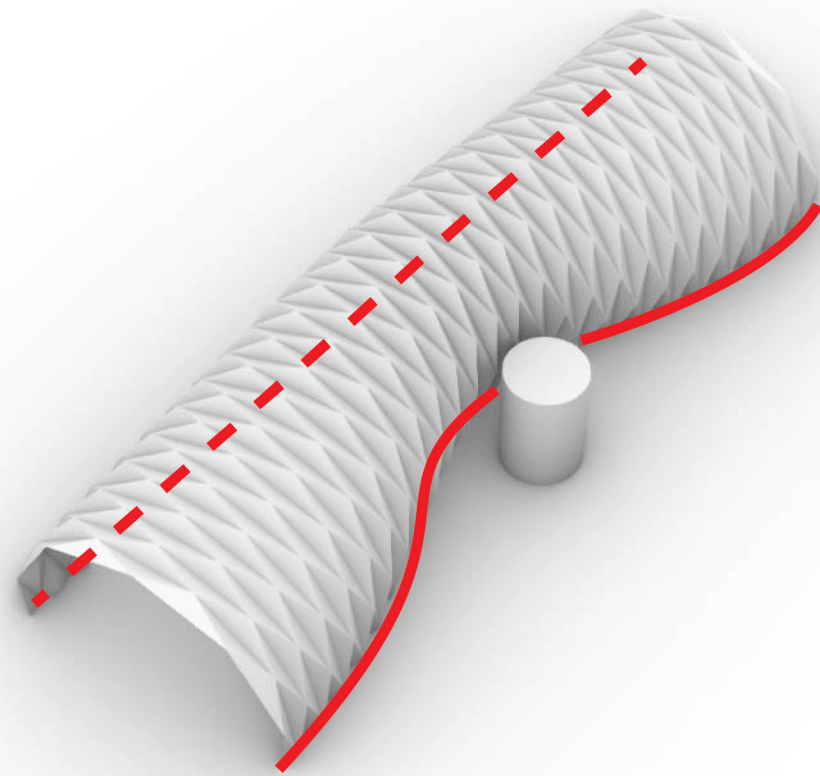


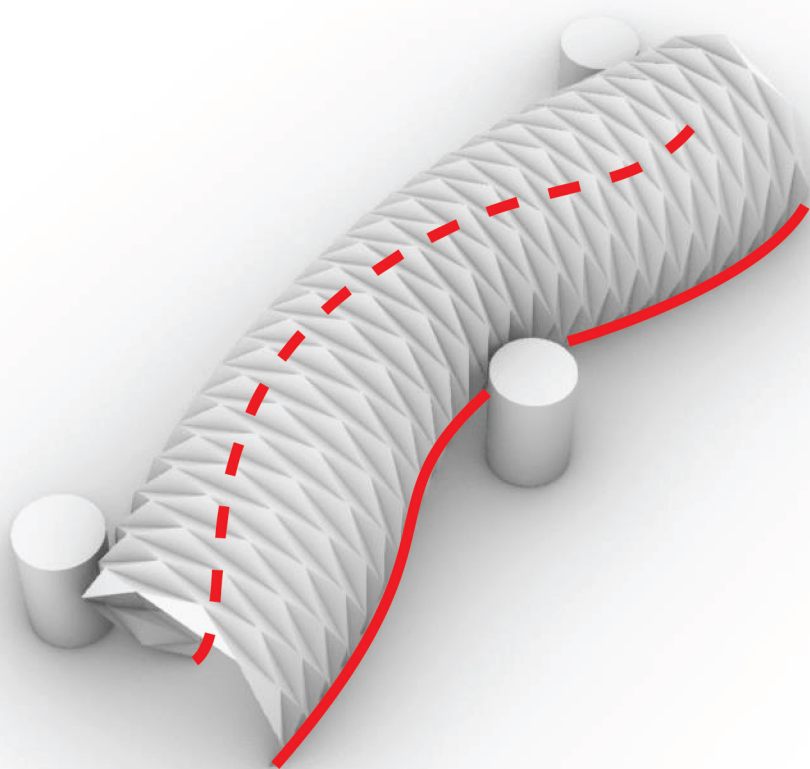


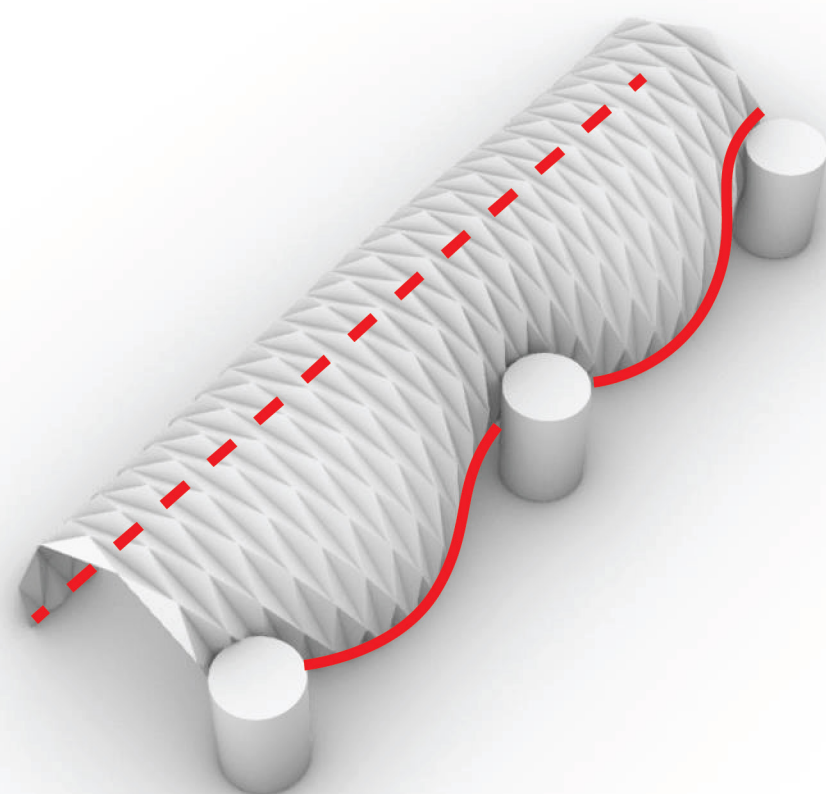




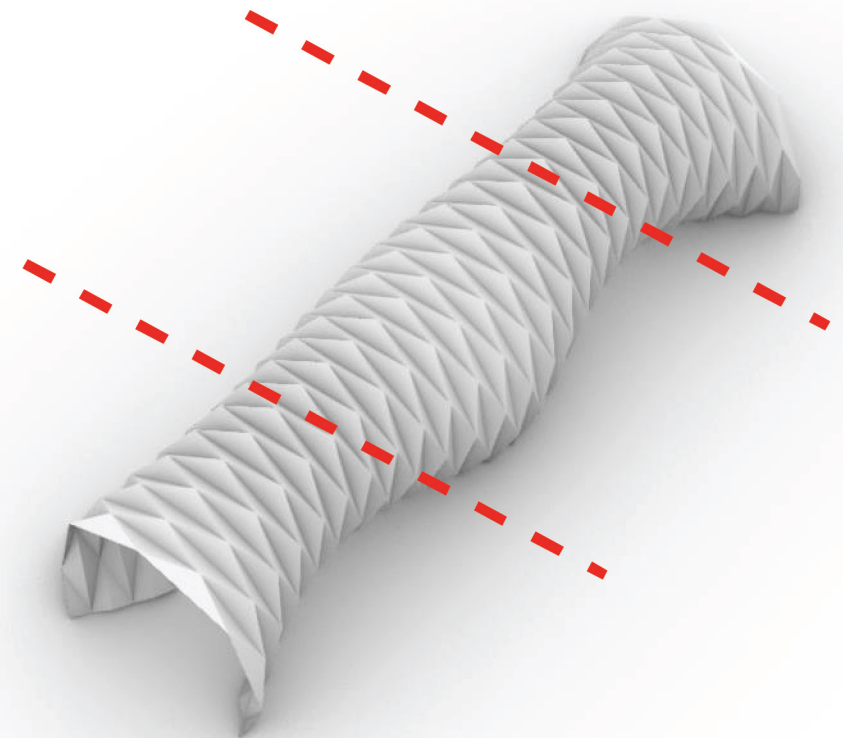
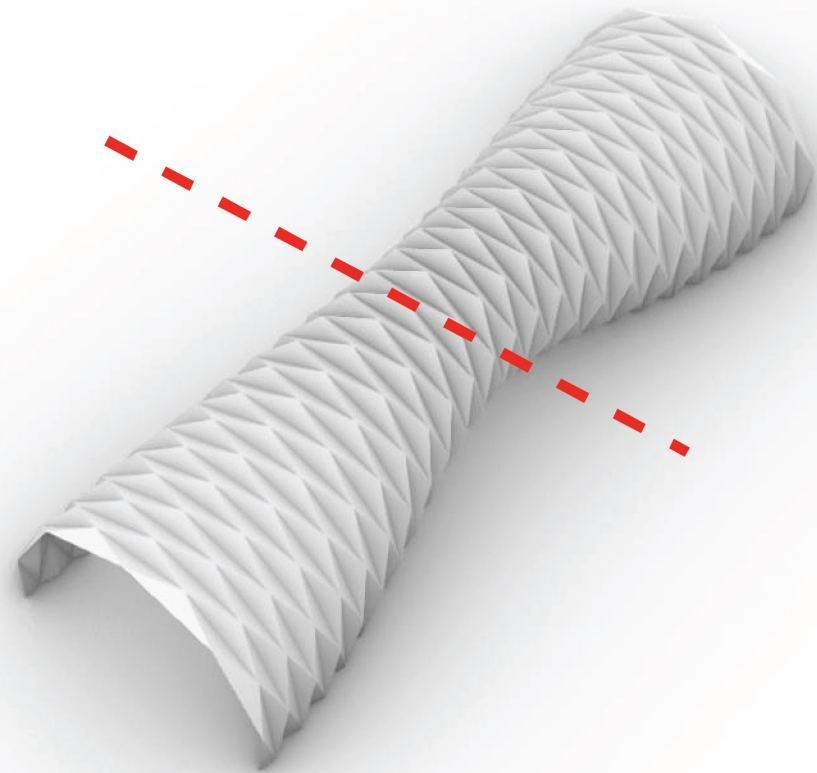




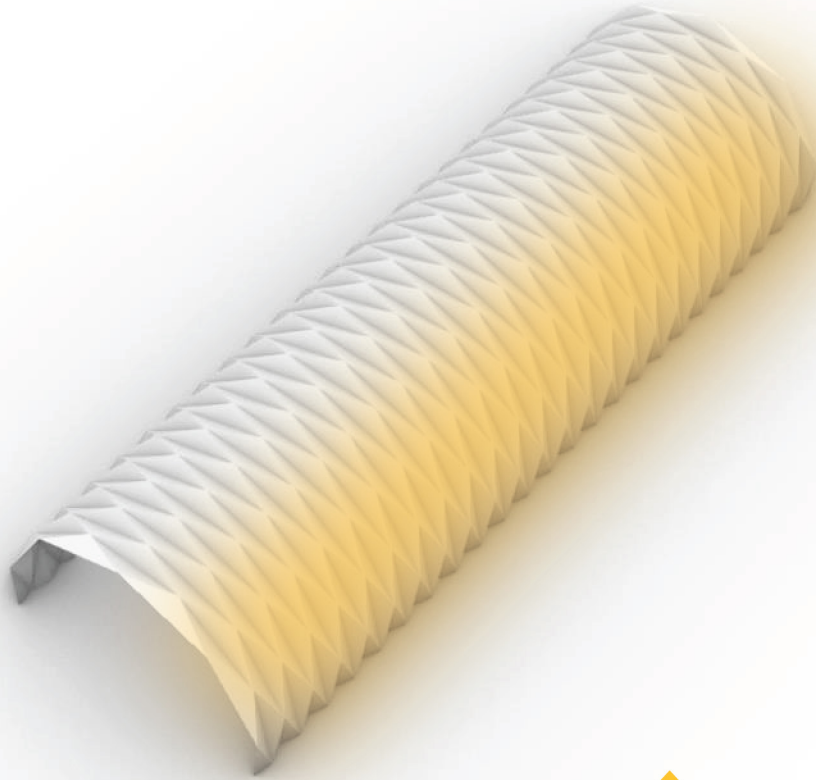


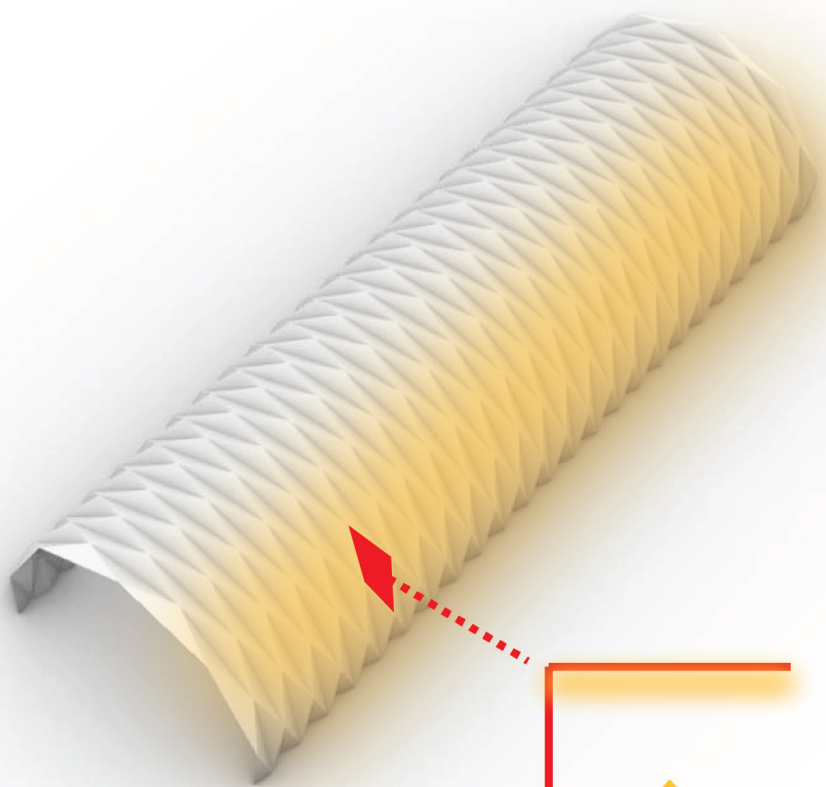


2. Functionality



Plug-ins



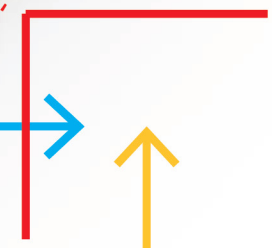
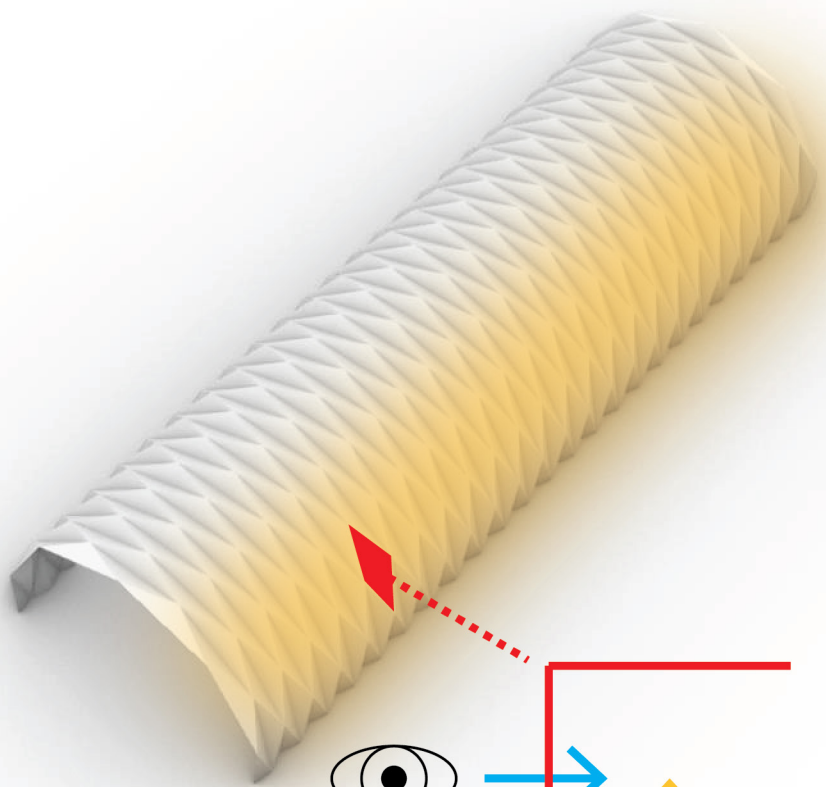


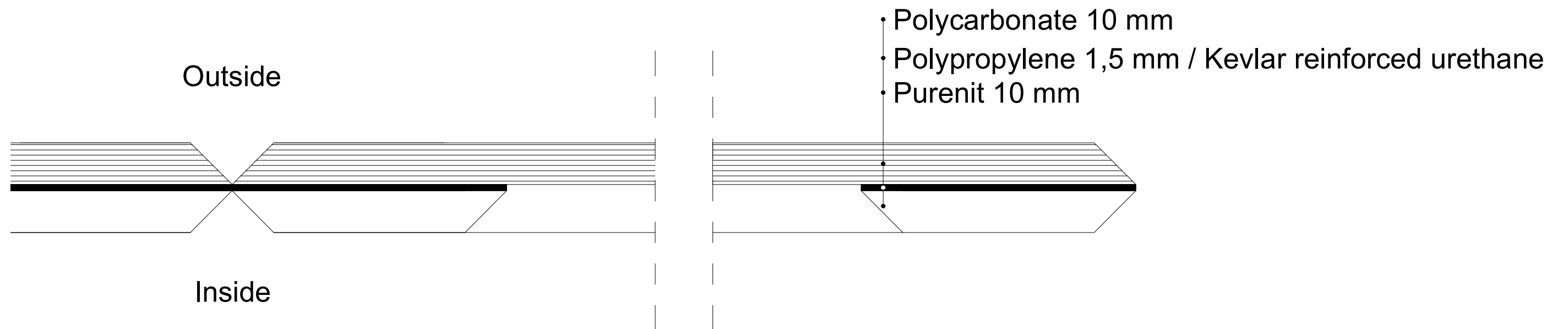
- Cavity for:
 - Lightsensor
 - LED strip
 - Lithium battery
 - LED and battery controler

- Polycarbonate 2 mm
- PV cell 150 x150 x 0.35 mm
- Aluminum backplate 1 mm
- Silicone Sealant 1 mm
- Purenit 10 mm
- Polypropylene 1,5 mm / Kevlar reinforced urethane
- Purenit 10 mm
- Silicone Sealant 1 mm
- Aluminum backplate 1 mm
- Polycarbonate 1 mm



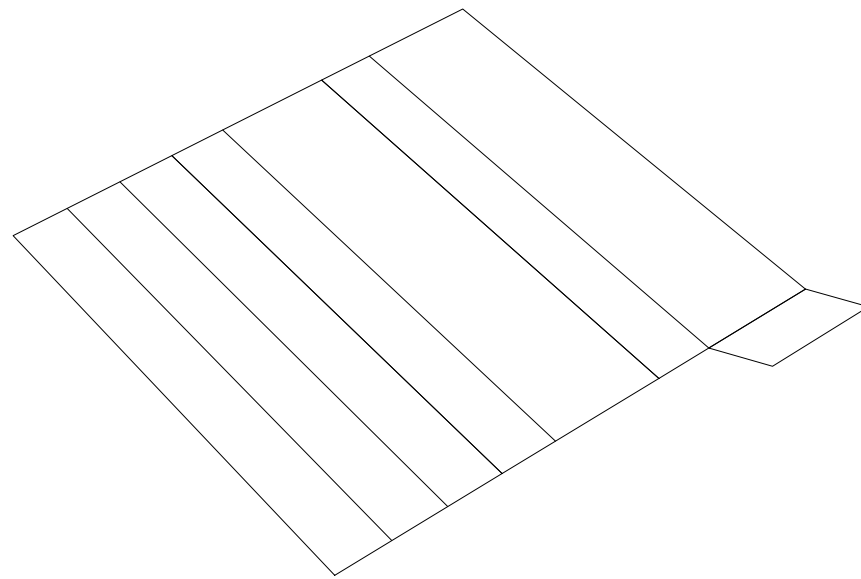
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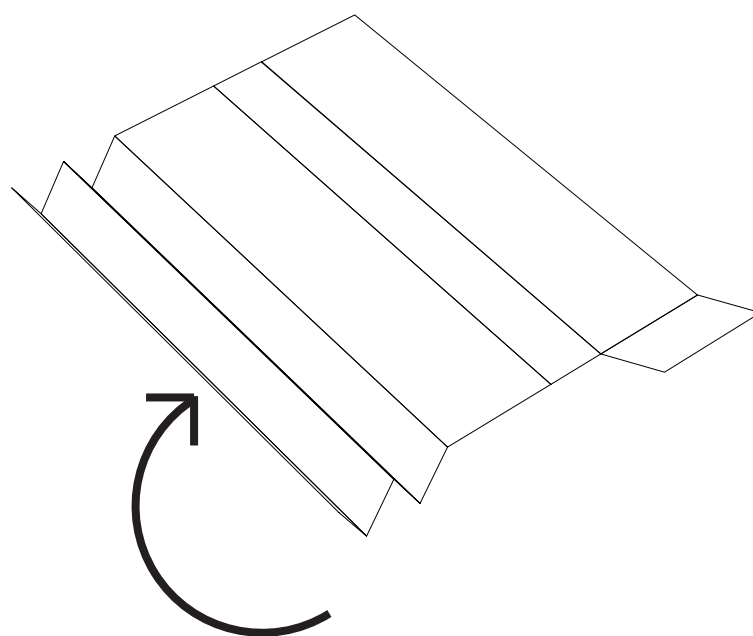


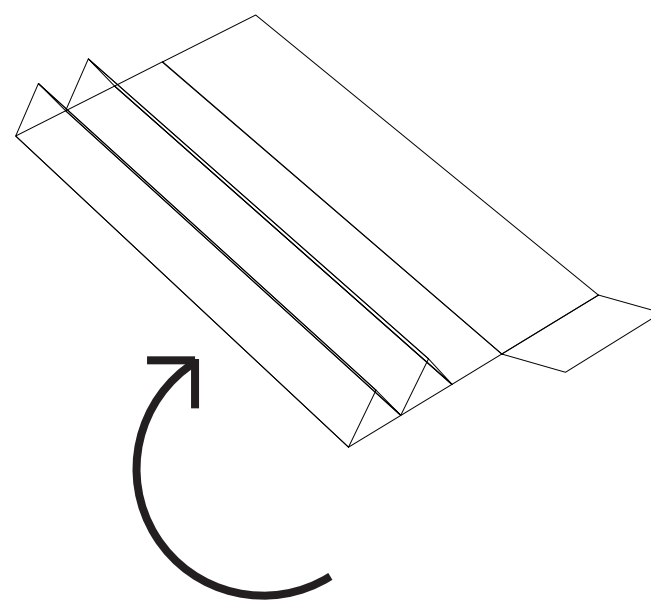


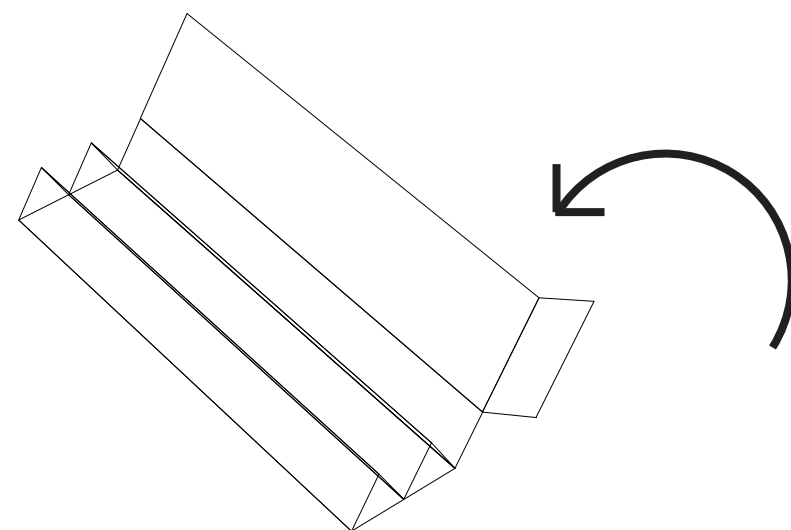
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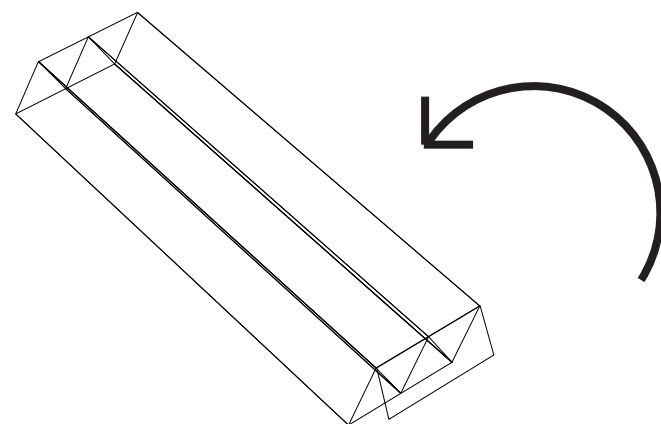
Floor

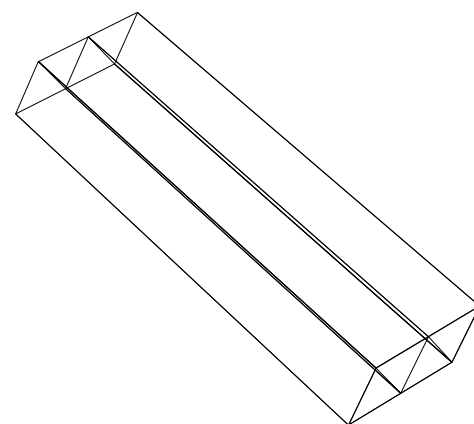


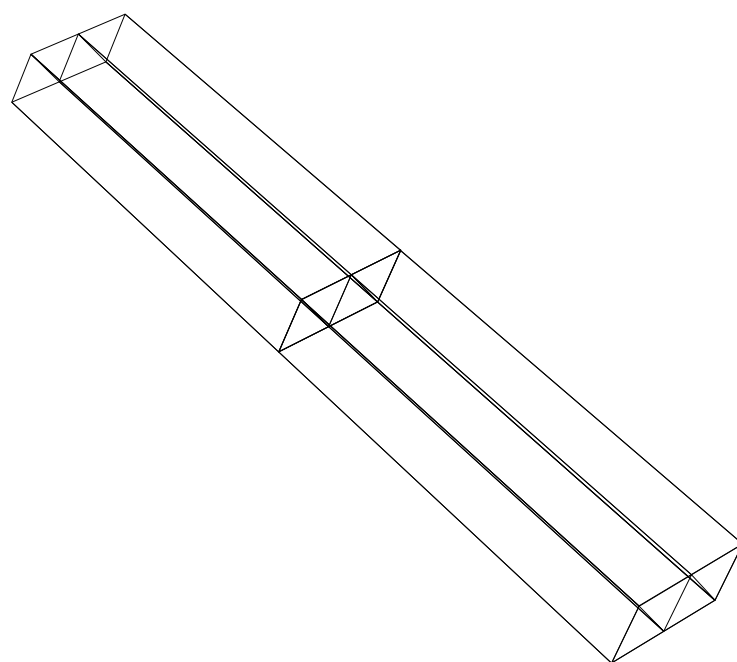


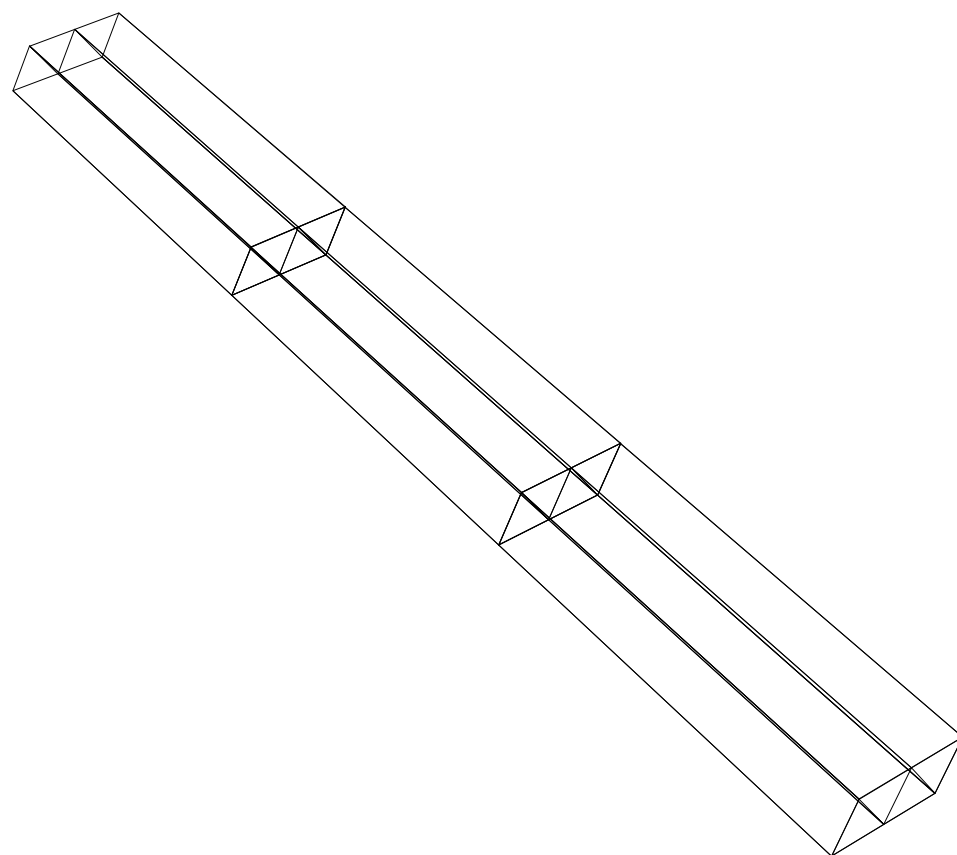


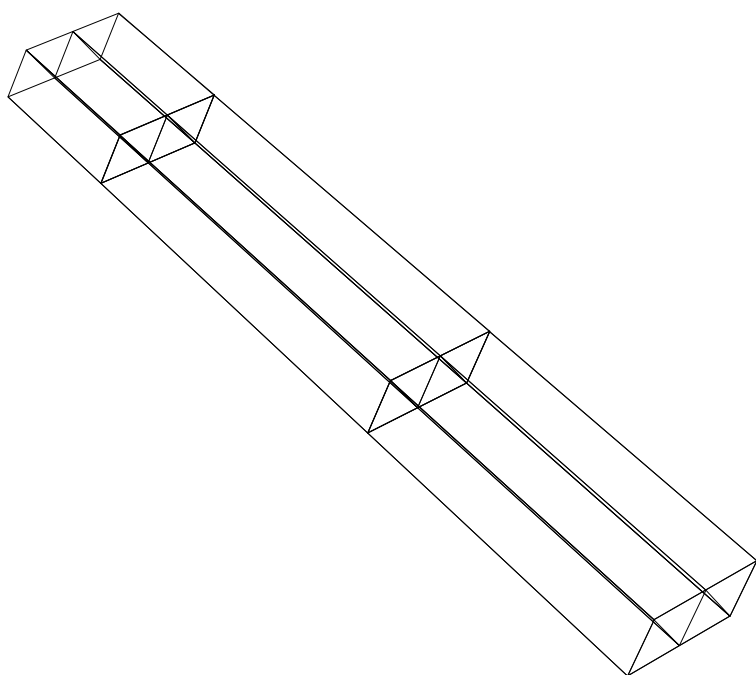


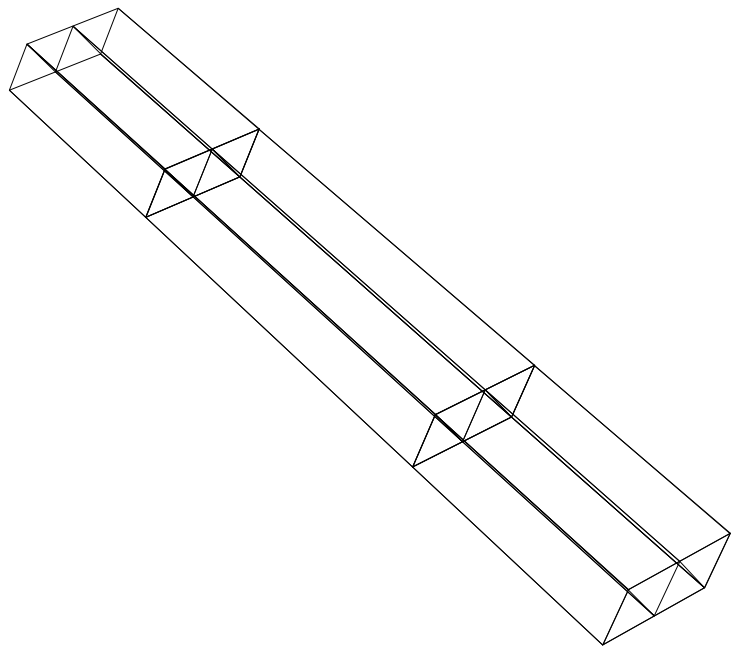


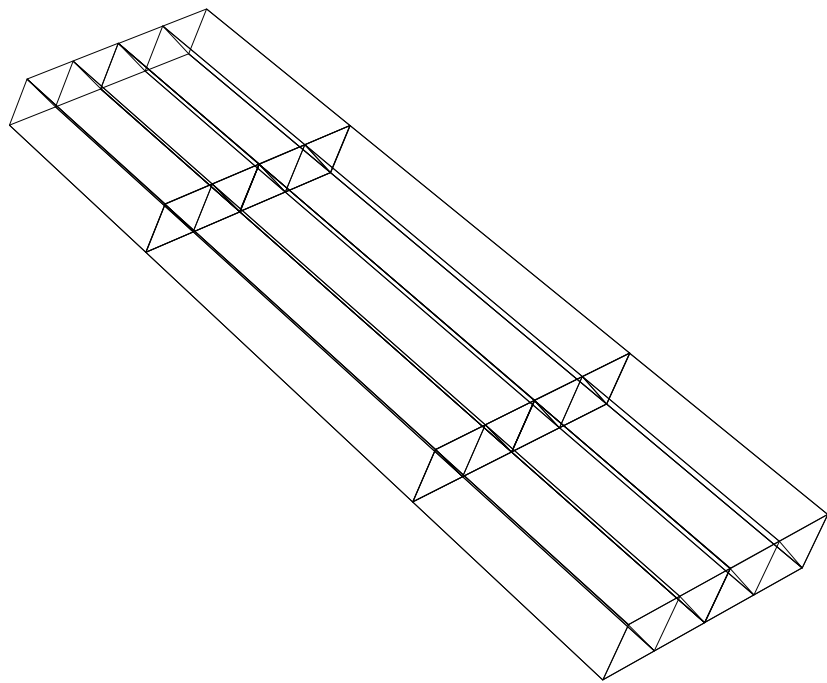


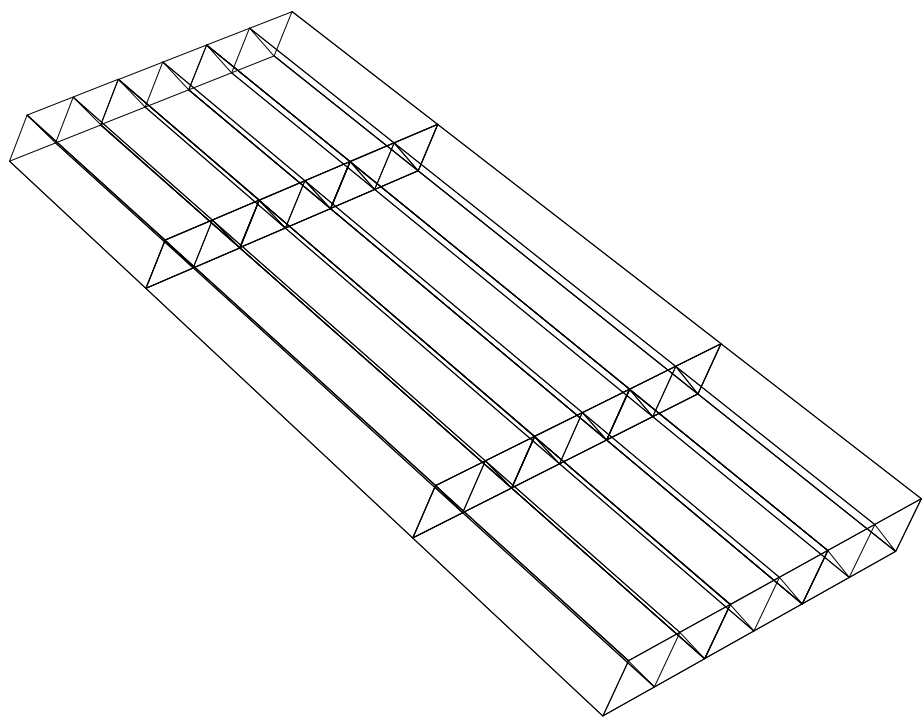


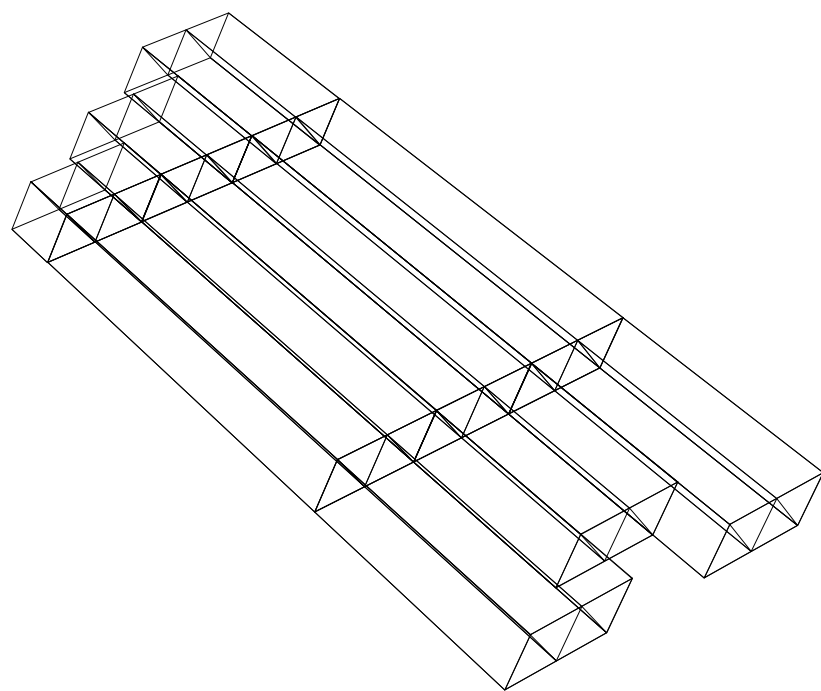


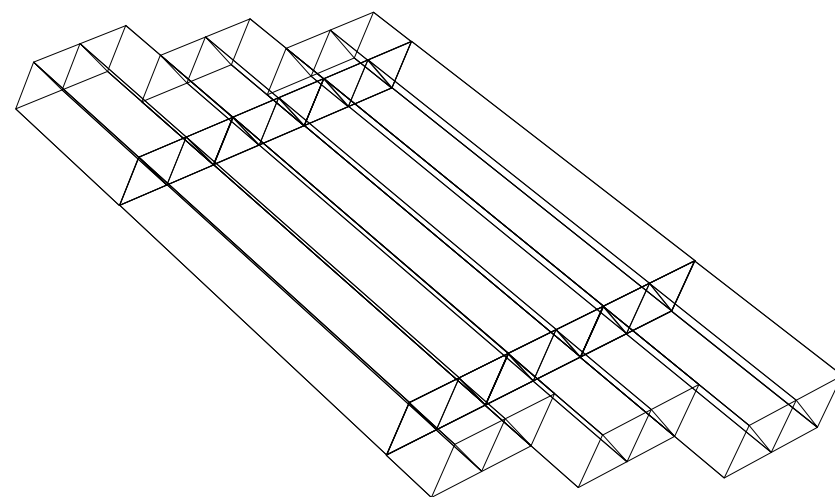


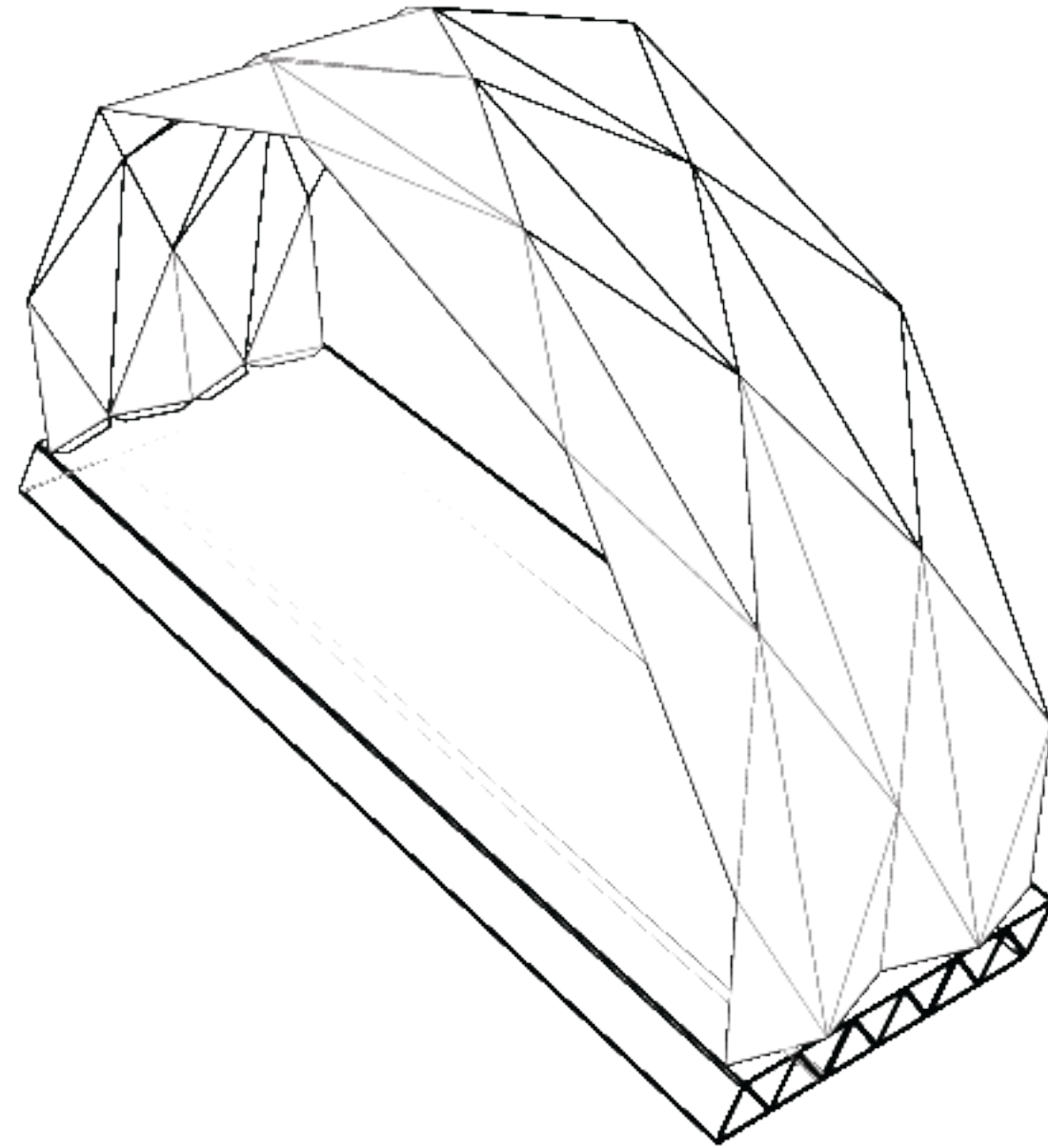


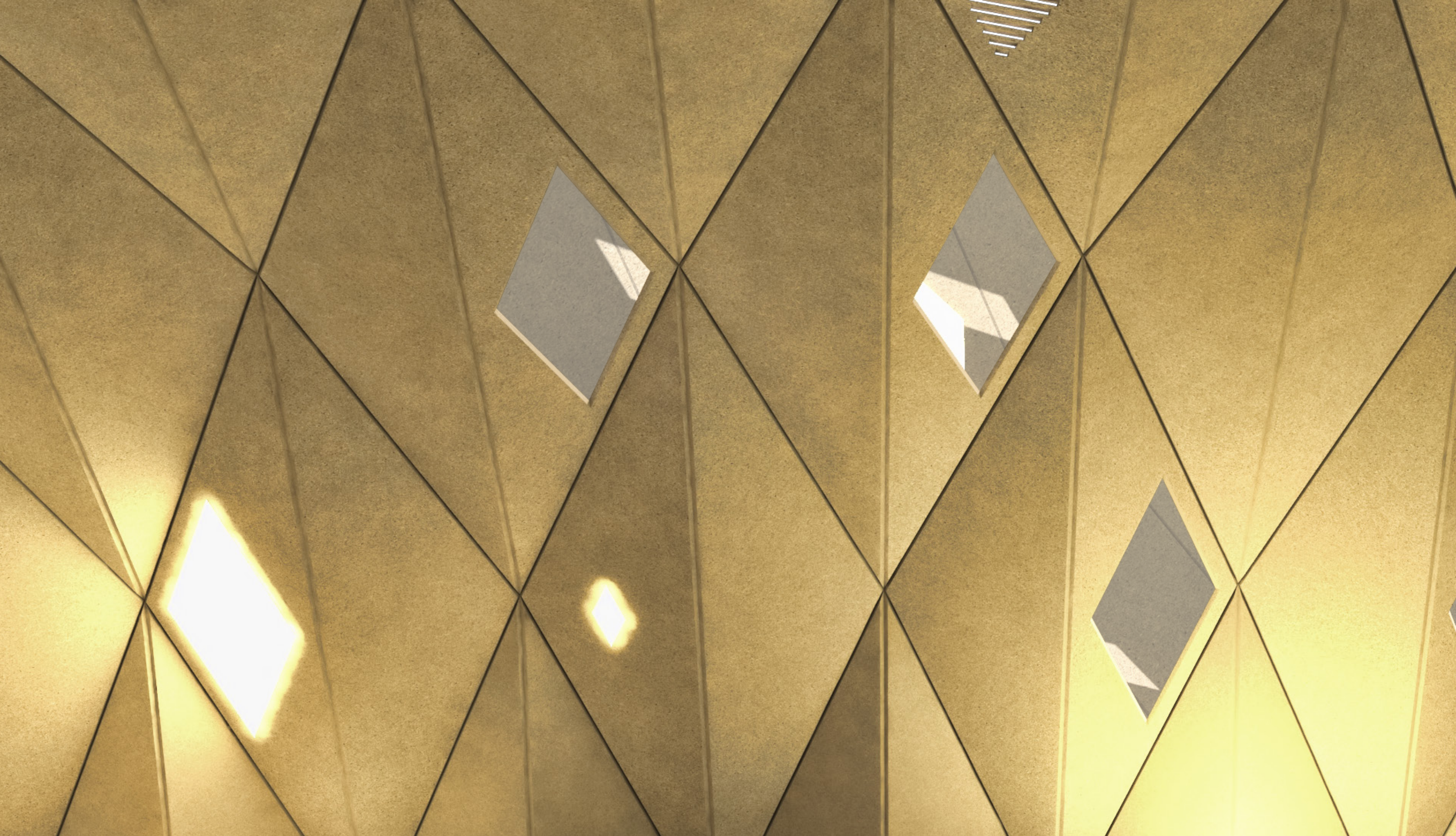




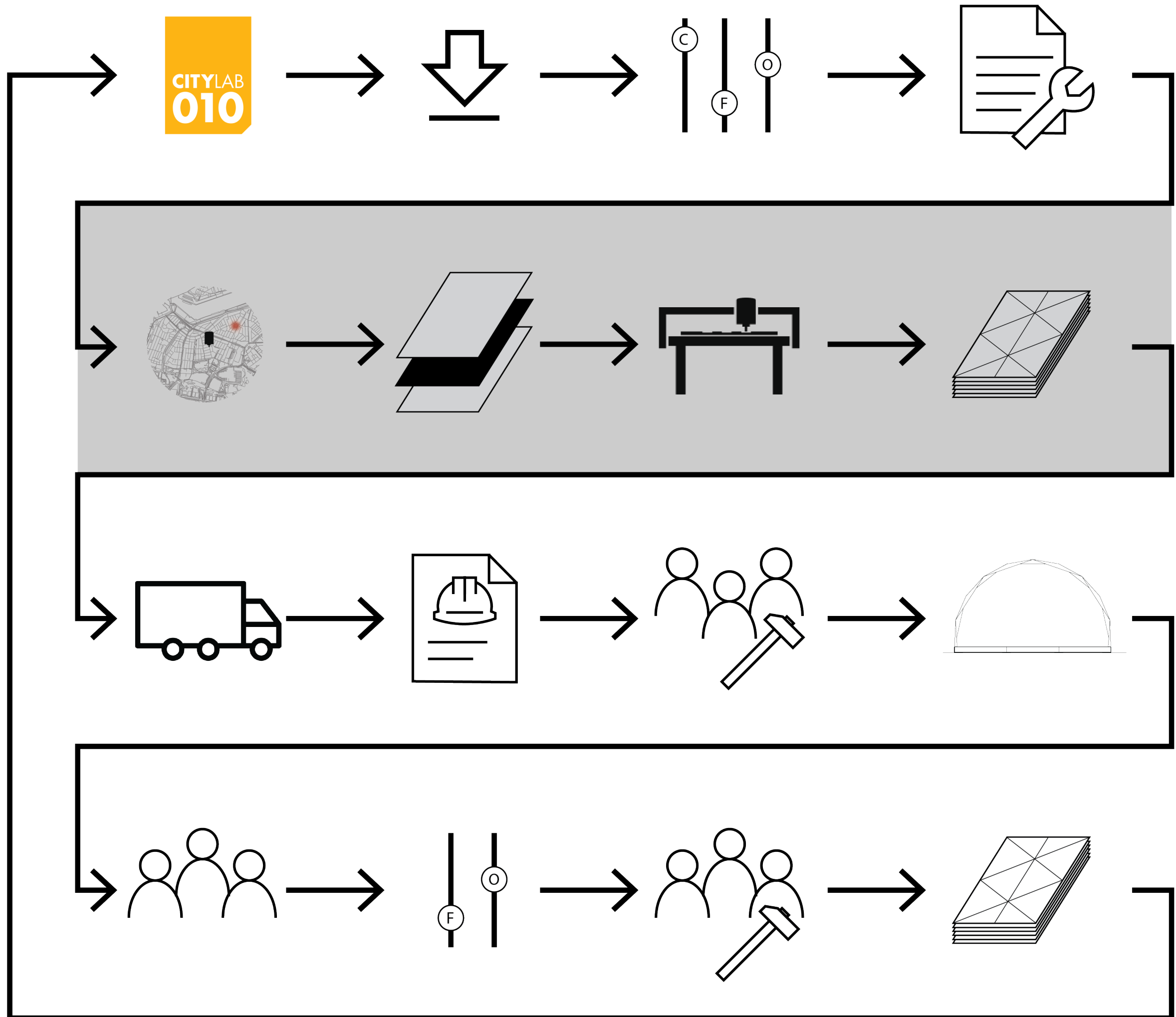


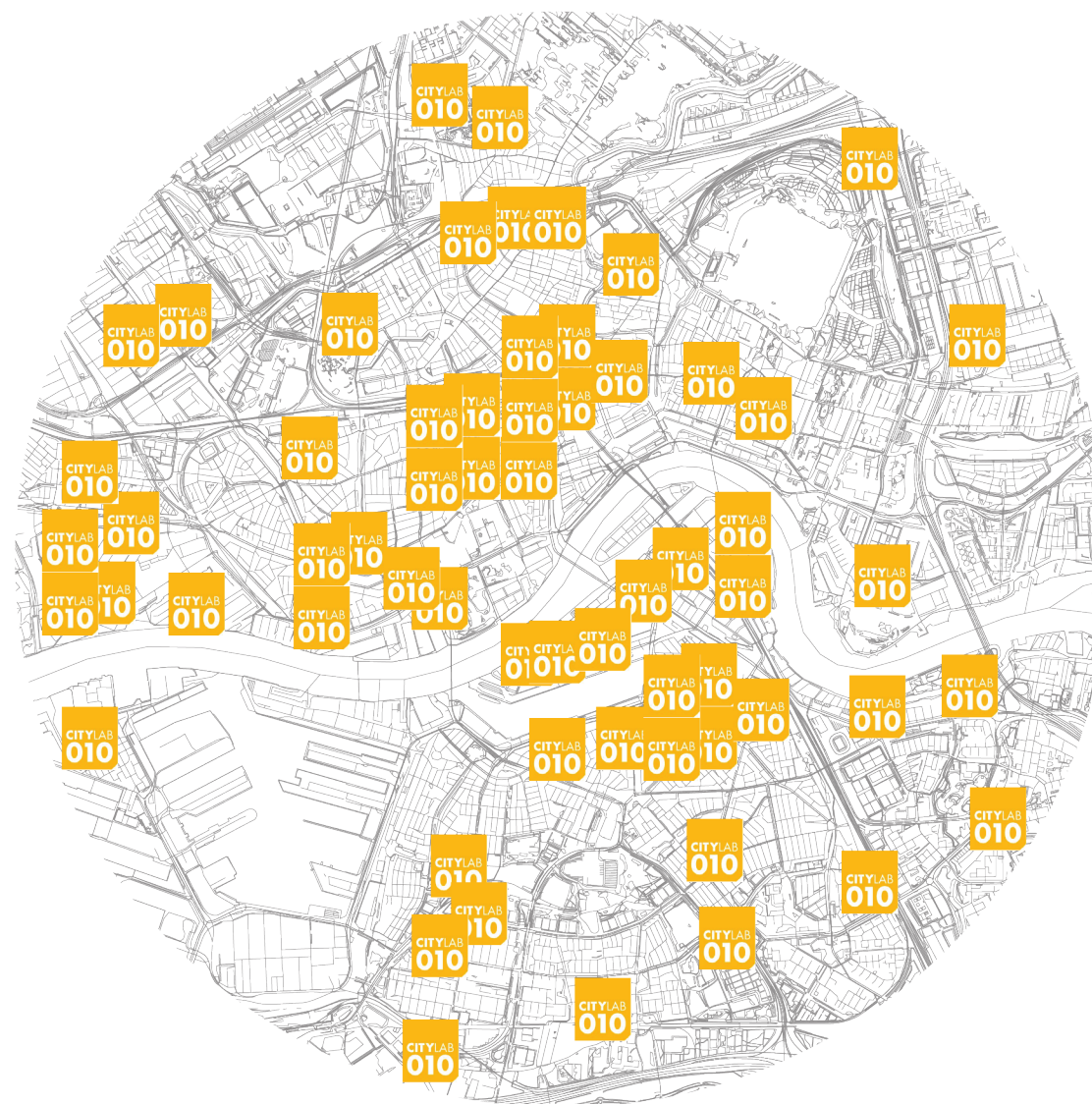






DESIGN

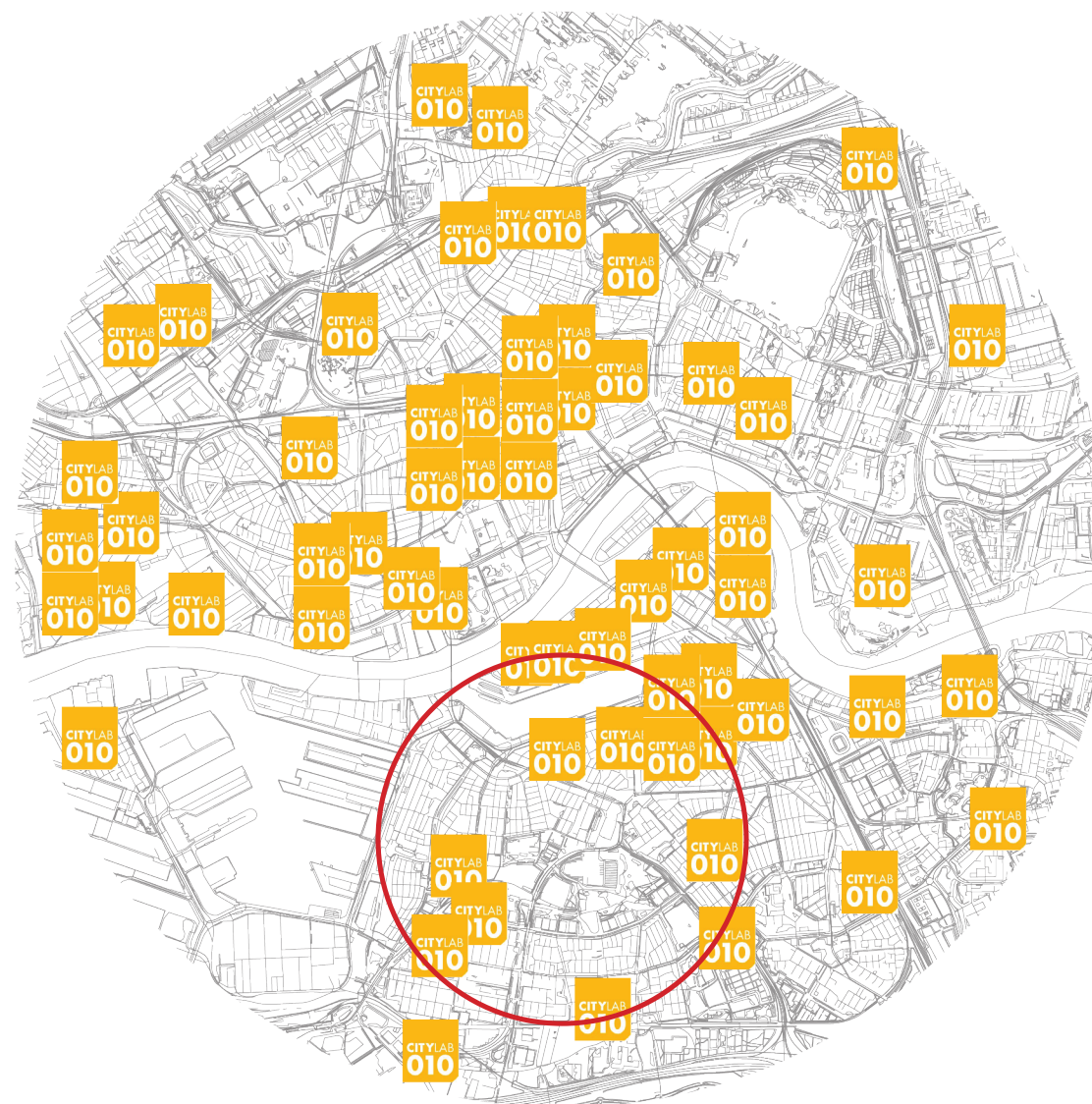




CityLab010



Charlois



CityLab010



Culture

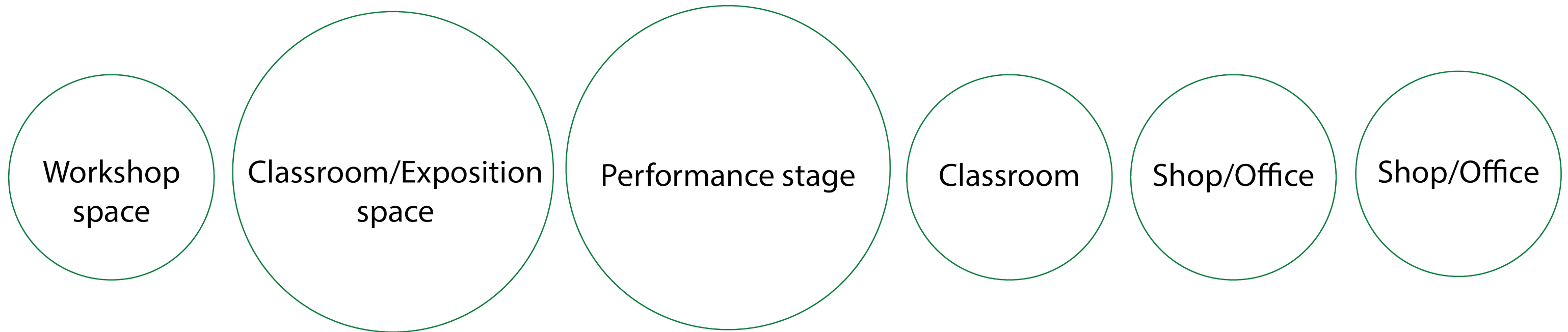


Employment
opportunities



Education

Program

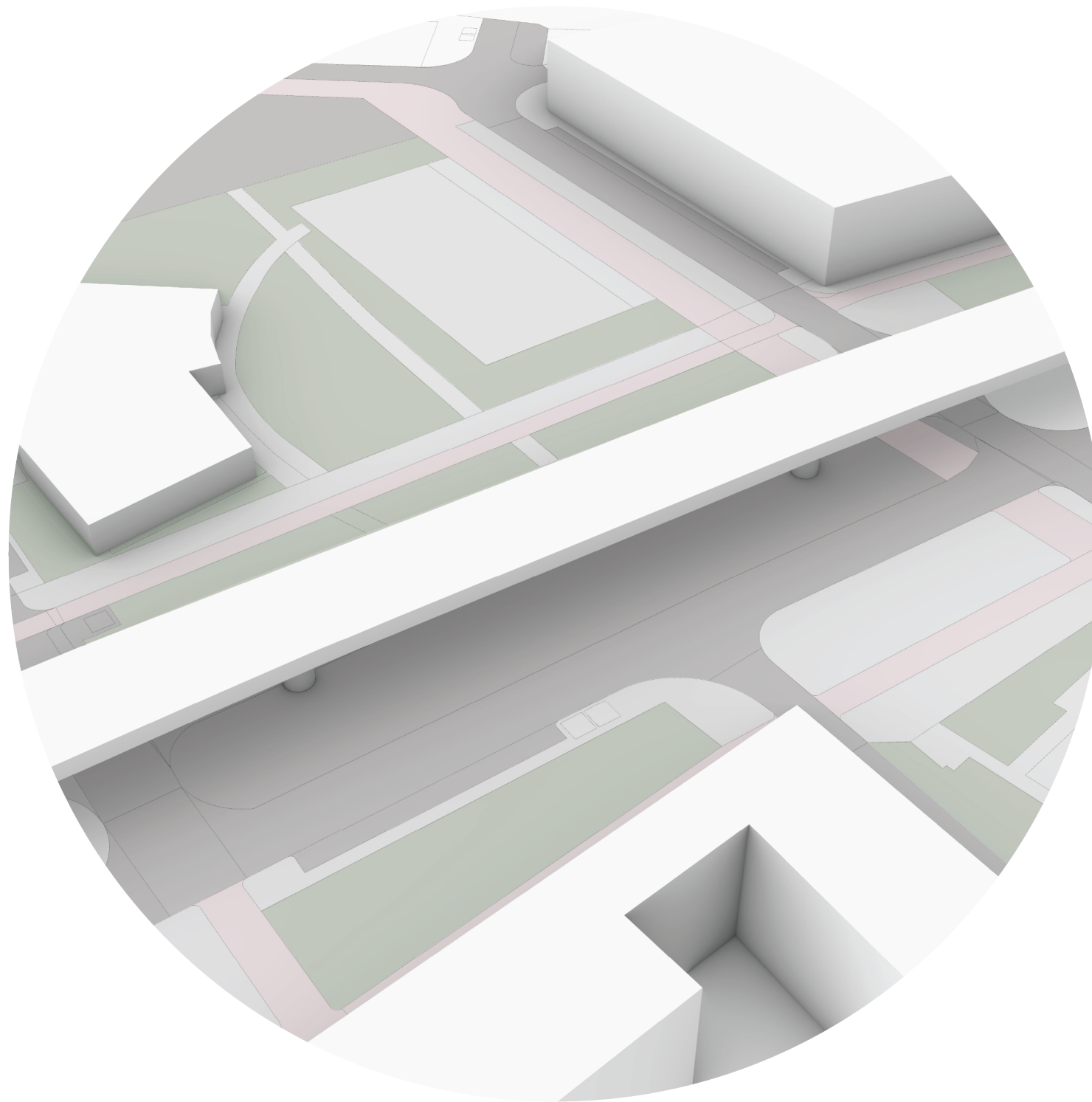




Mijnsheerenlaan, Tarwewijk

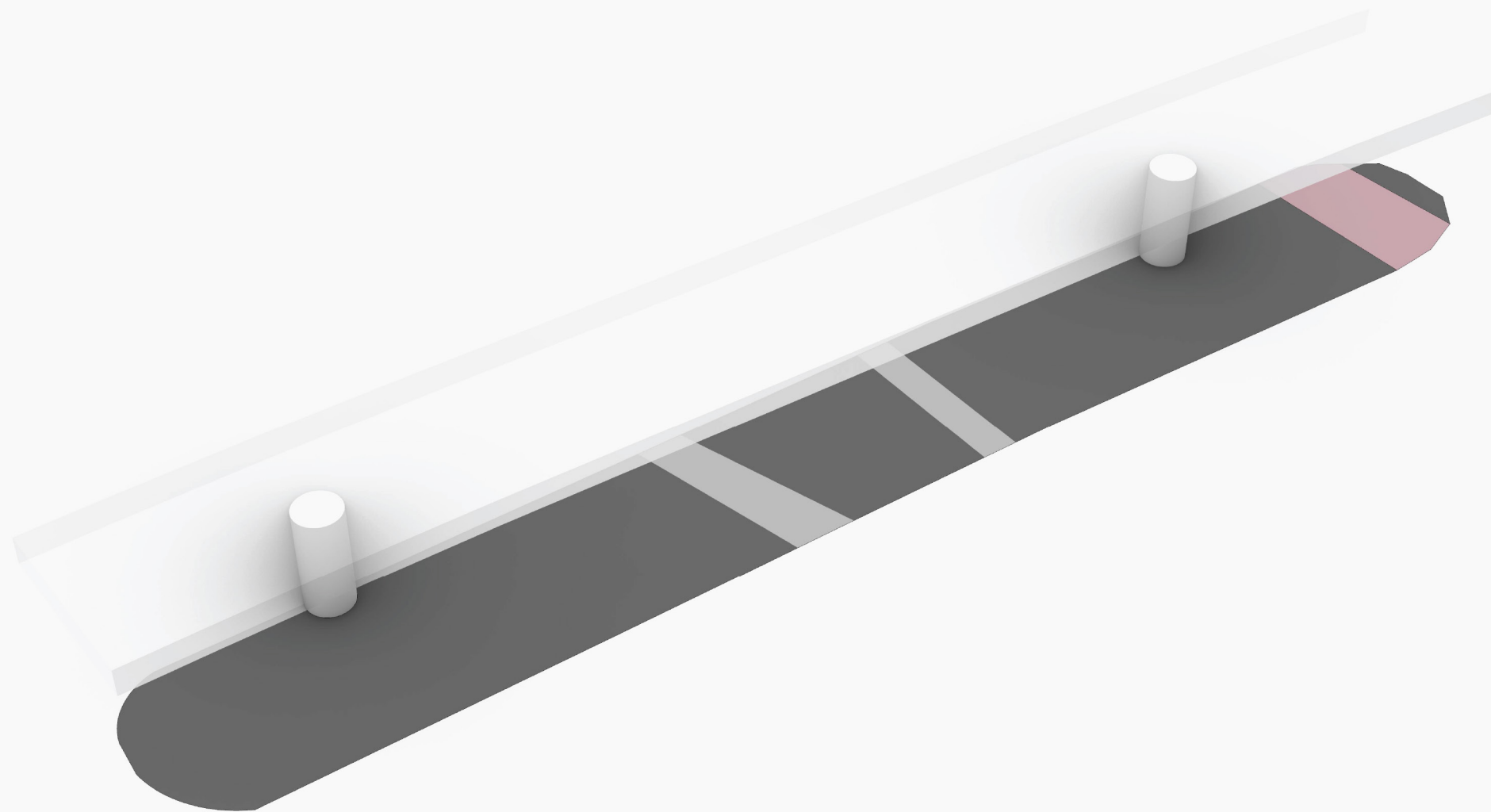


Mijnsherenlaan, Tarwewijk

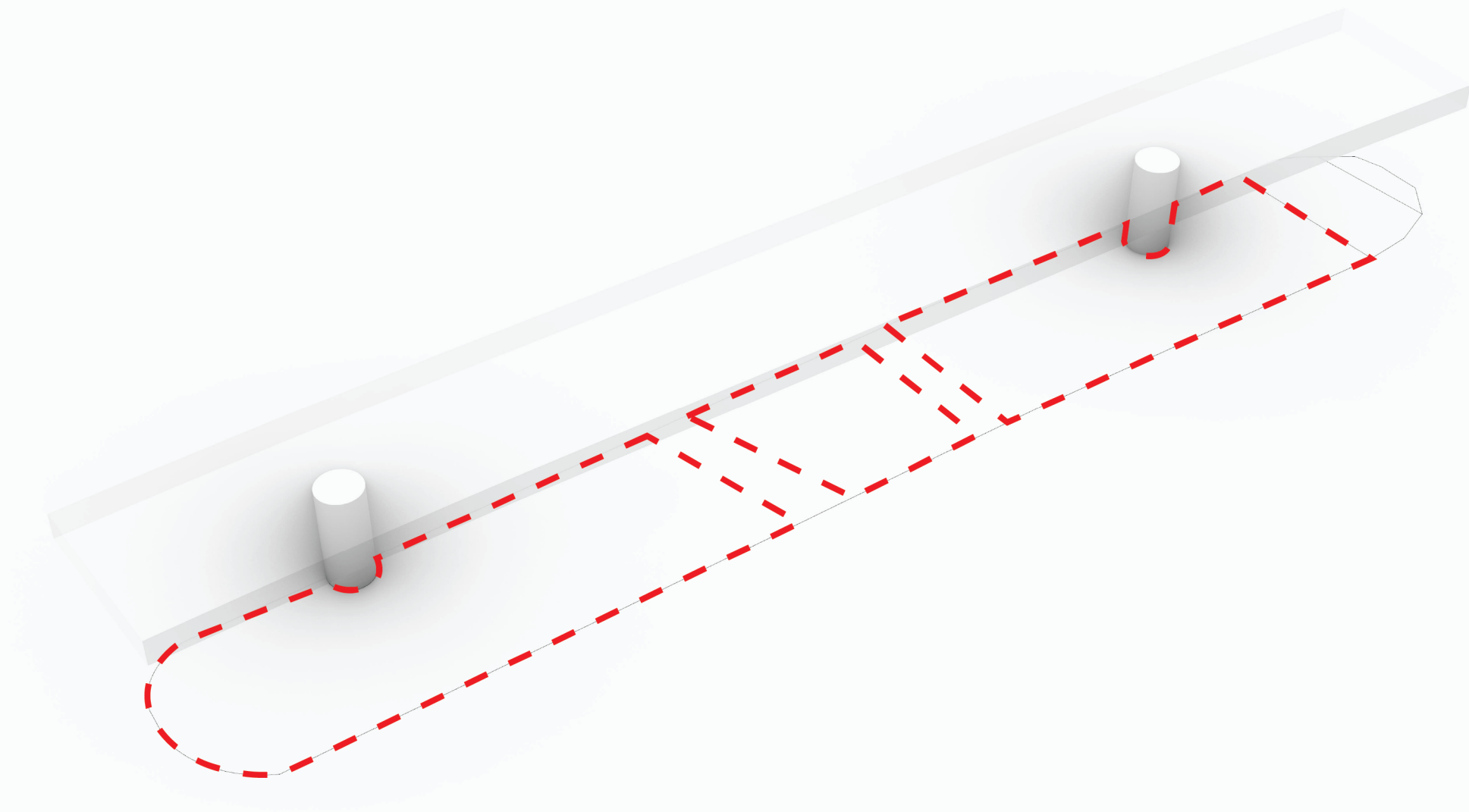


Mijnsherenlaan, Tarwewijk

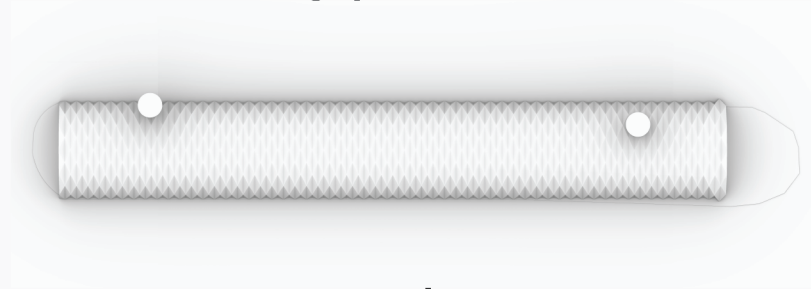
Boundary conditions



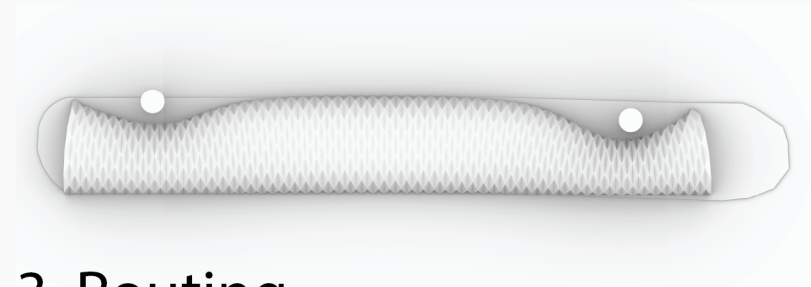
Maximal footprint



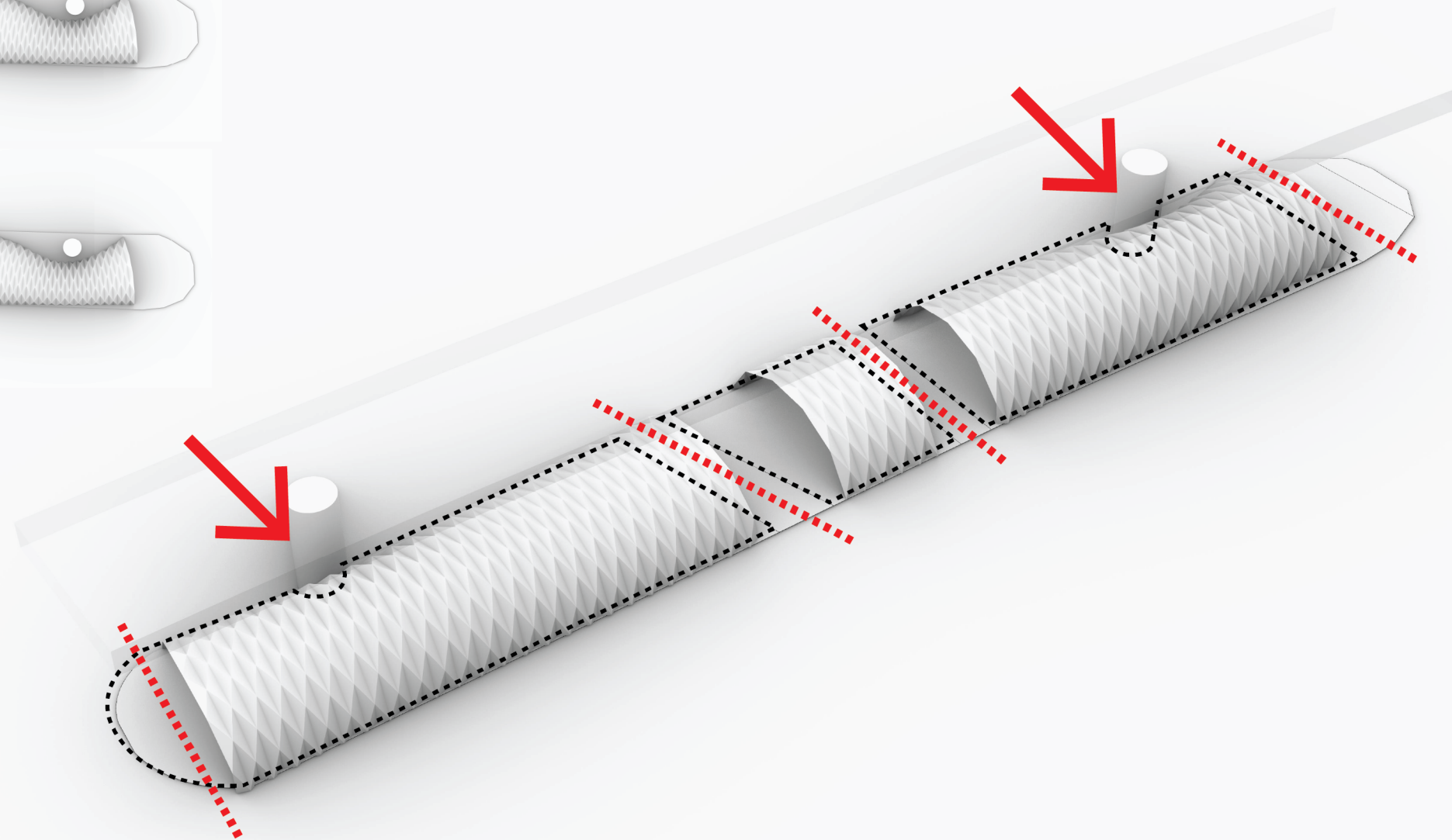
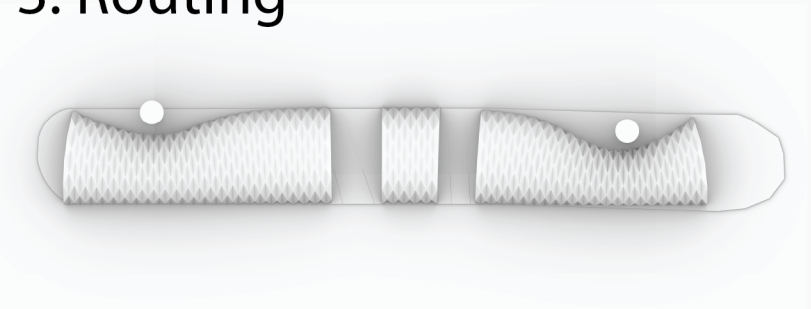
1. Boundary plot



2. Context conditions

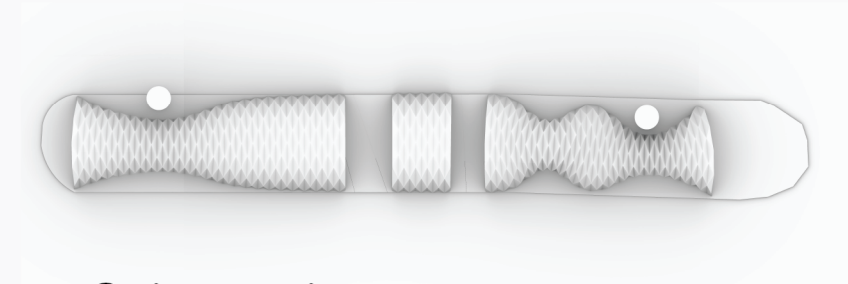


3. Routing

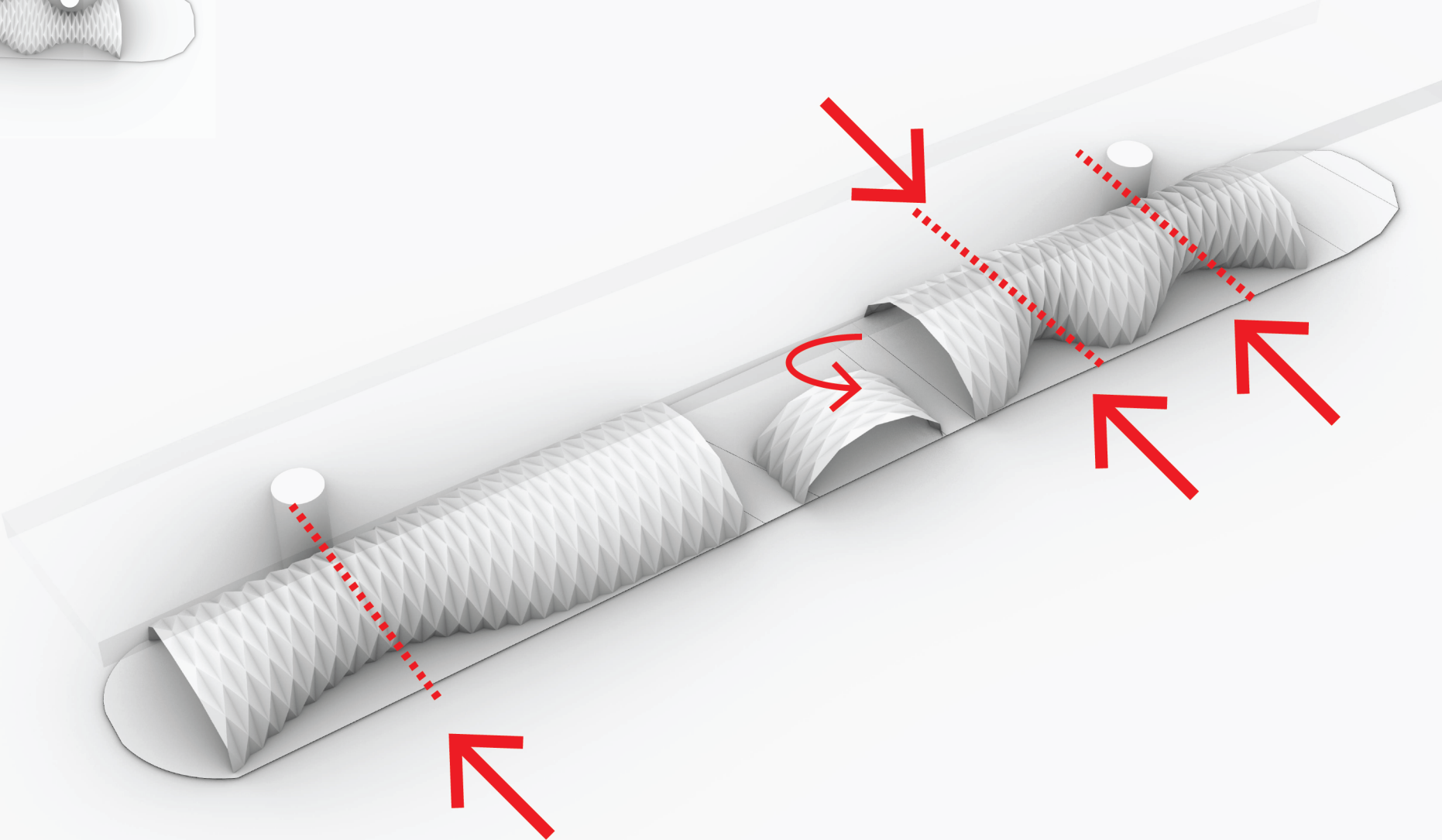
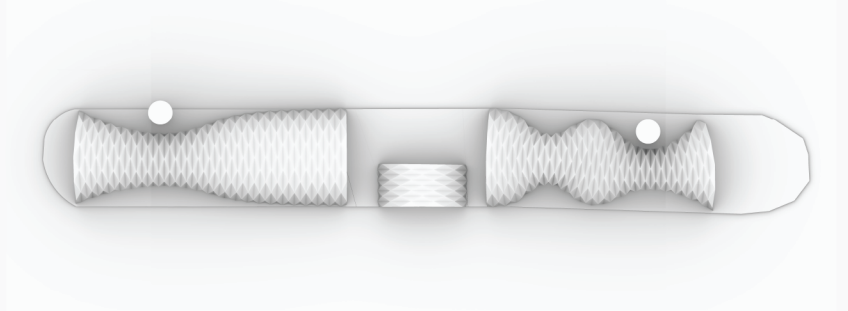


Context conditions / site specific input

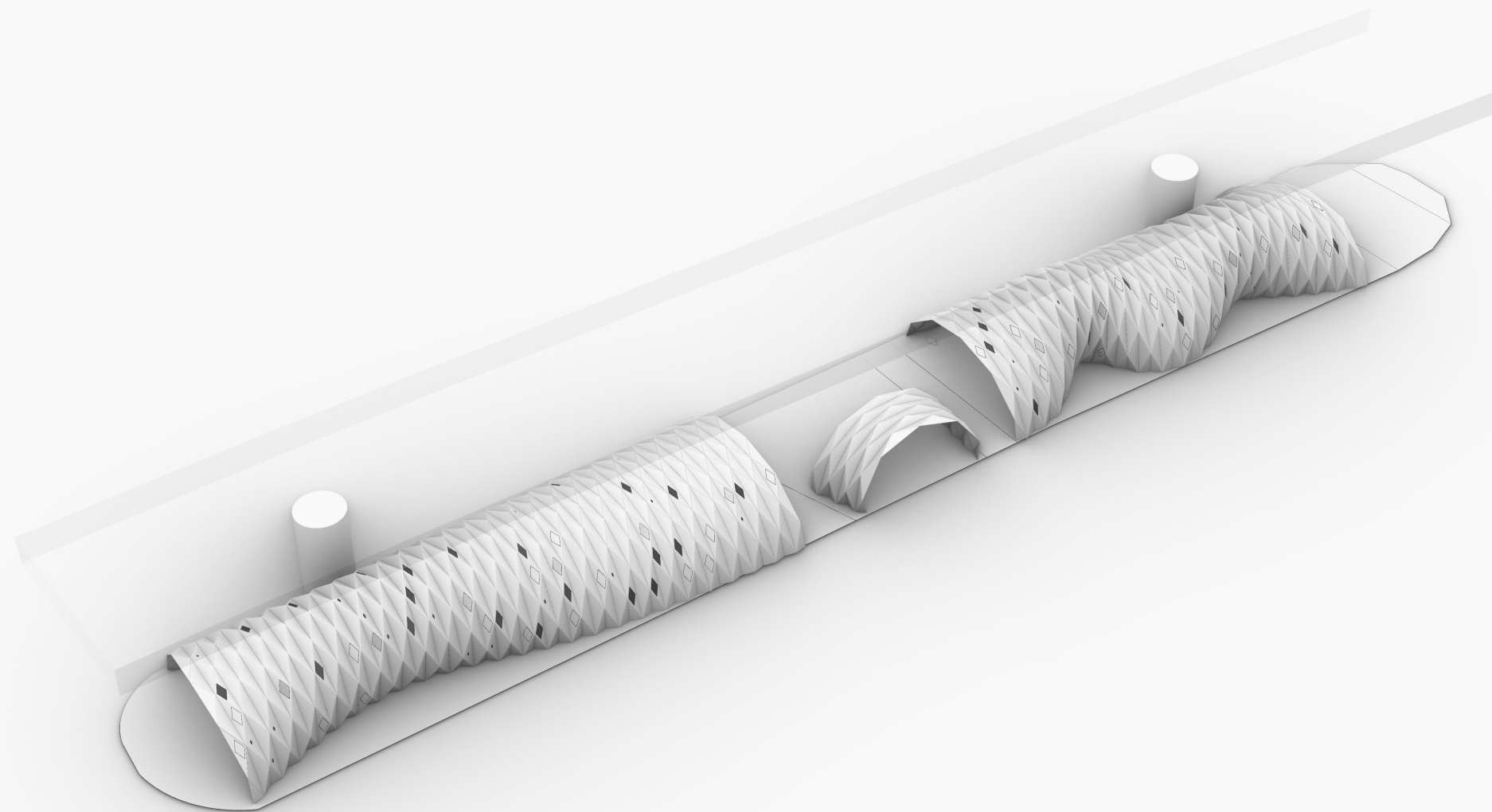
1. Function division



2. Orientation



Functionality



Plug-ins





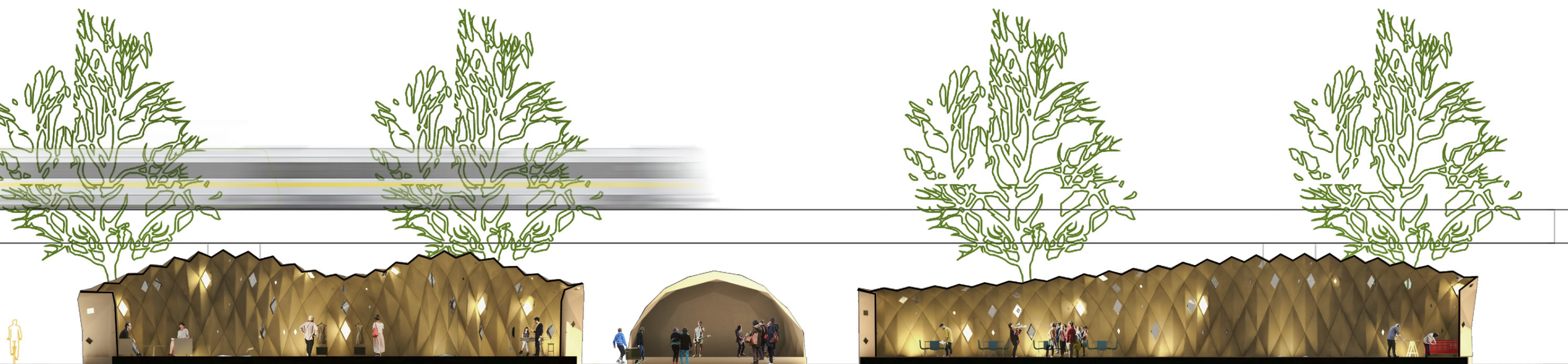




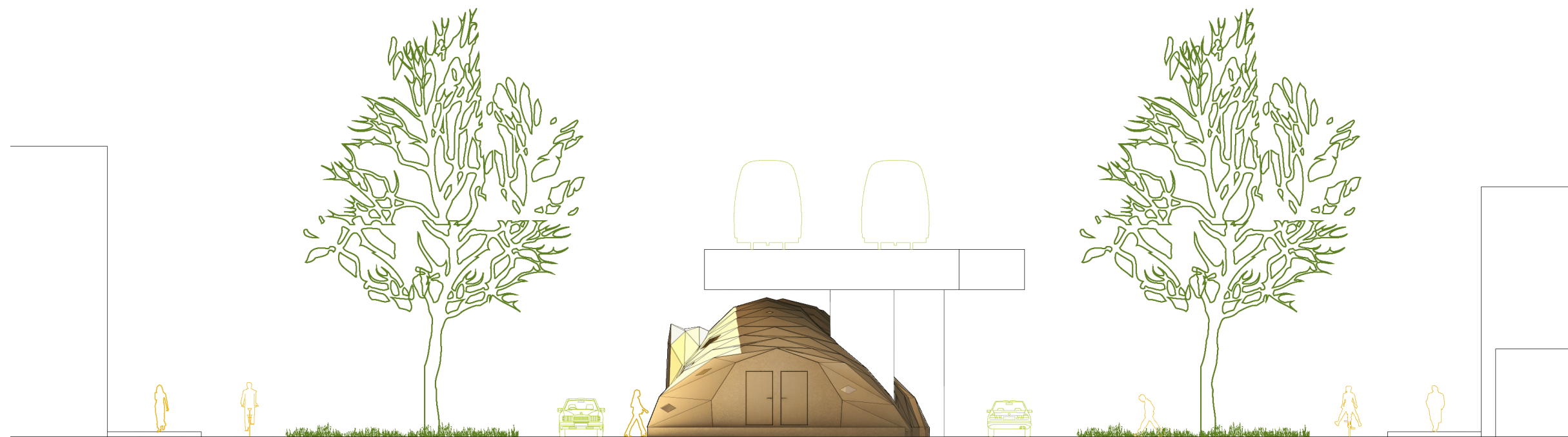


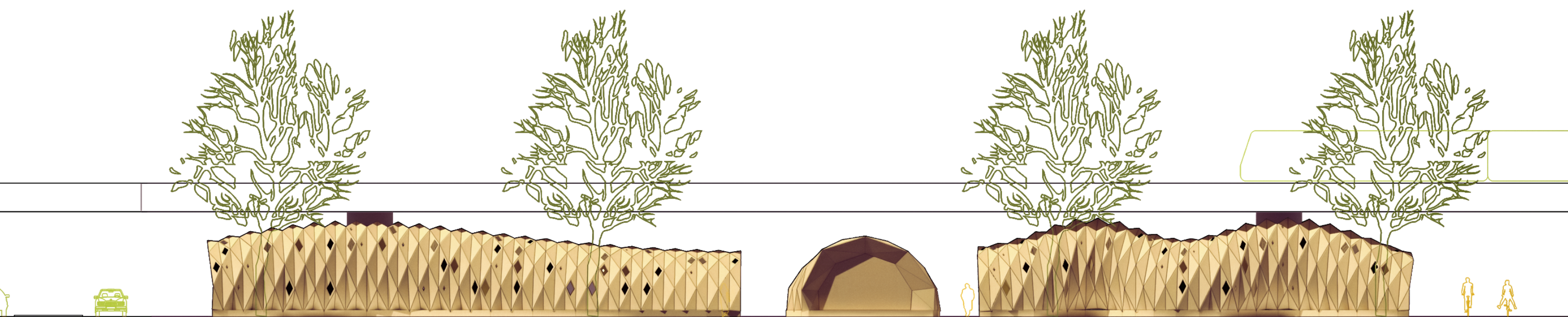


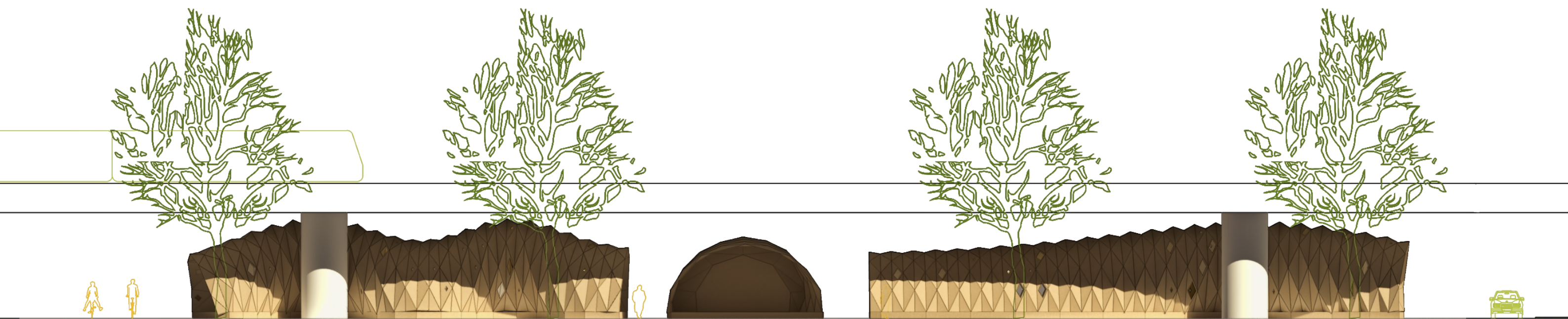


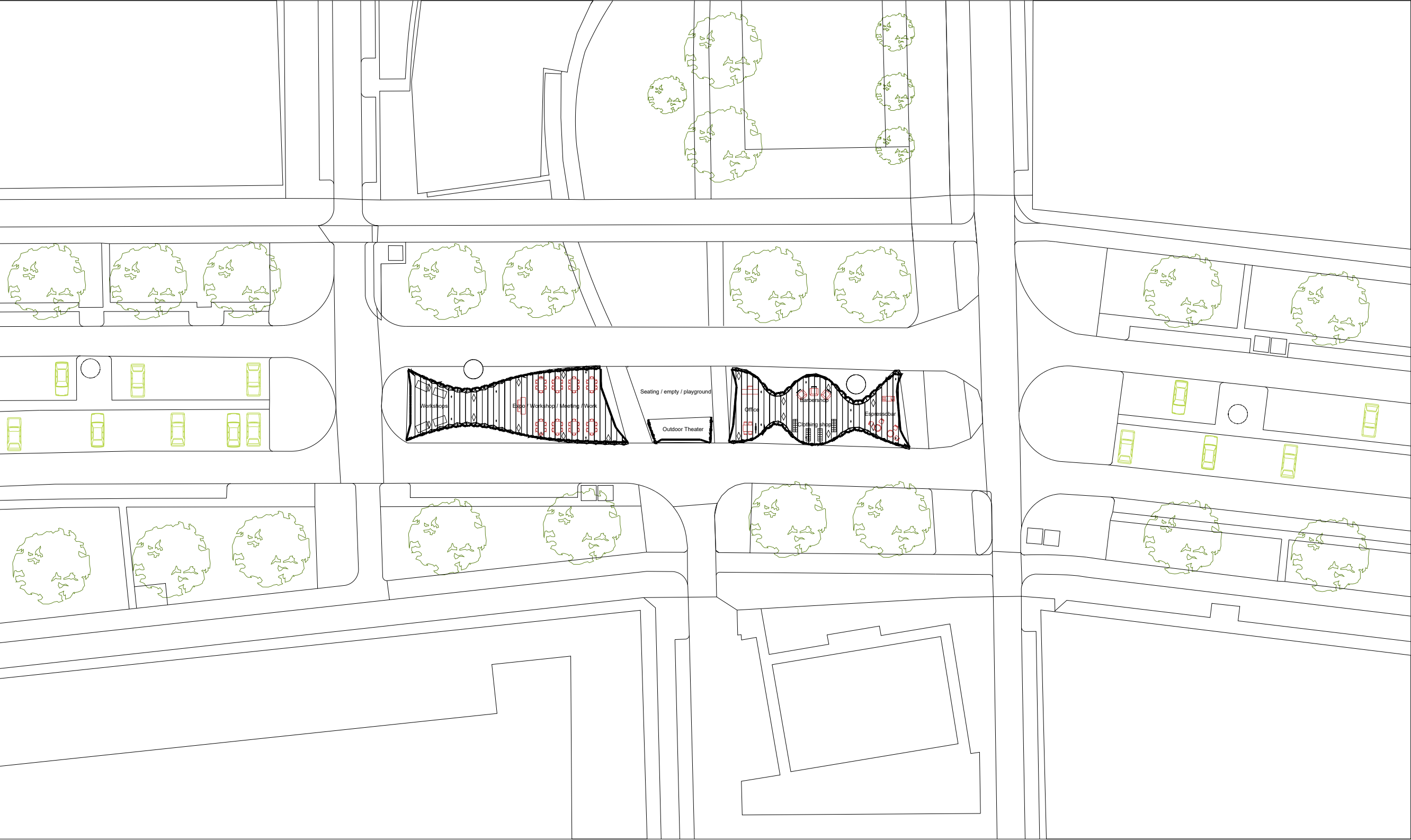


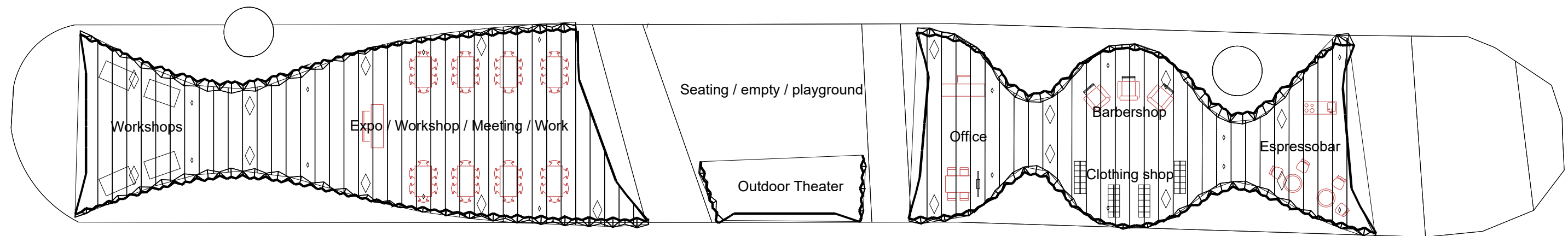
Facades

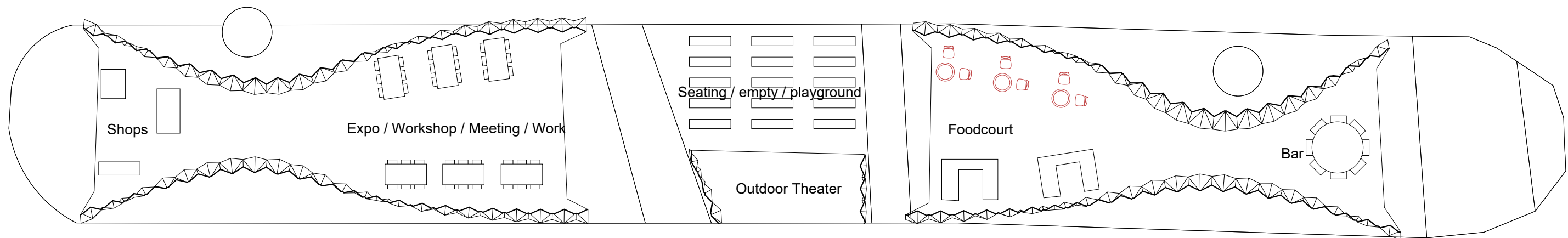


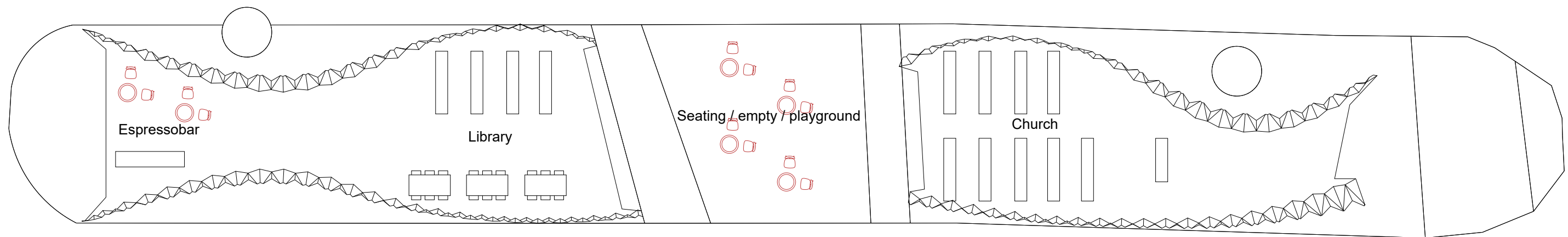


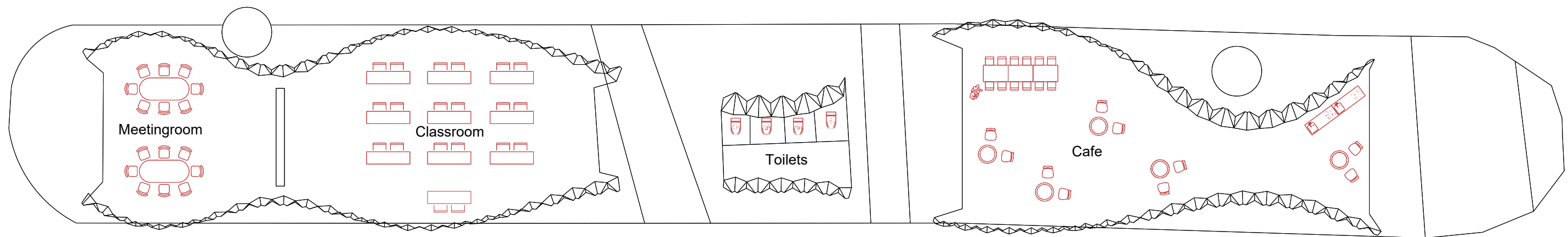


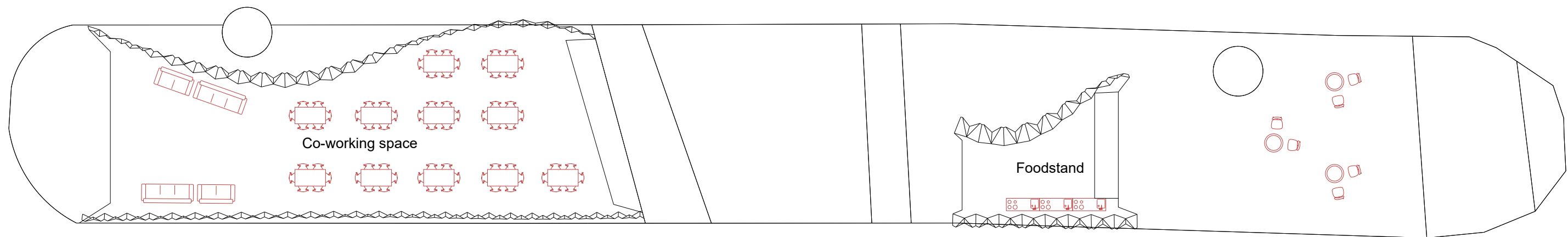


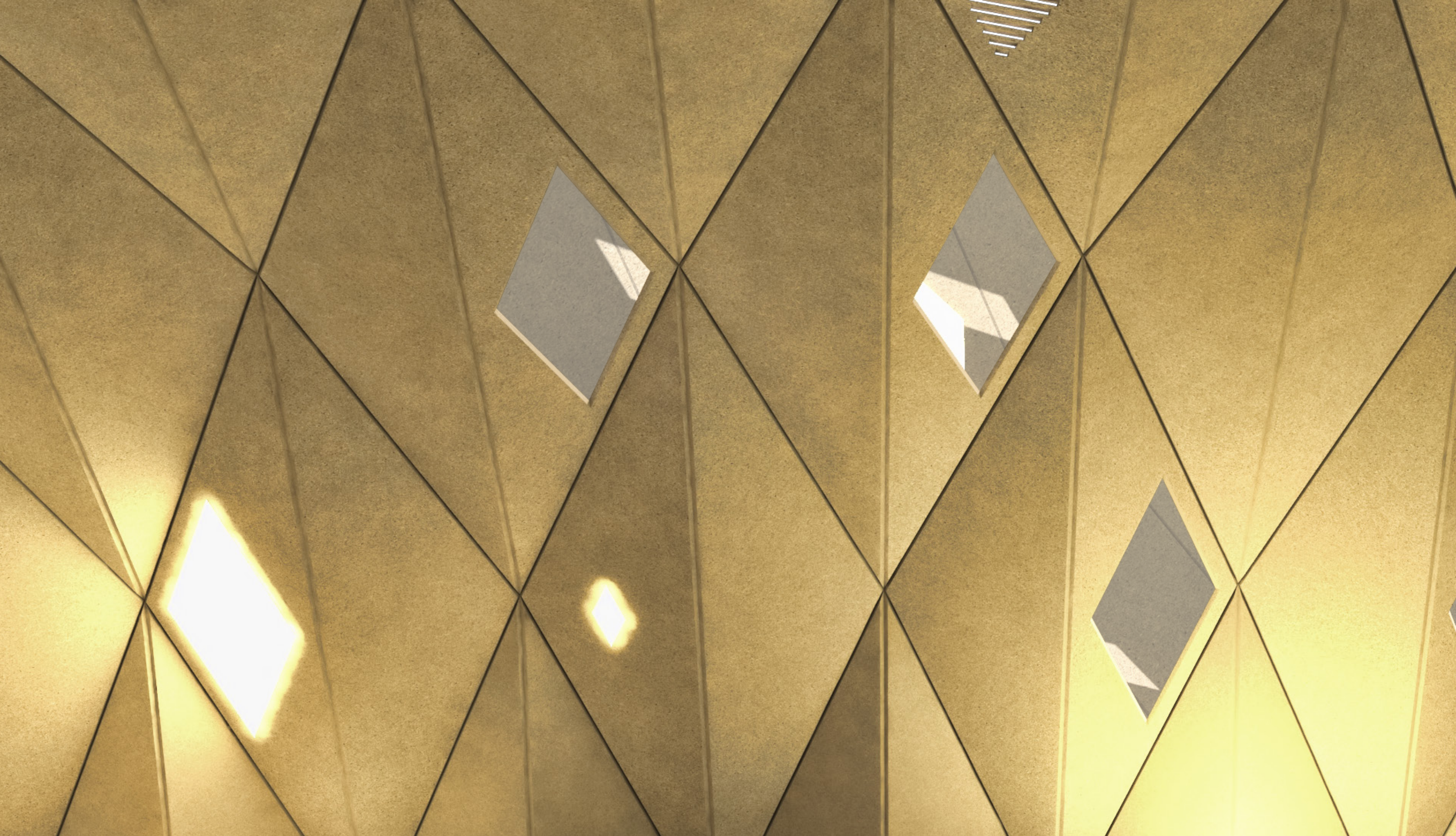






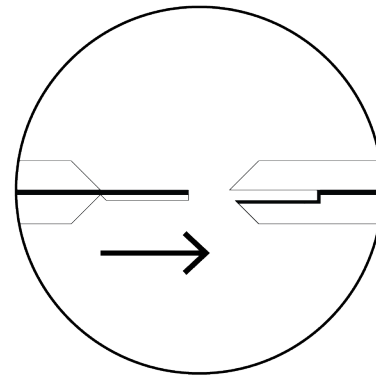
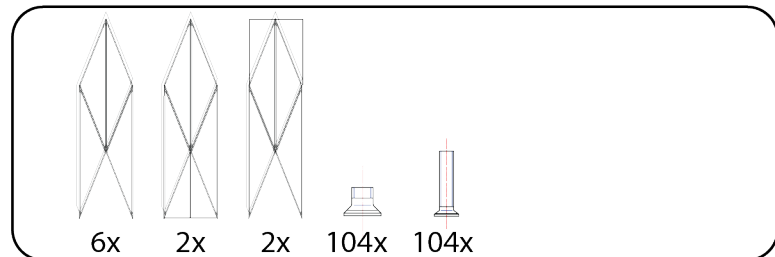
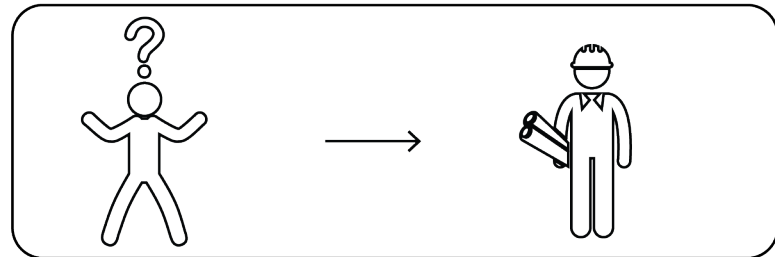
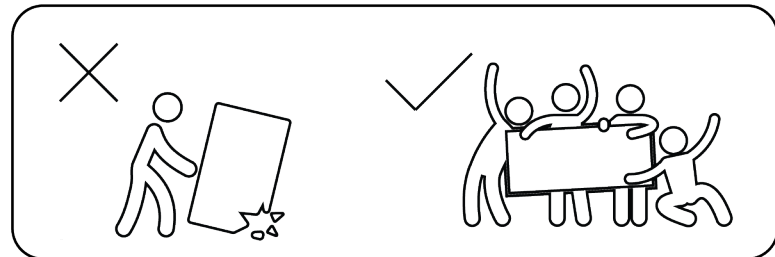
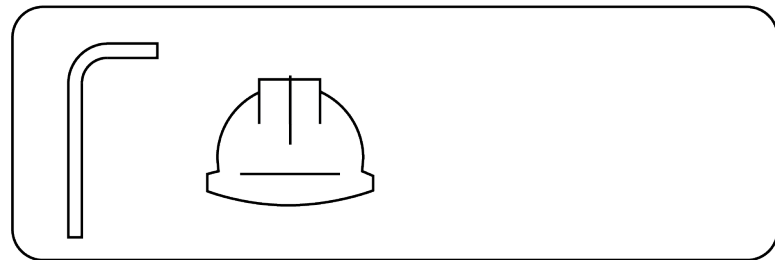
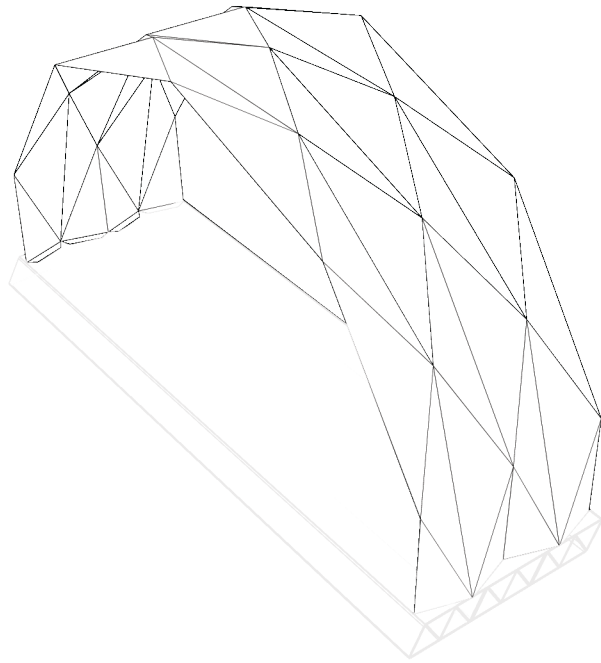




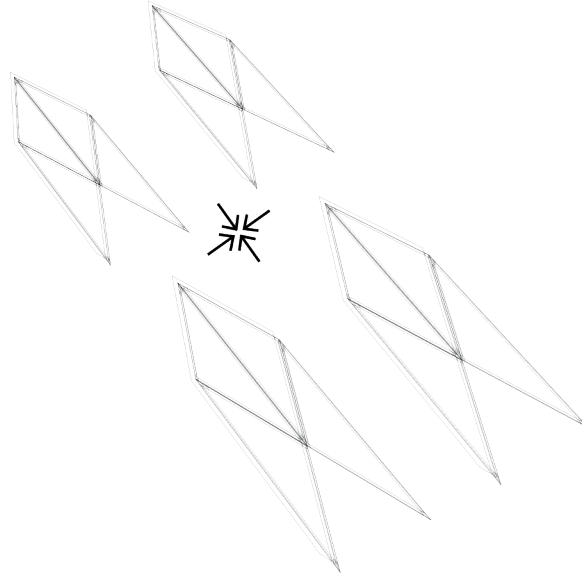


DETAILING

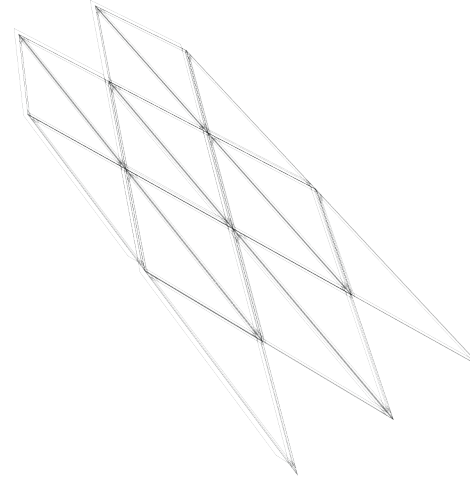
ORI-ACT



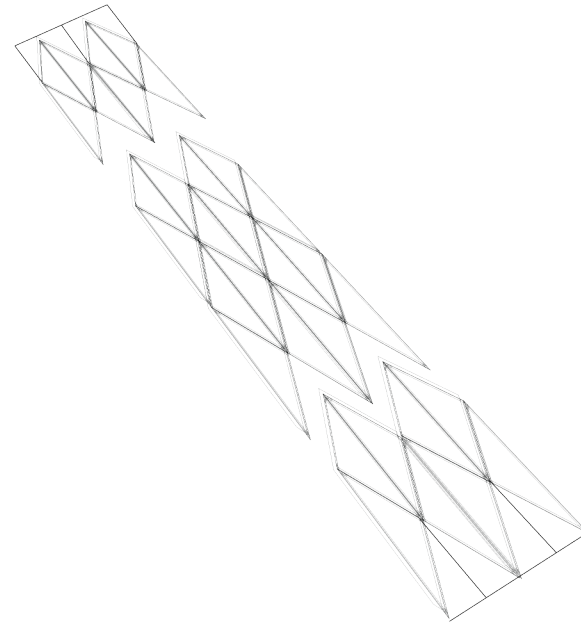
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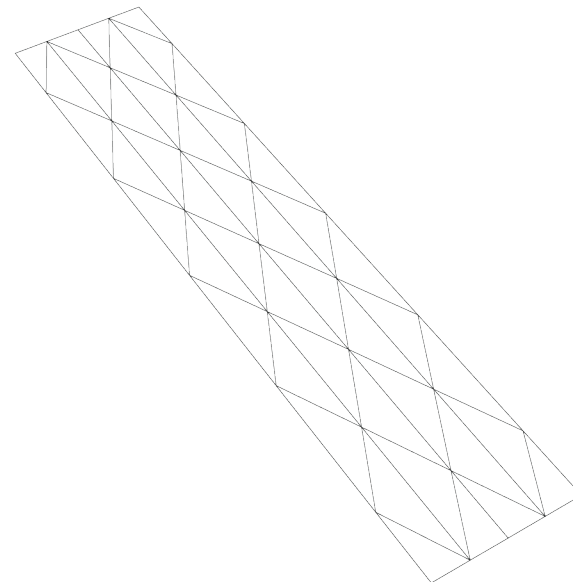
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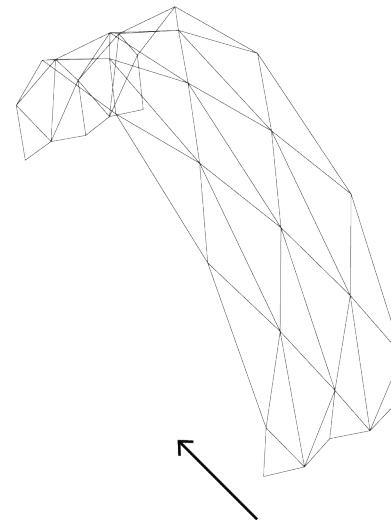
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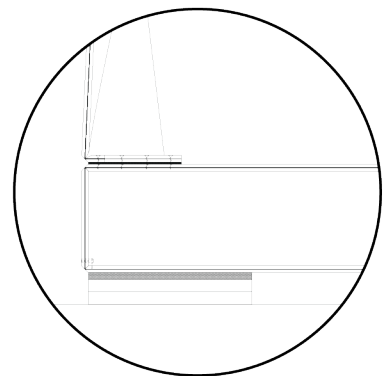
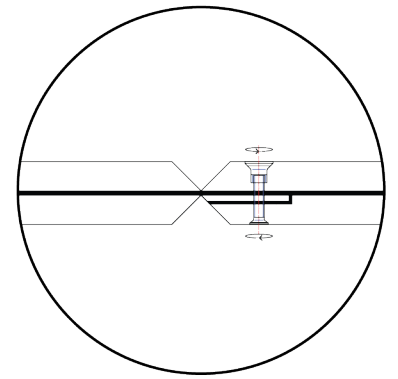
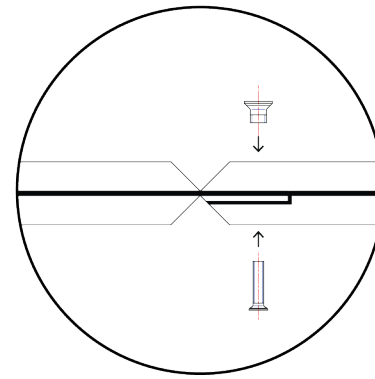
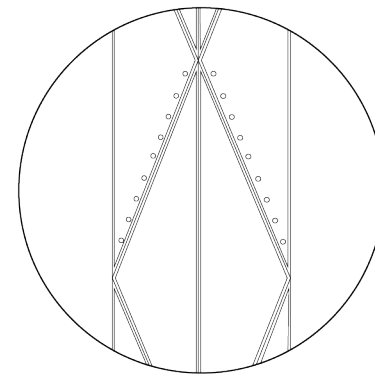
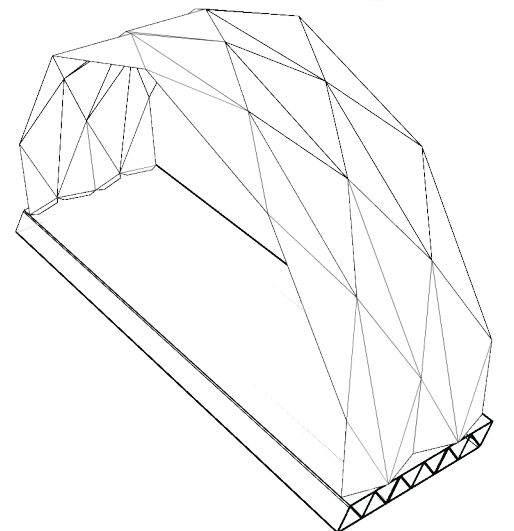
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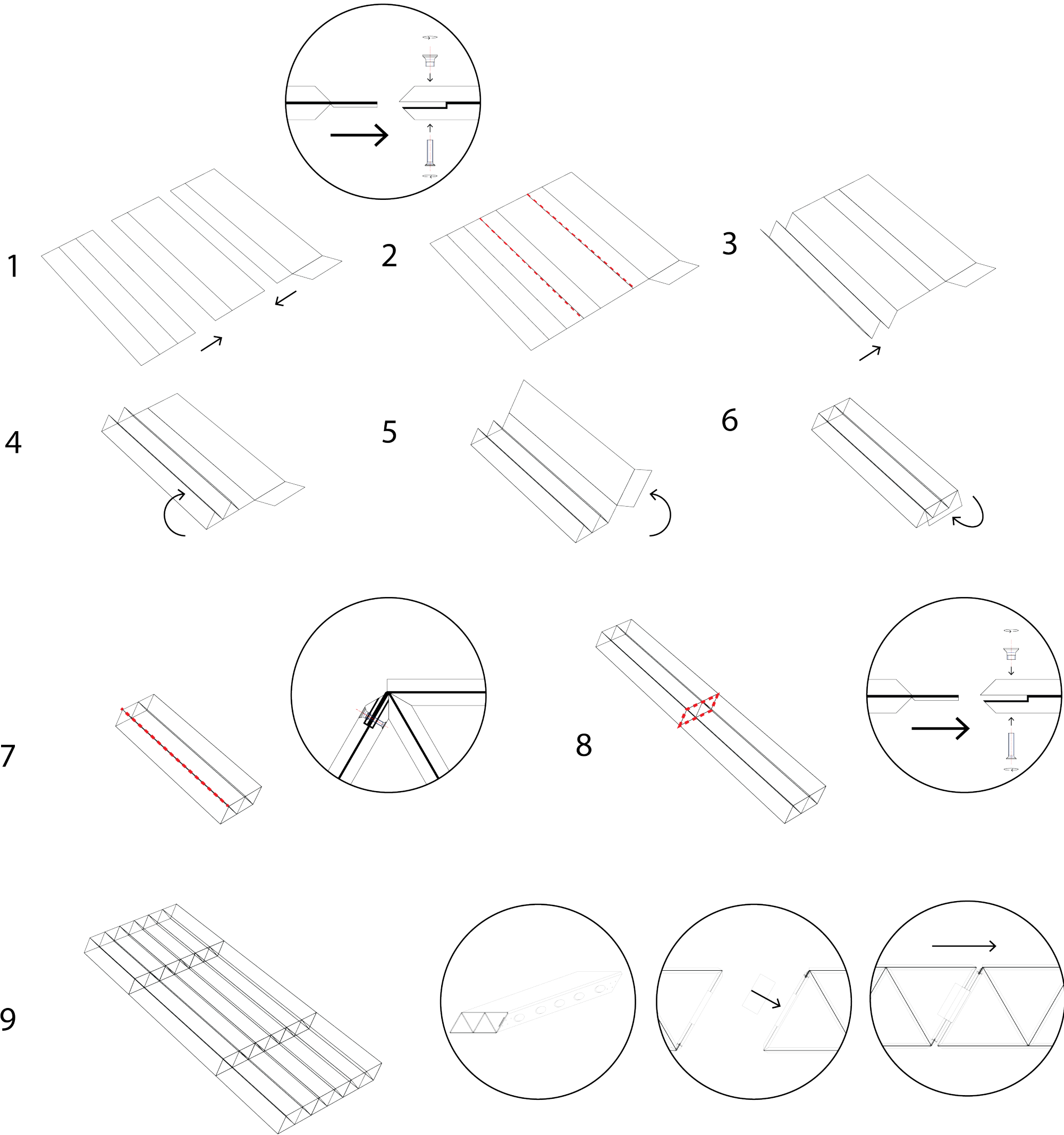
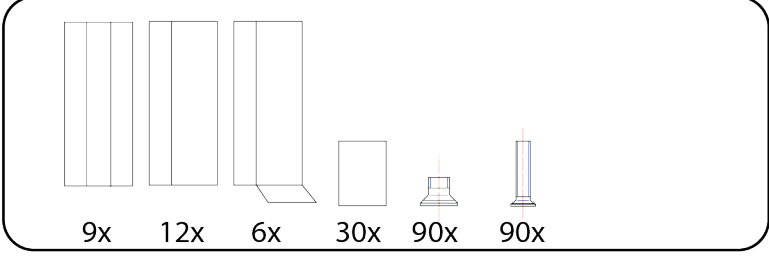
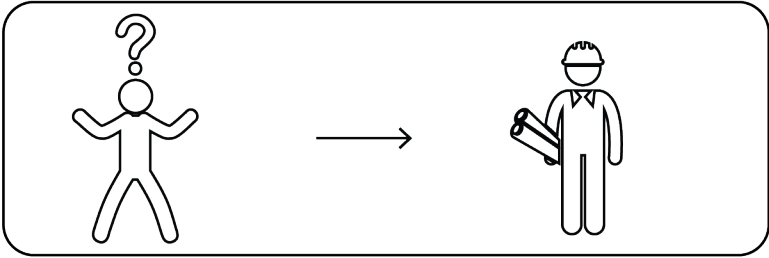
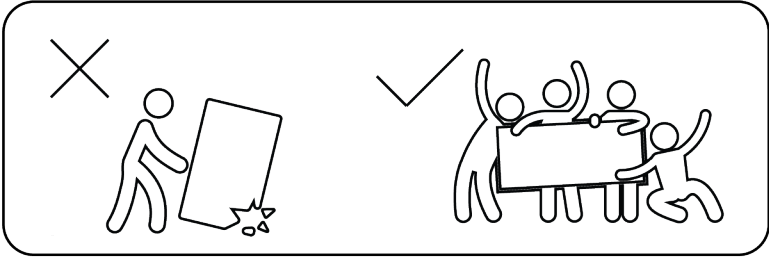
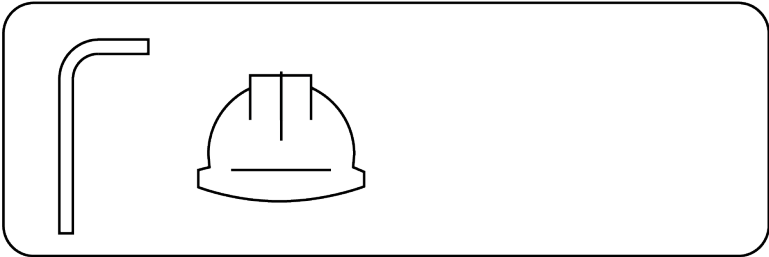
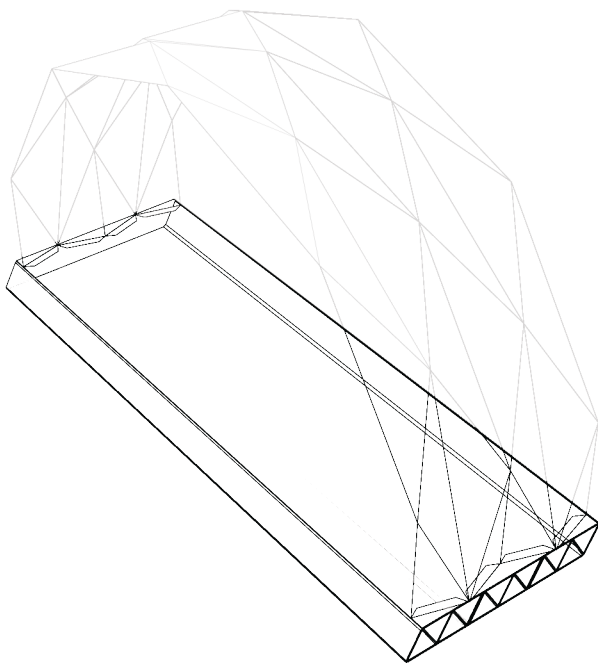
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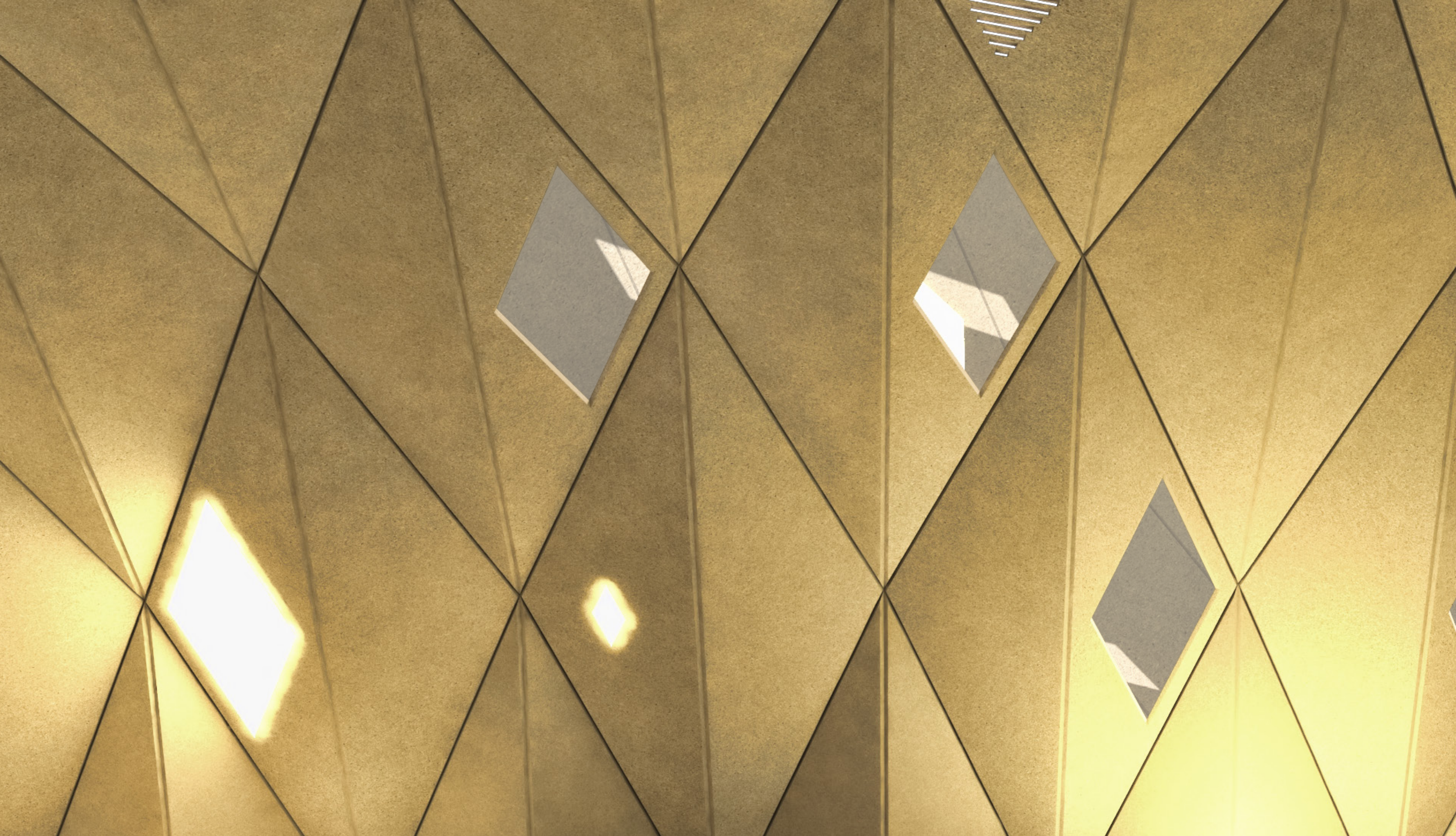


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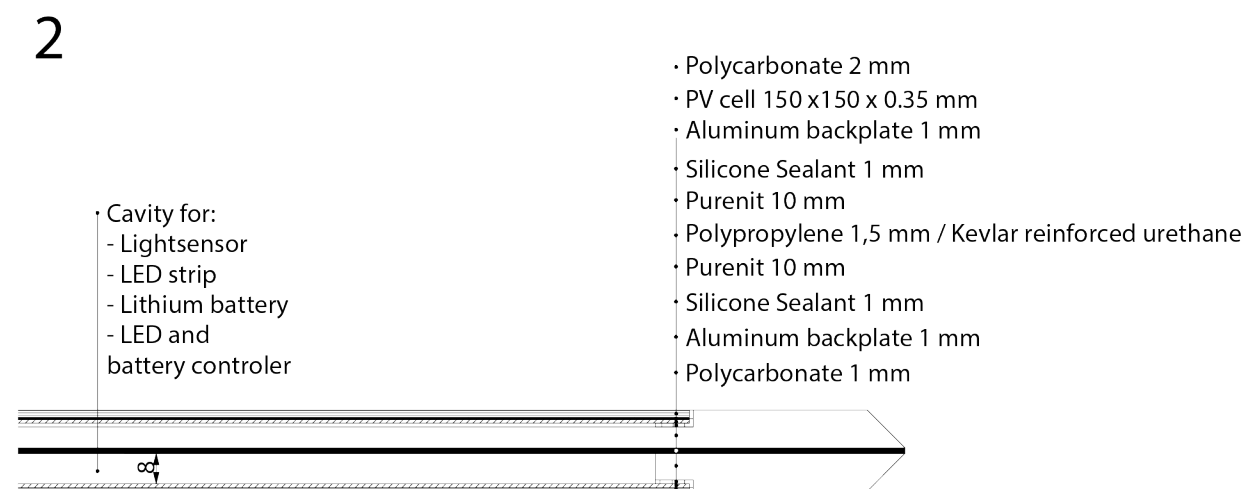
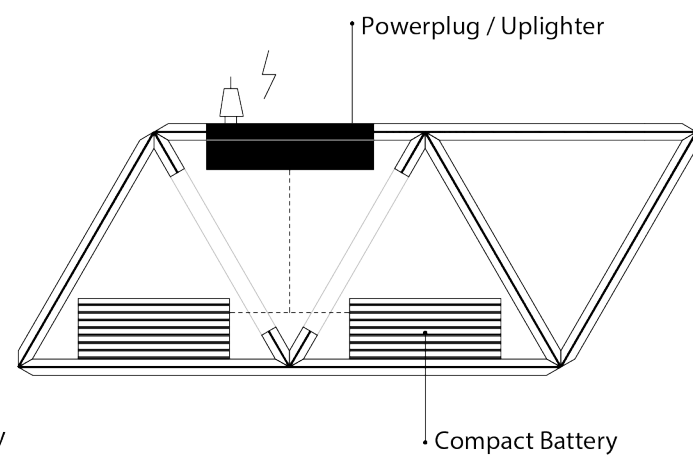
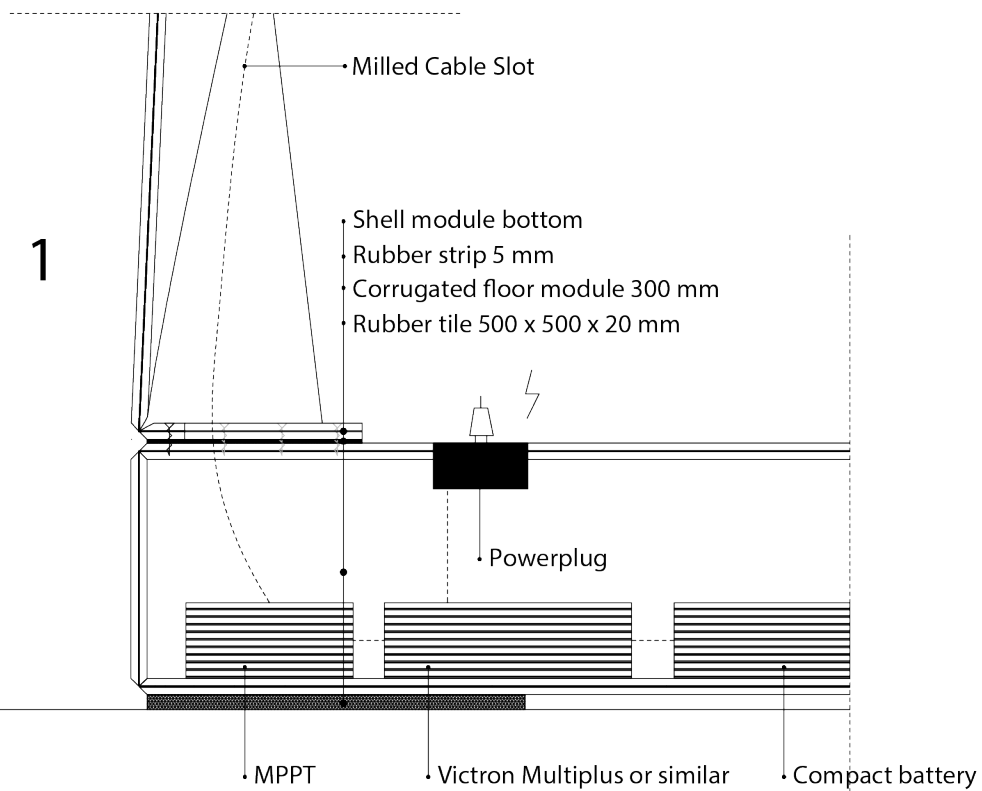
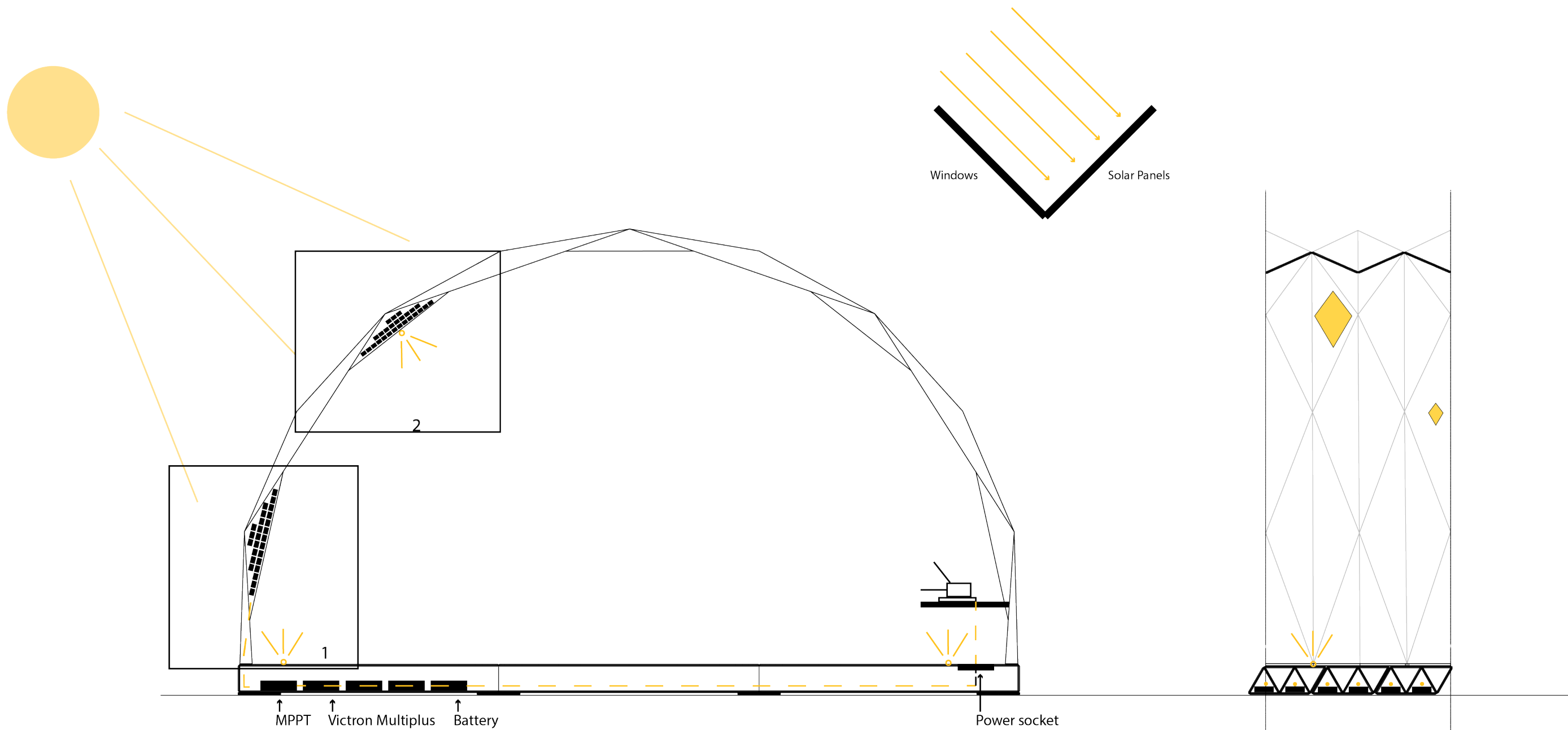


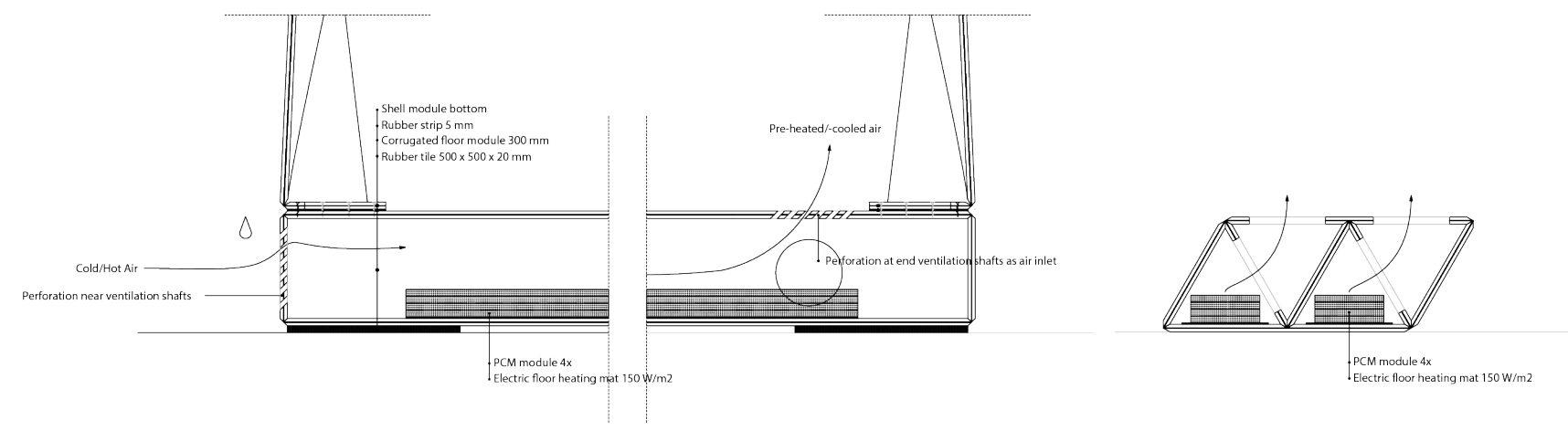
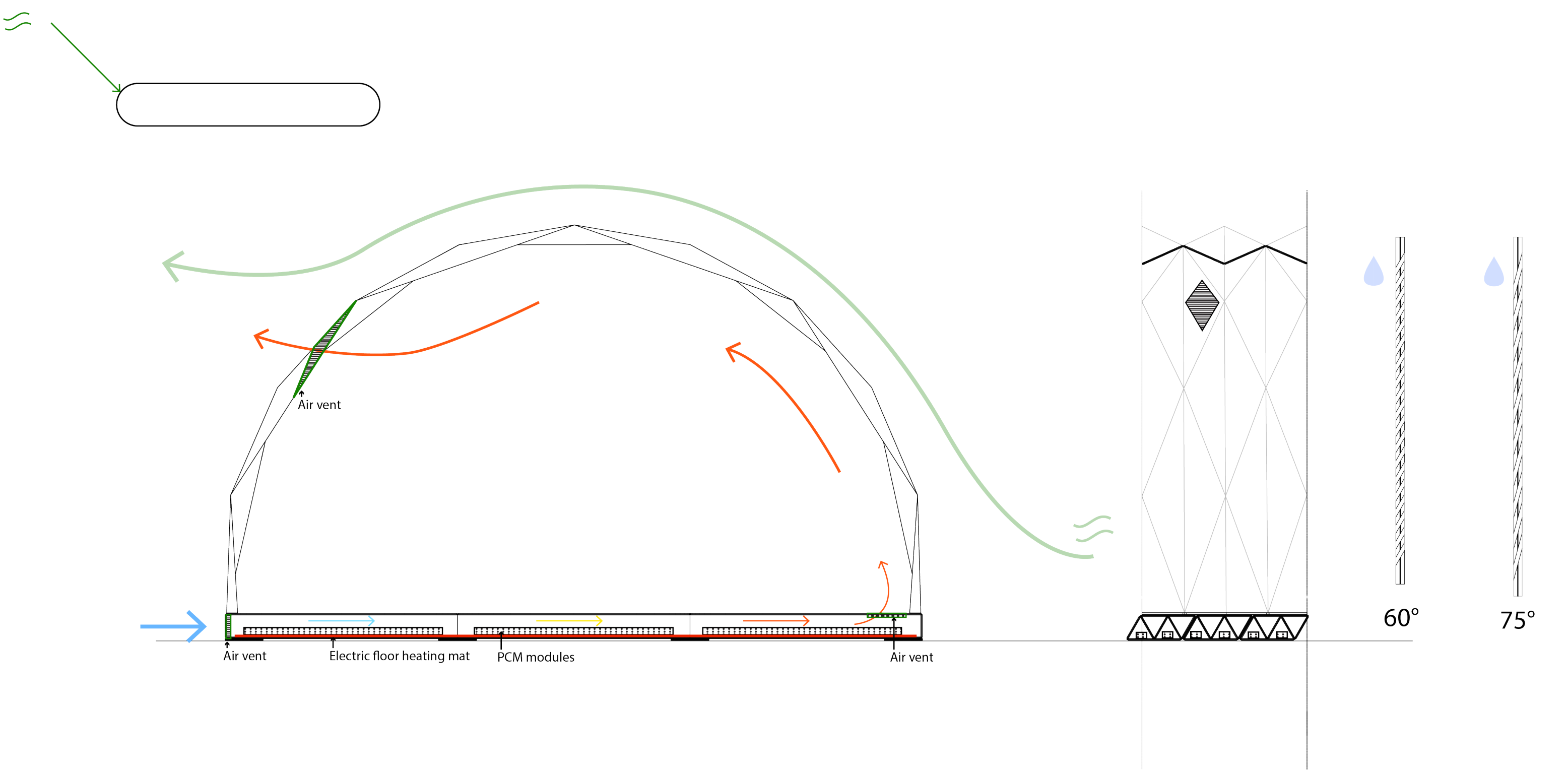
ORI-ACT

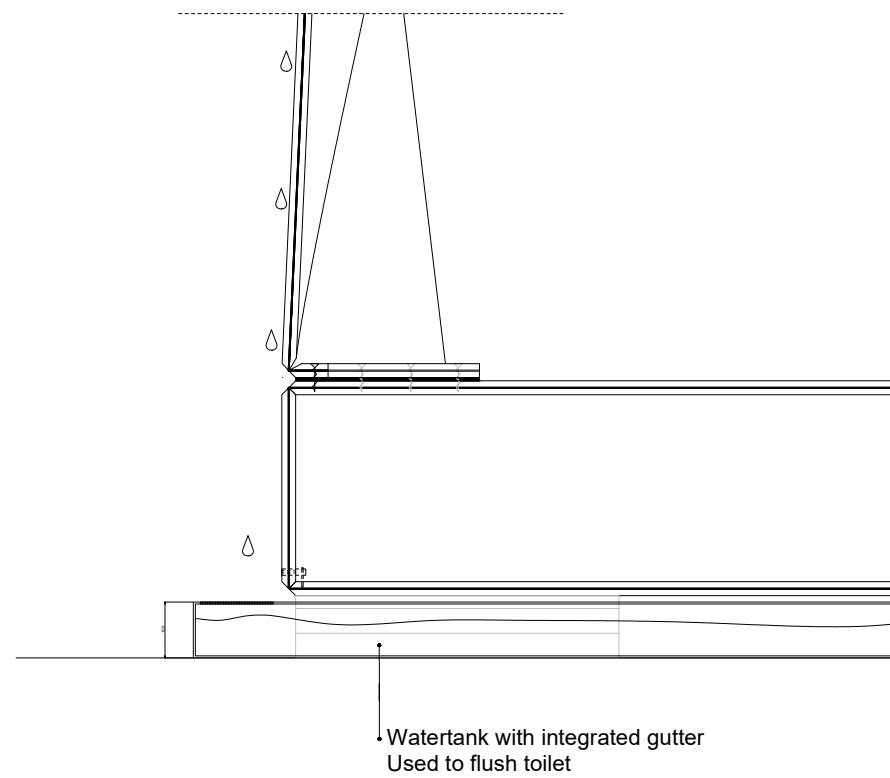
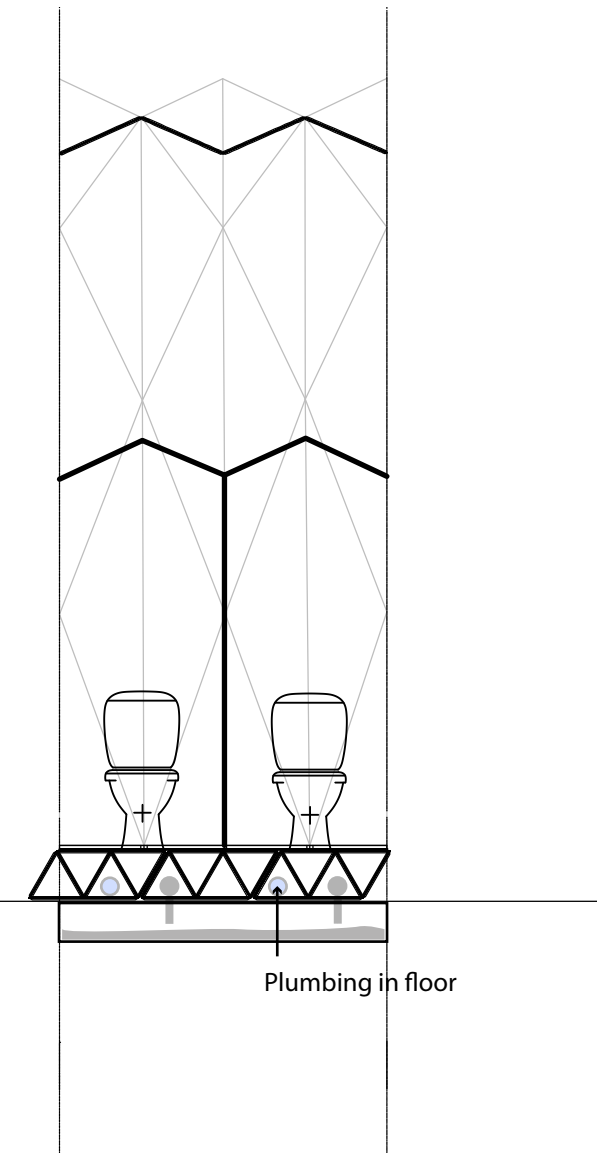
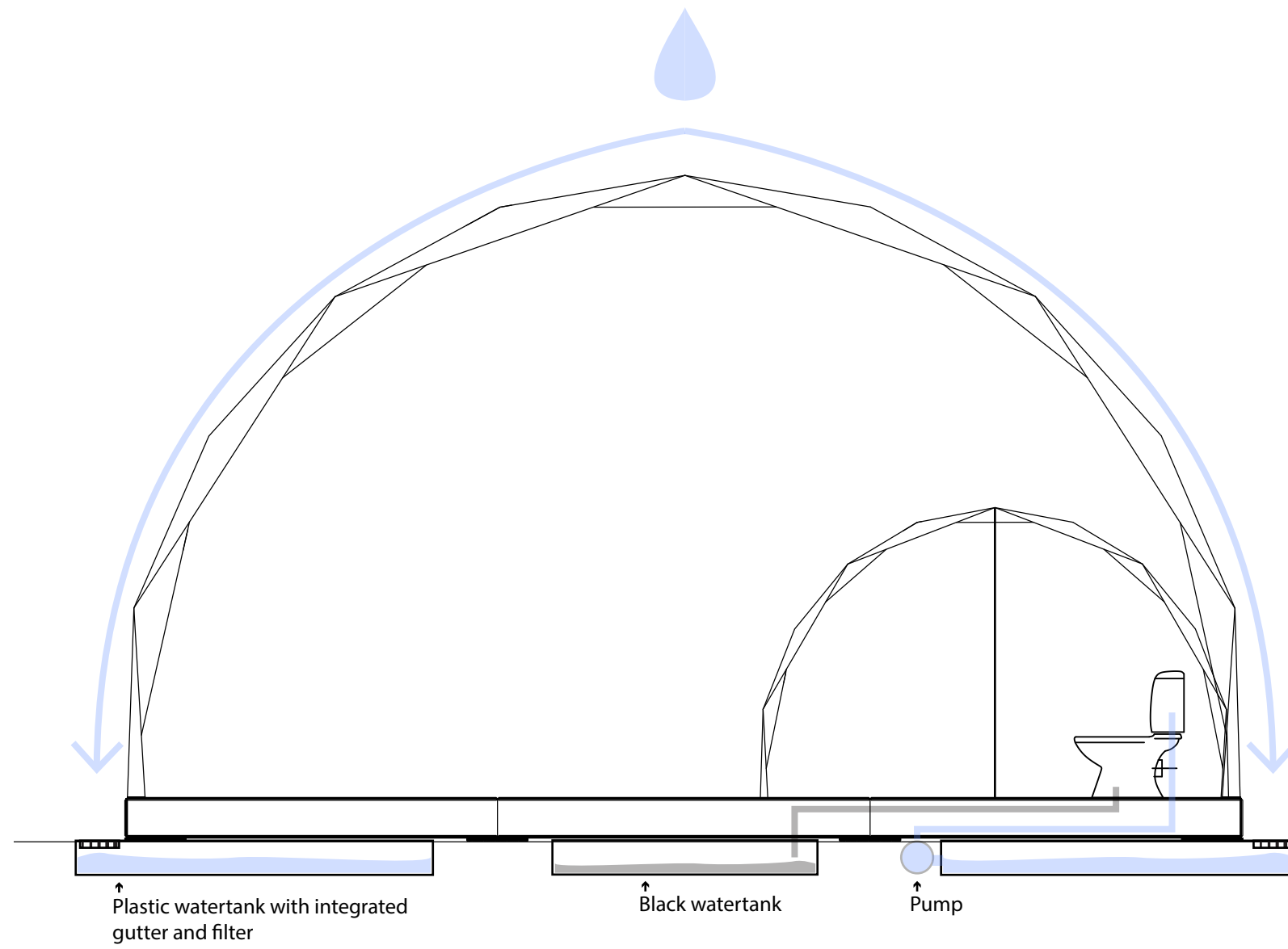


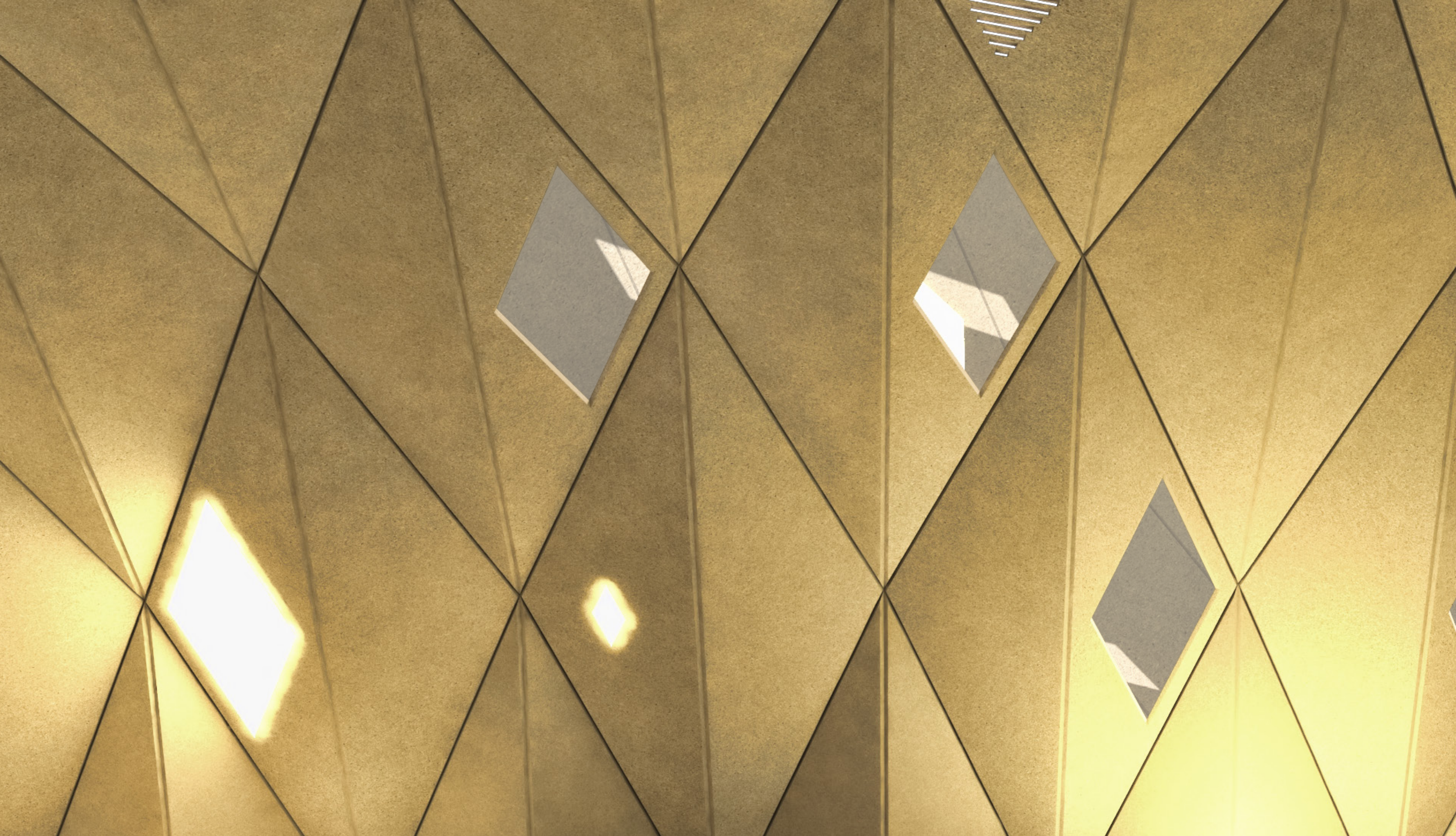


SUSTAINABILITY

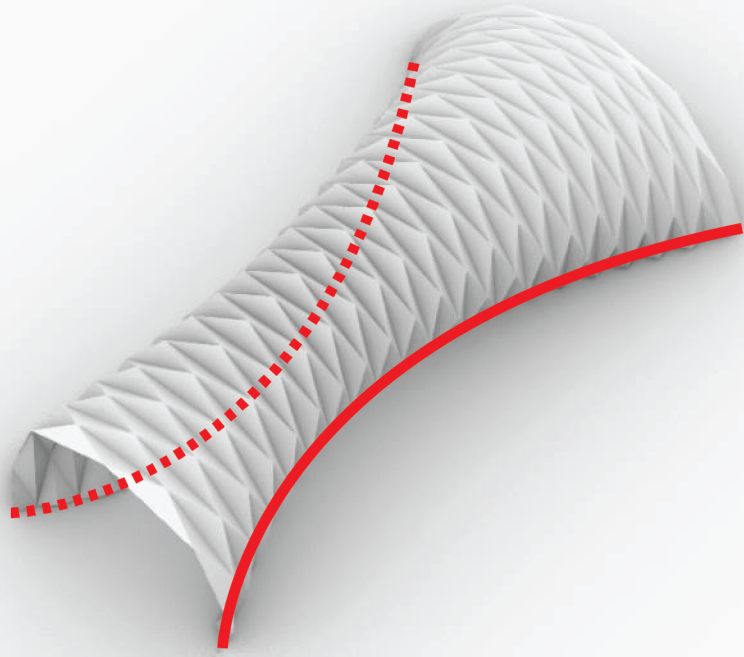
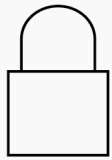


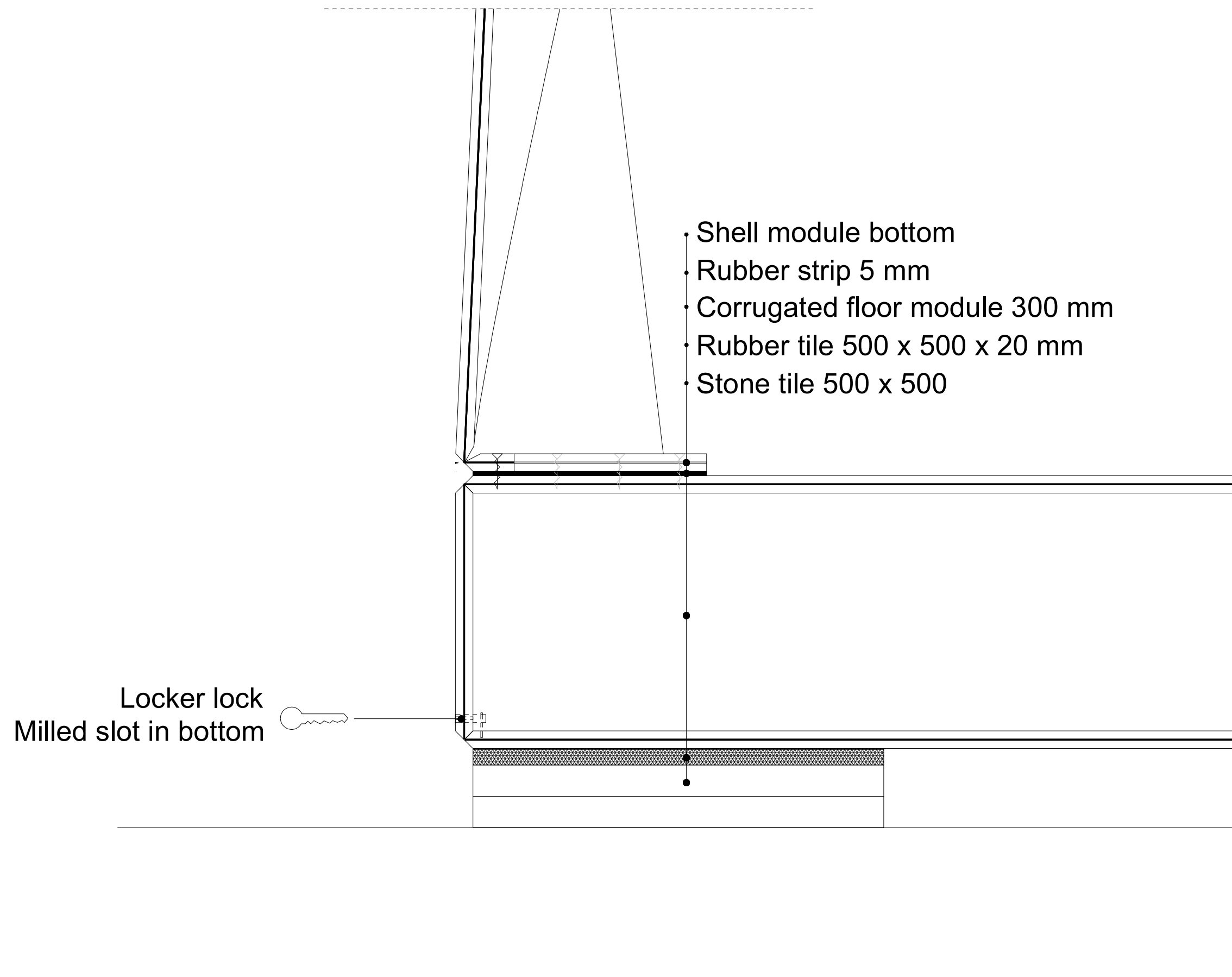


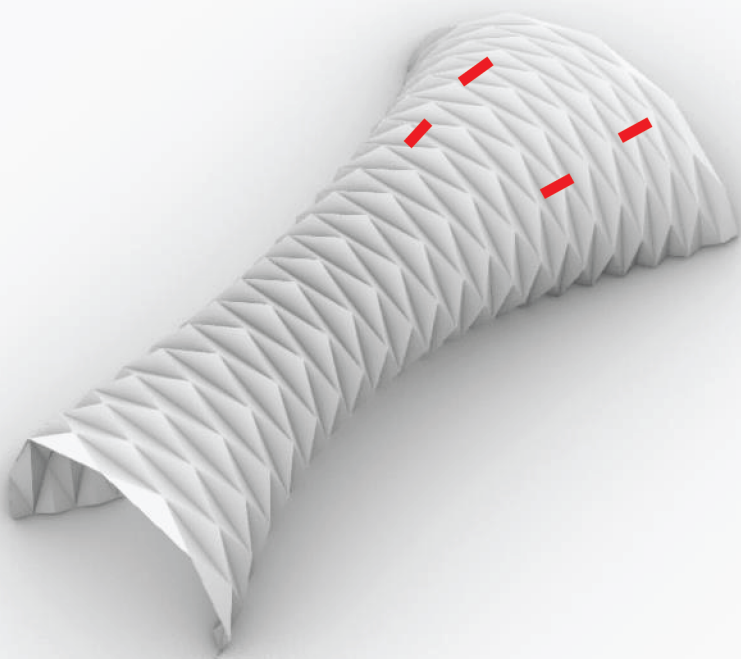
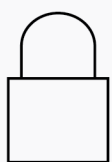


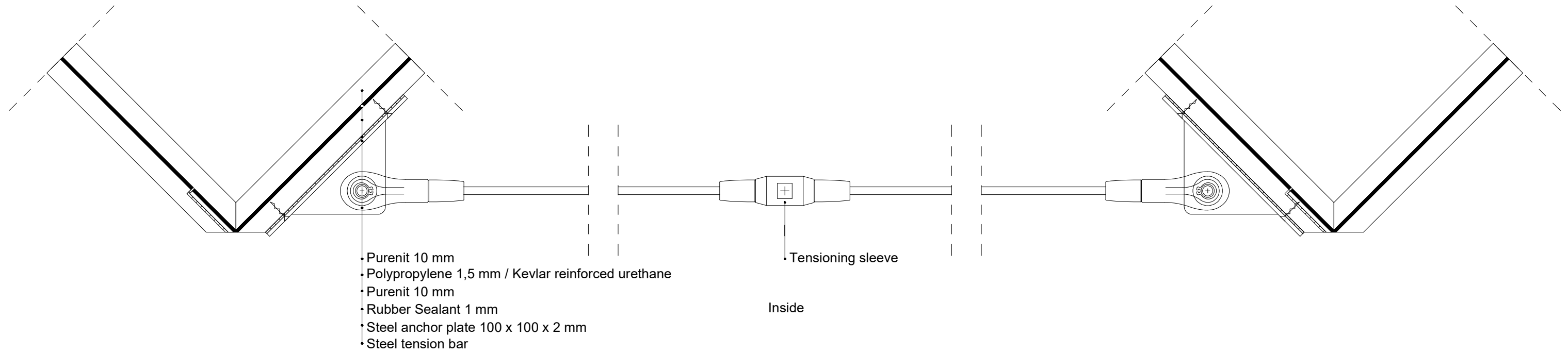


STRUCTURAL

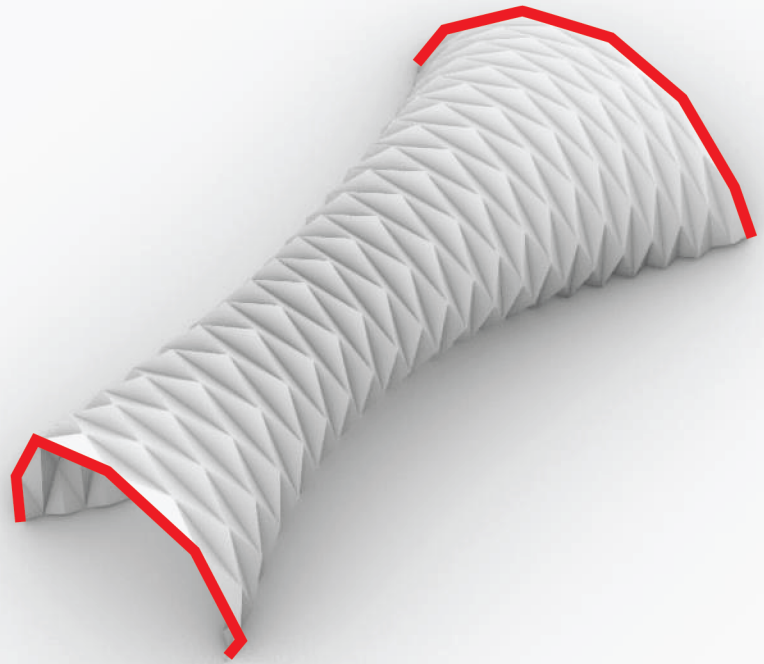
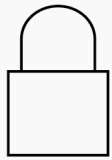


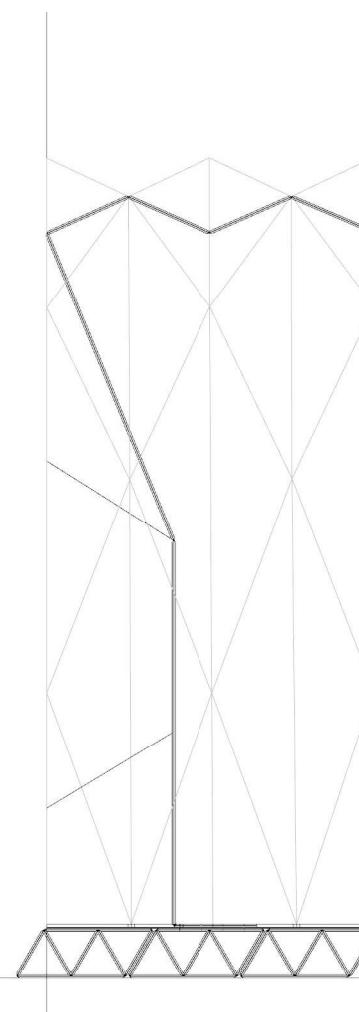
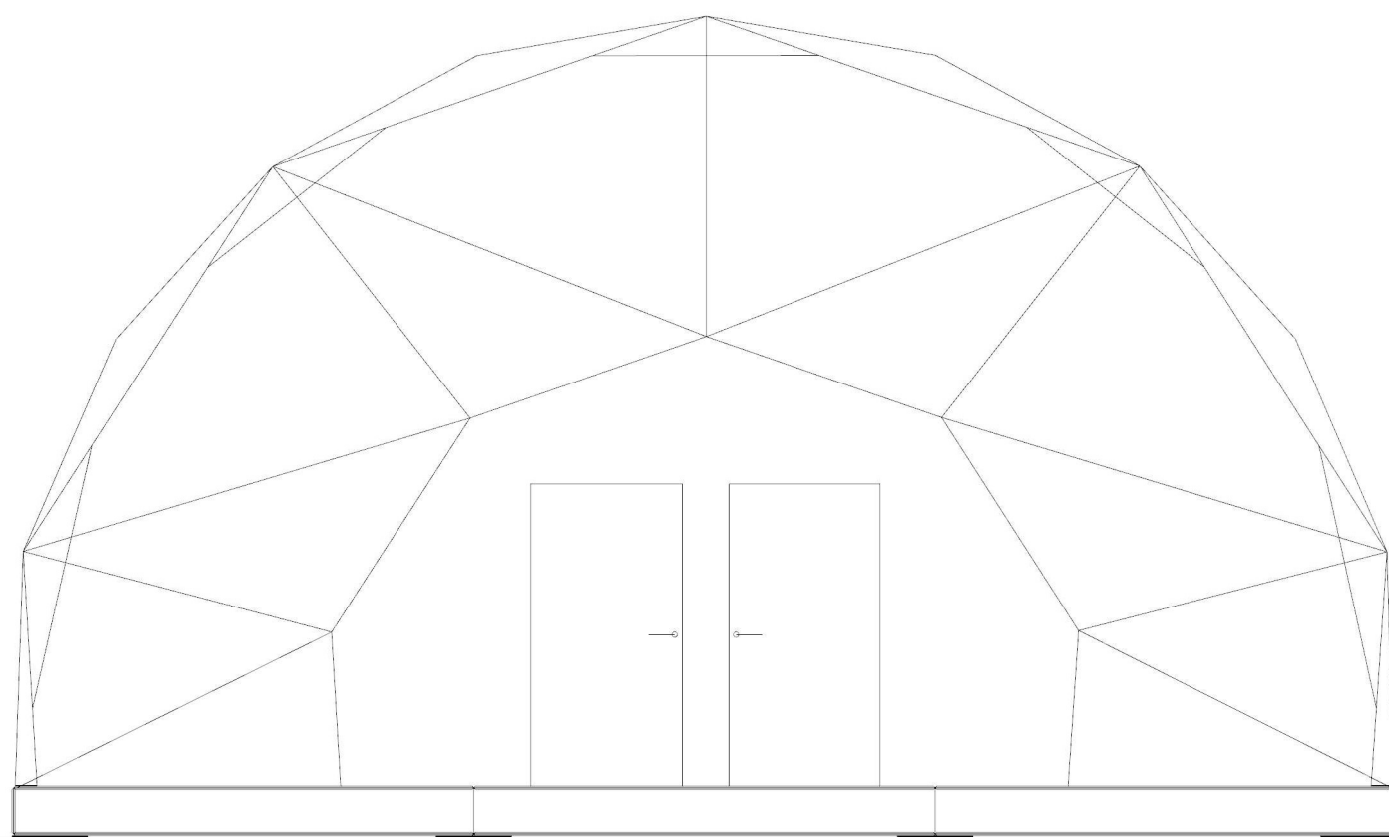




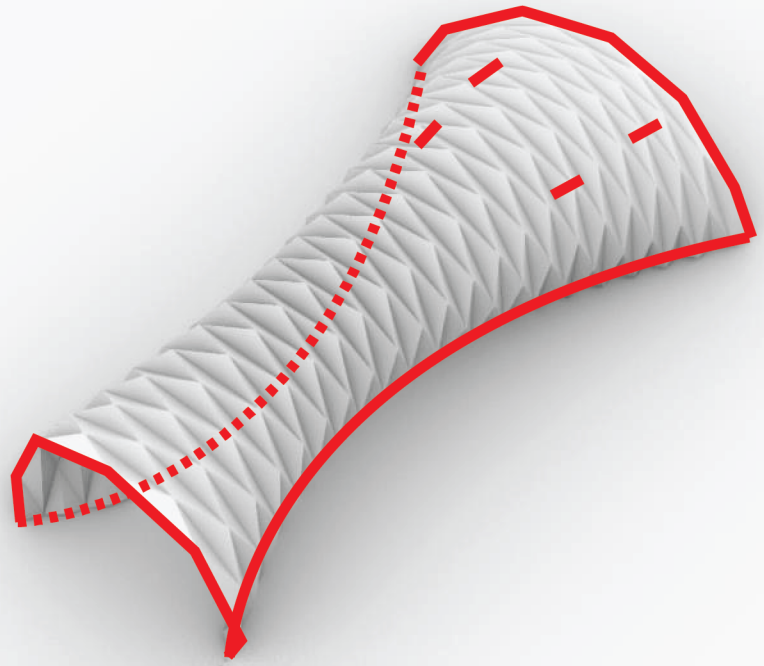
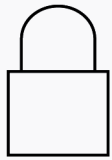


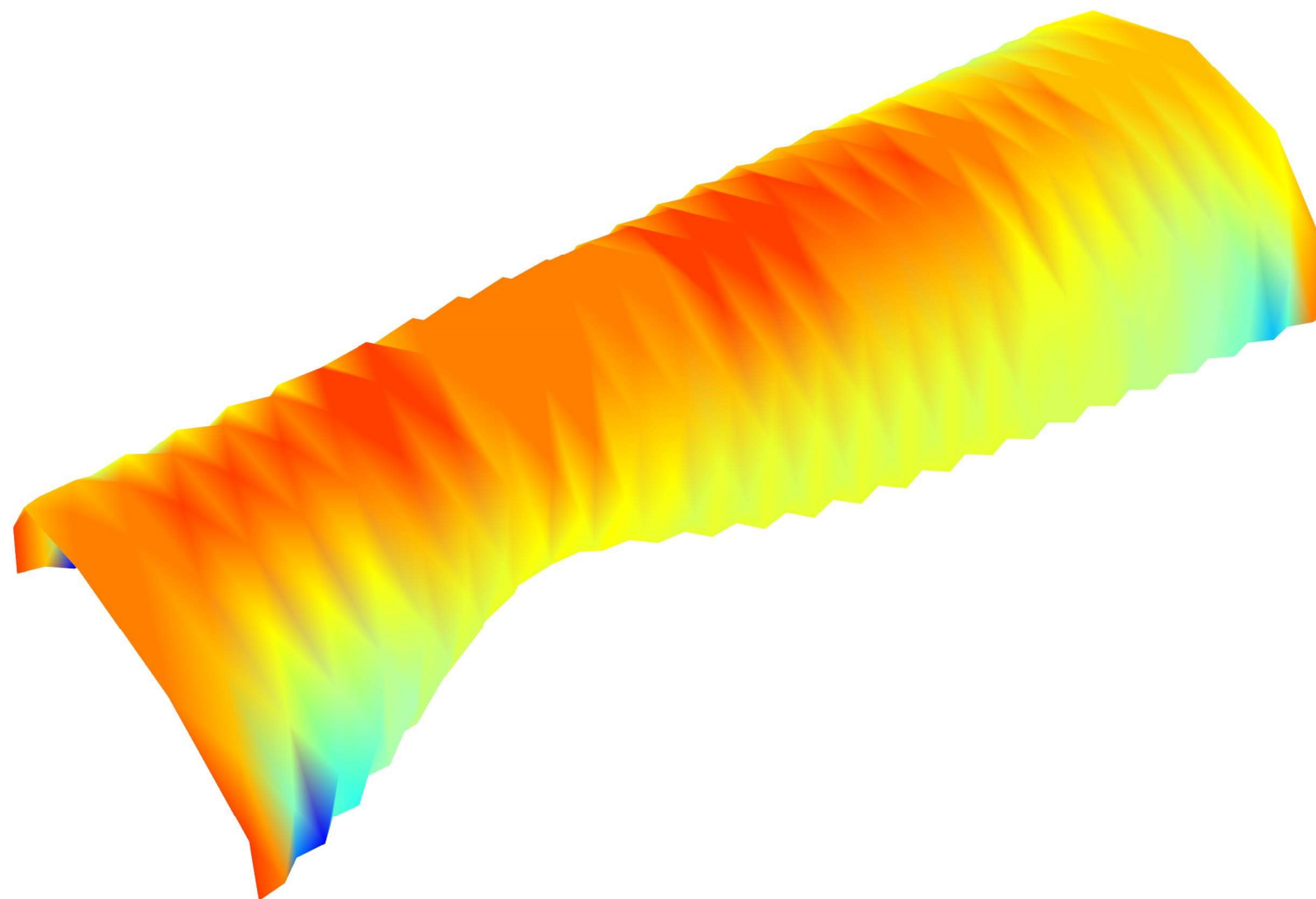
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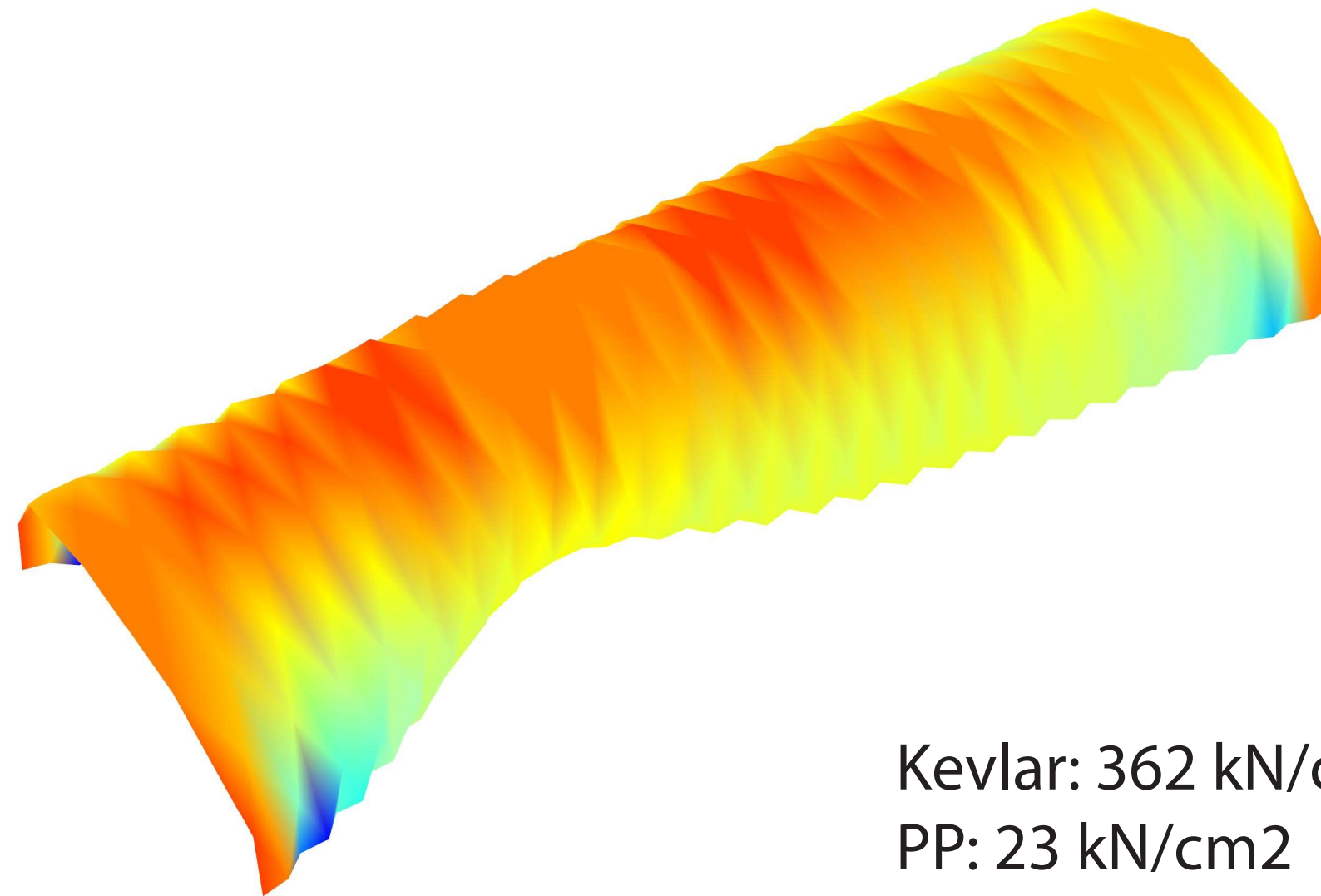


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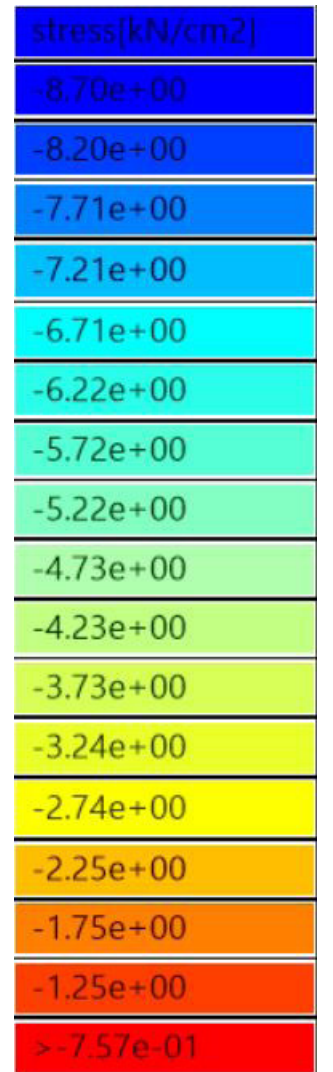


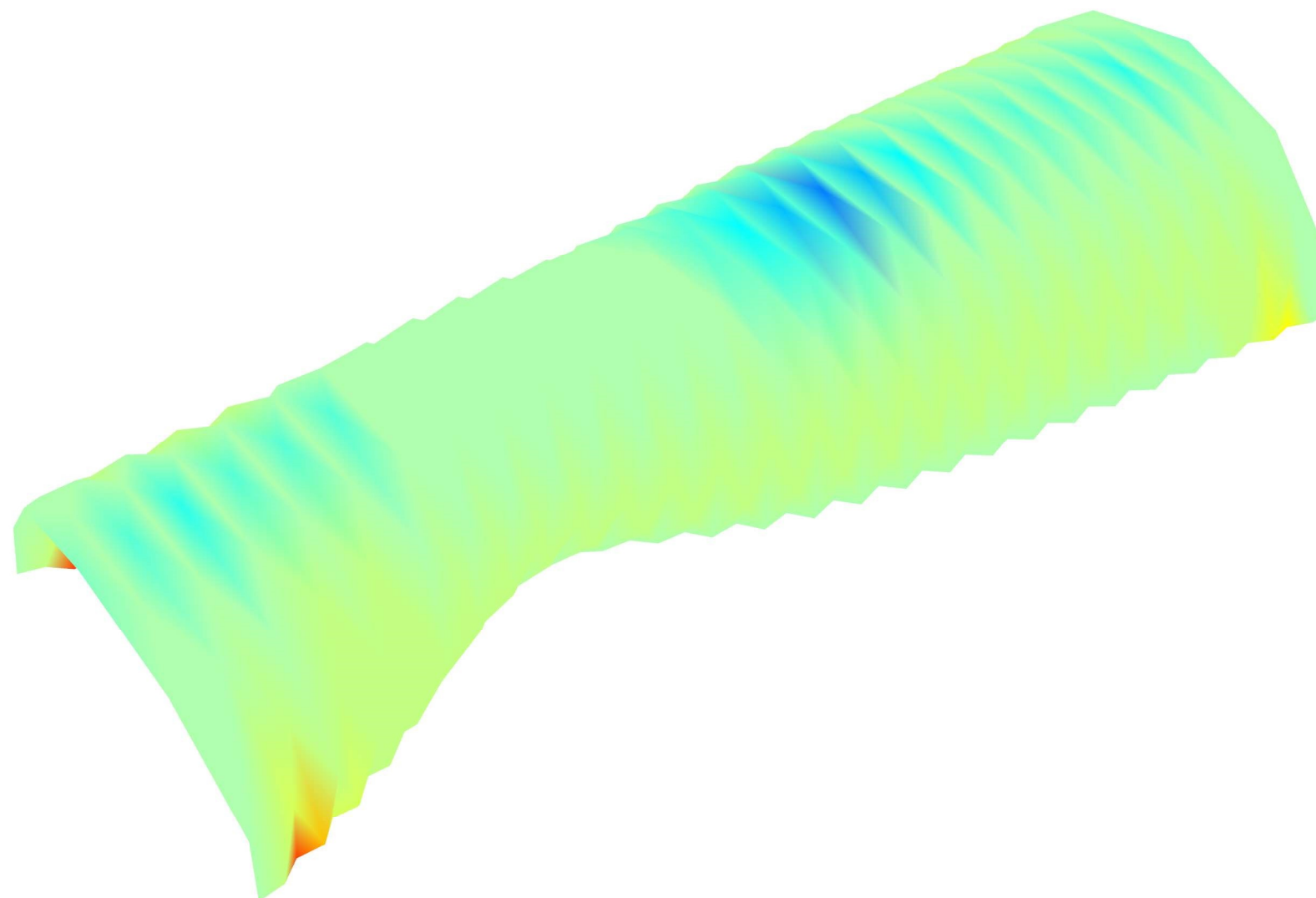


stress[kN/cm2]
-8.70e+00
-8.20e+00
-7.71e+00
-7.21e+00
-6.71e+00
-6.22e+00
-5.72e+00
-5.22e+00
-4.73e+00
-4.23e+00
-3.73e+00
-3.24e+00
-2.74e+00
-2.25e+00
-1.75e+00
-1.25e+00
>-7.57e-01

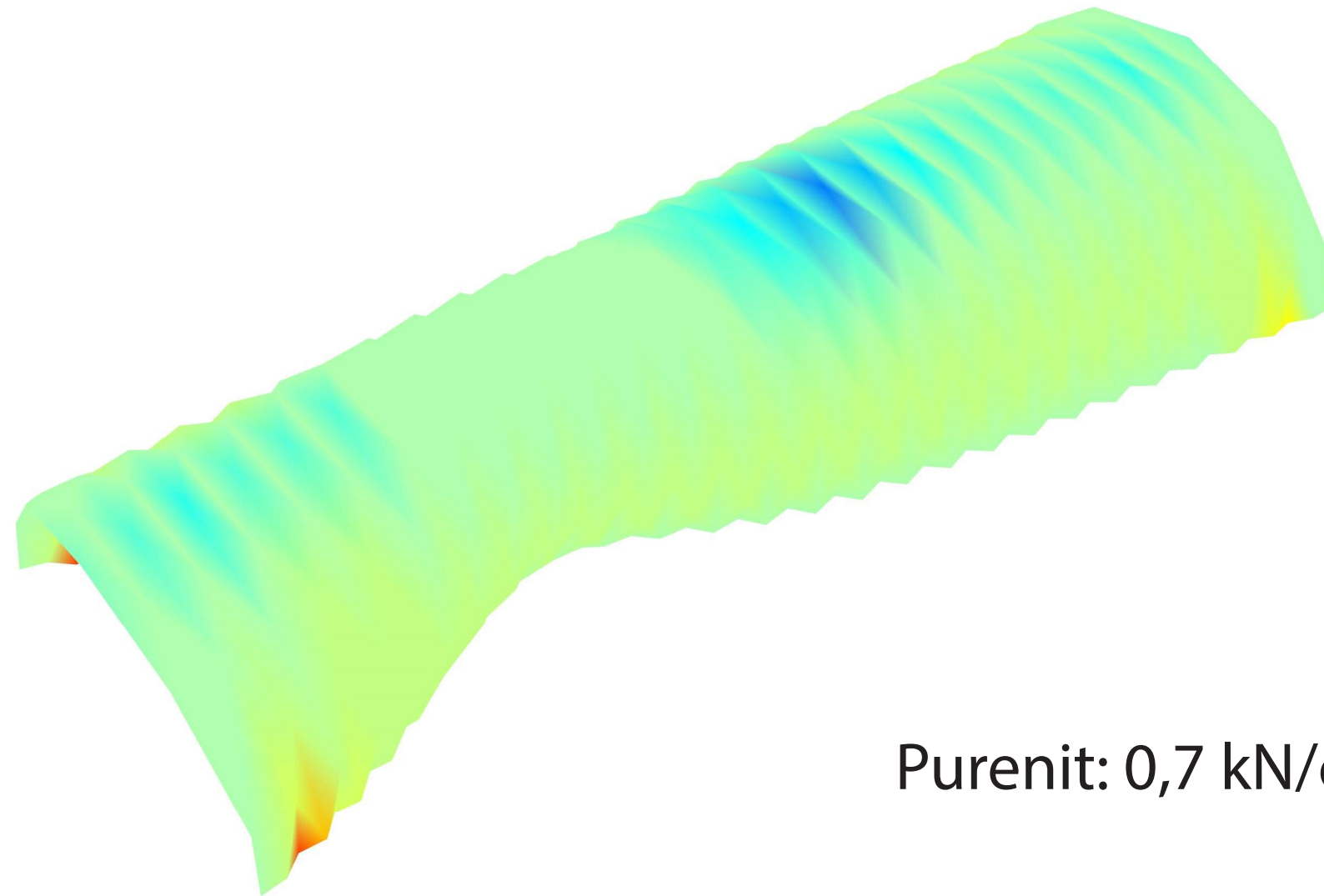


Kevlar: 362 kN/cm²
PP: 23 kN/cm²





stress[kN/cm2]
-4.17e-01
-3.65e-01
-3.13e-01
-2.61e-01
-2.09e-01
-1.56e-01
-1.04e-01
-5.21e-02
0.00e+00
1.25e+00
2.50e+00
3.74e+00
4.99e+00
6.24e+00
7.49e+00
8.73e+00
> 9.98e+00

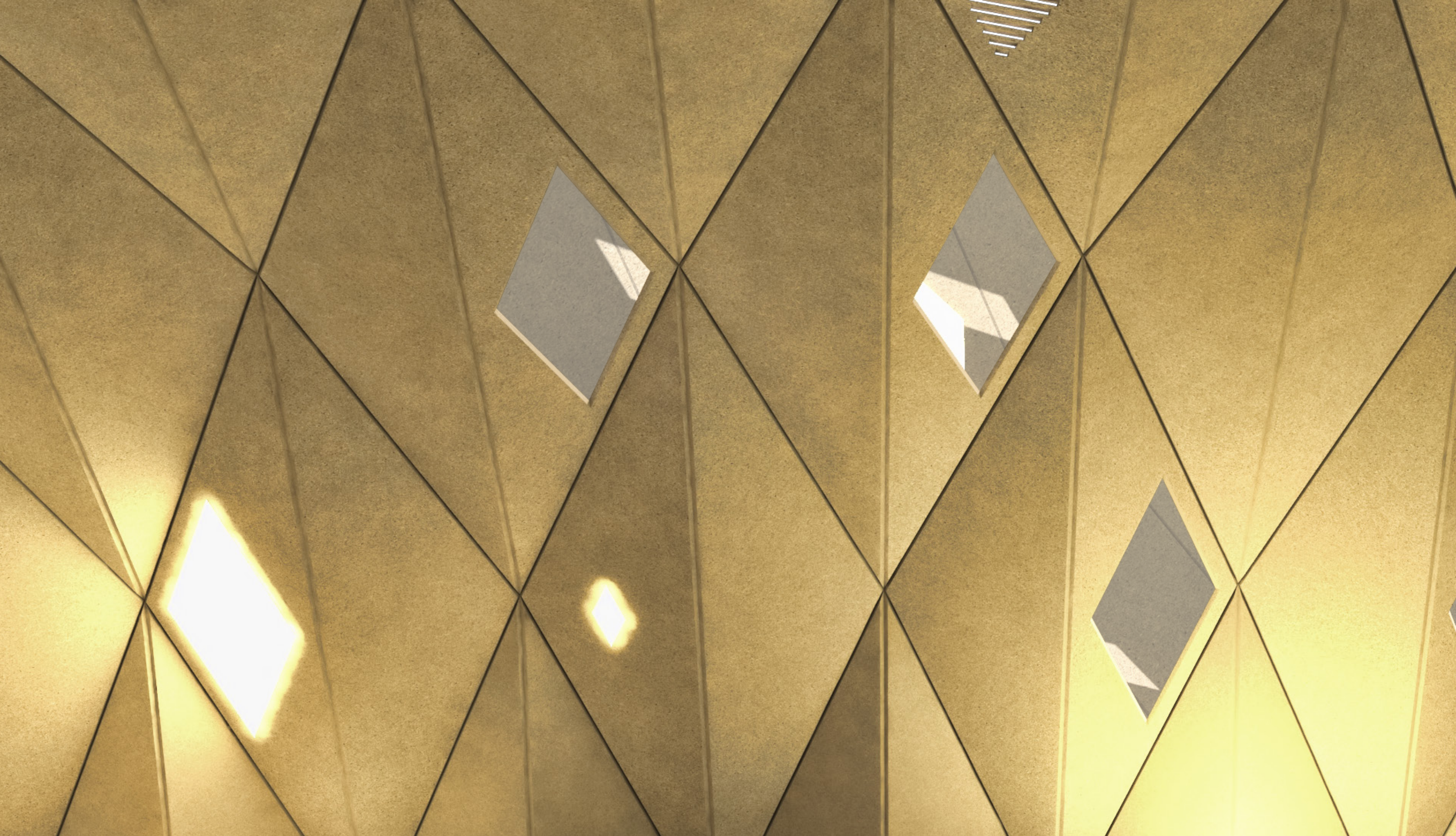


Purenit: 0,7 kN/cm2



stress[kN/cm2]
-4.17e-01
-3.65e-01
-3.13e-01
-2.61e-01
-2.09e-01
-1.56e-01
-1.04e-01
-5.21e-02
0.00e+00
1.25e+00
2.50e+00
3.74e+00
4.99e+00
6.24e+00
7.49e+00
8.73e+00
> 9.98e+00

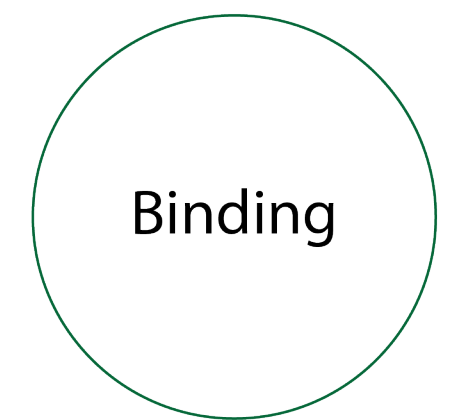
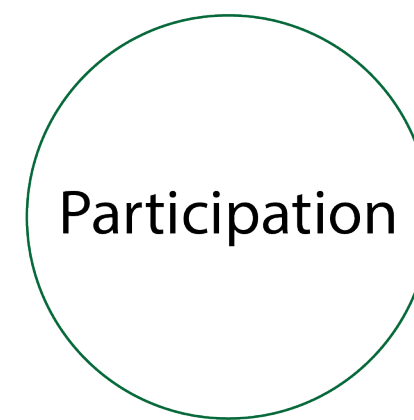
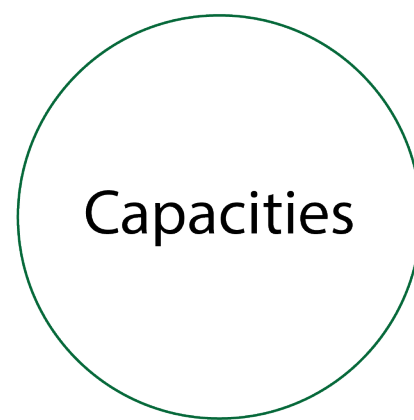
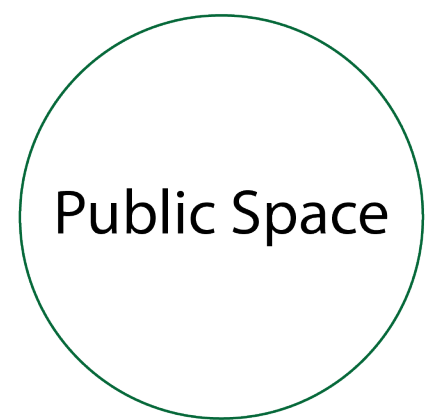
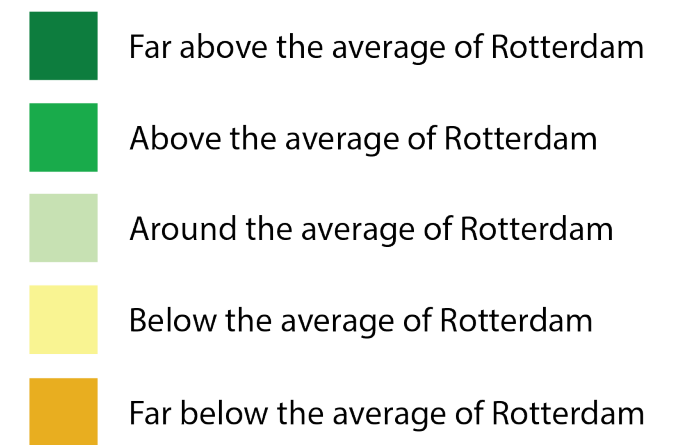


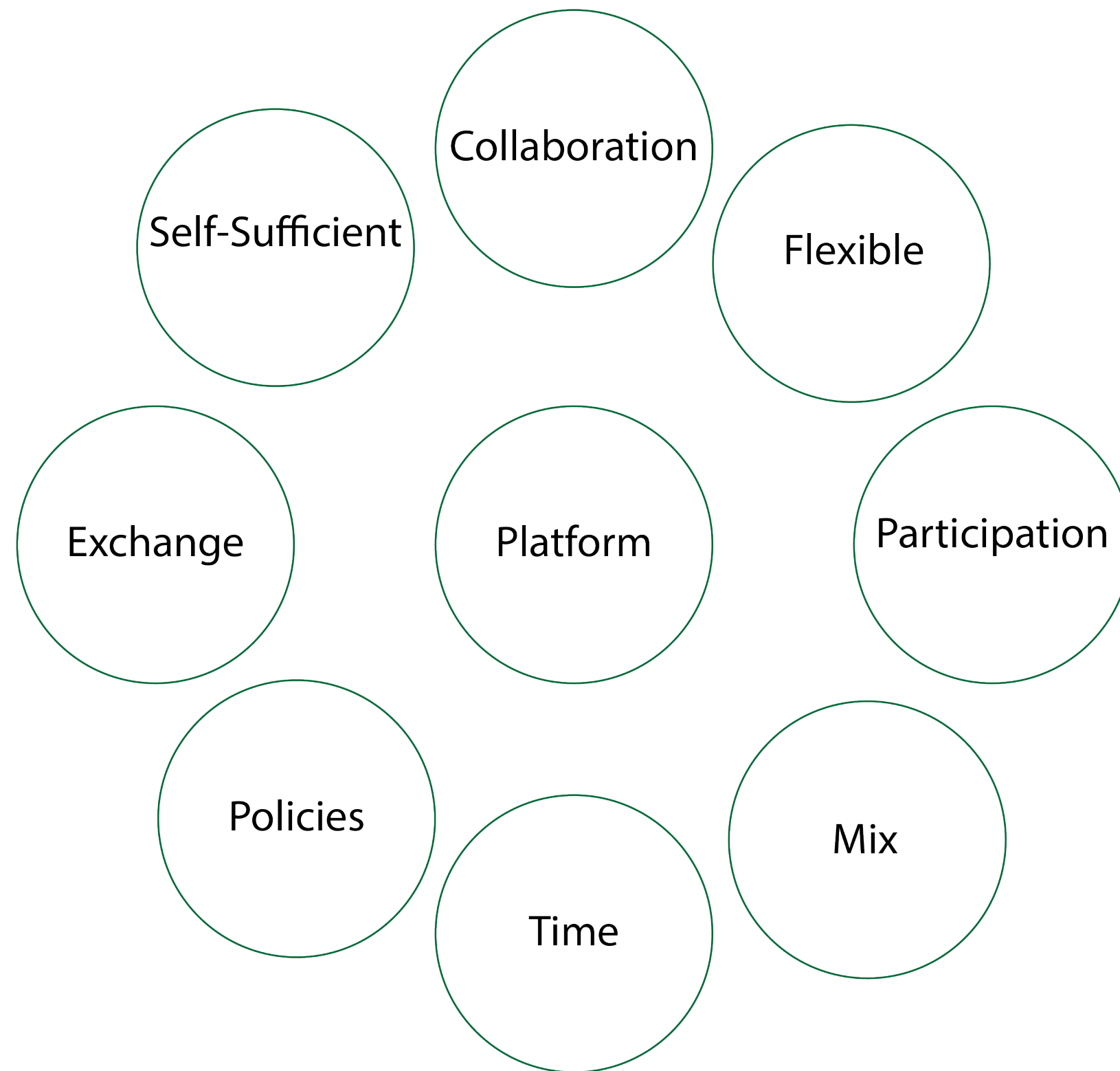


CONCLUSION

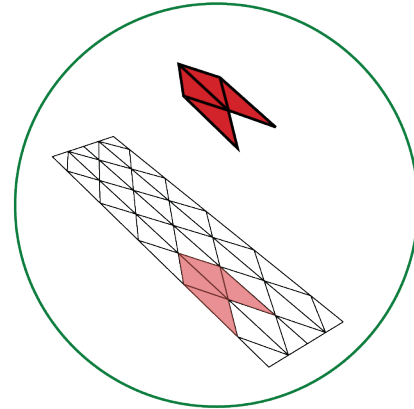
Overall design question

How could a multipurpose, temporary and economically circular community platform be designed to stimulate participation and awareness in order to reactivate depreciated area's in the urban fabric of Rotterdam?

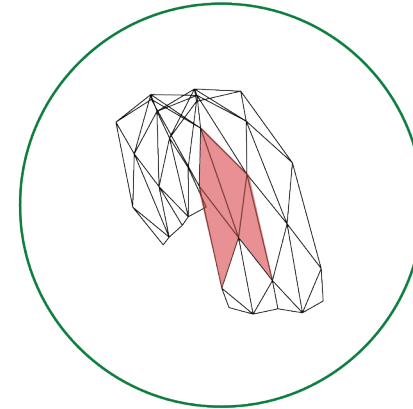




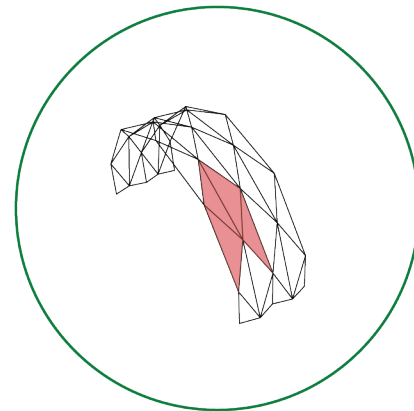
Modular



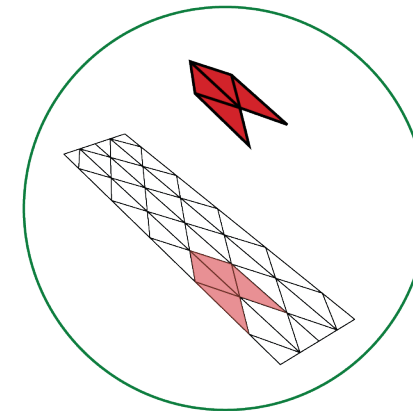
Adaptable



Easy assembly

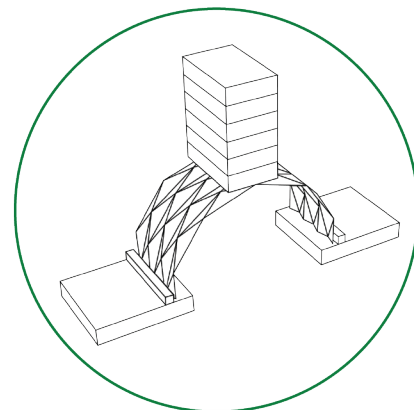


Demountable

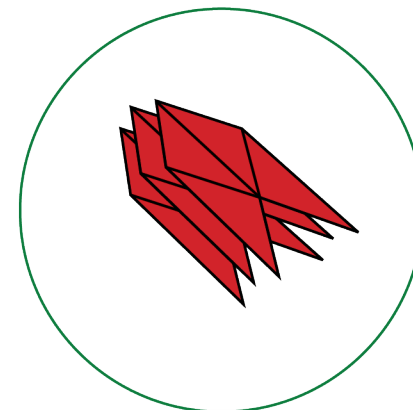


Yoshimura

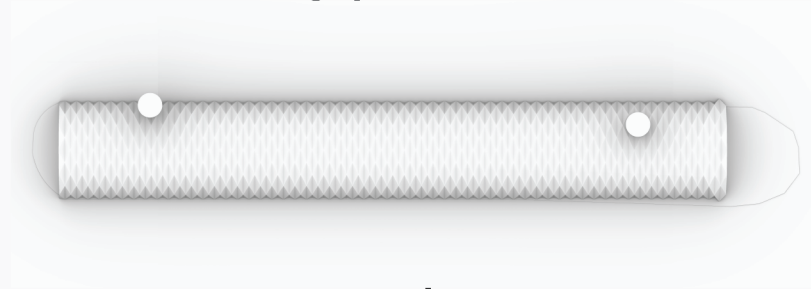
Self-Sufficient



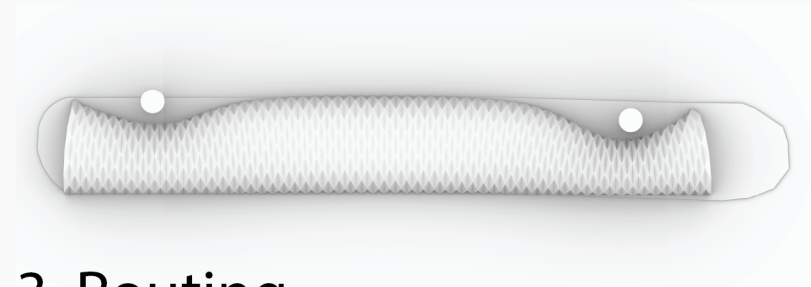
Transportable



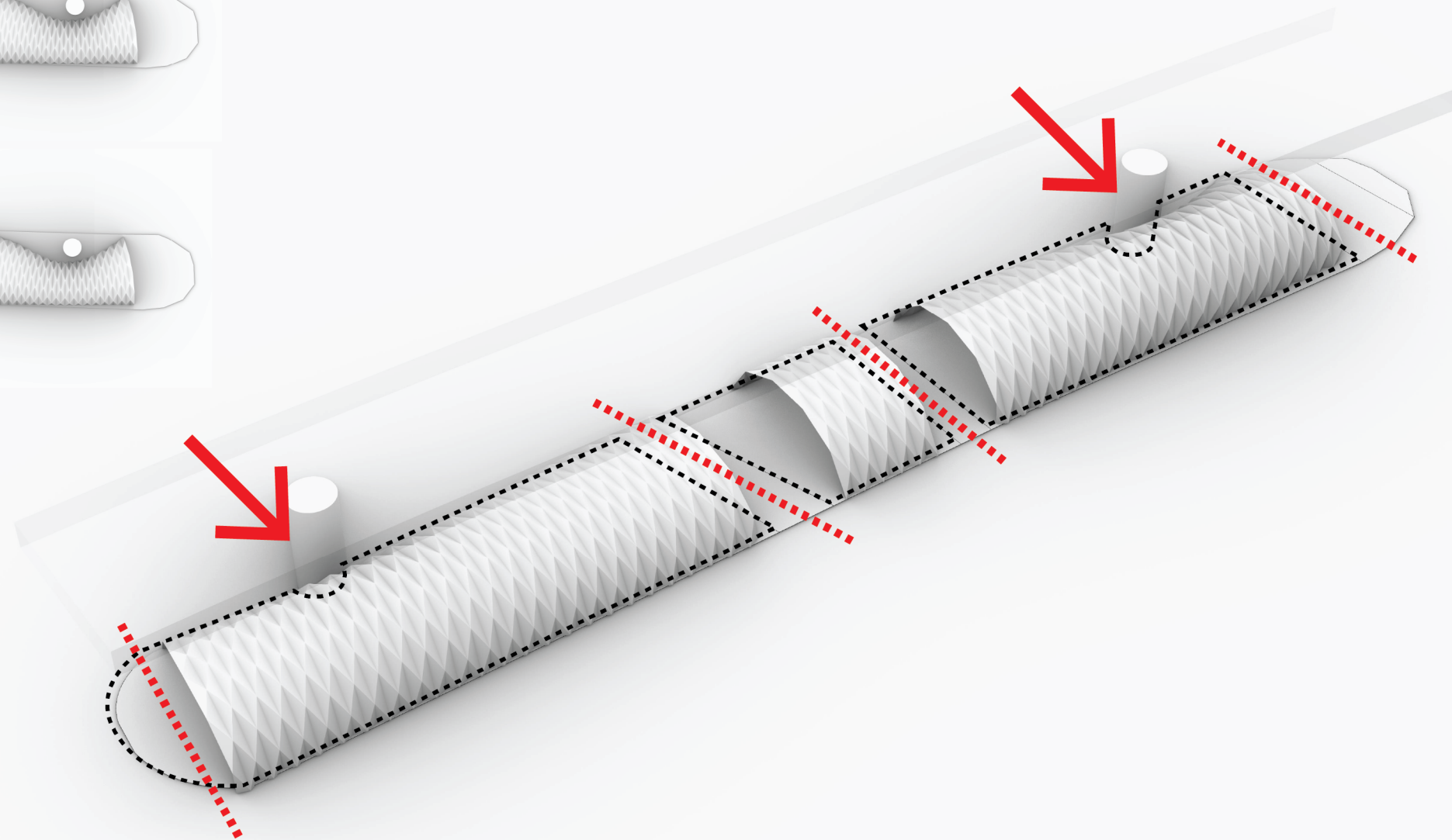
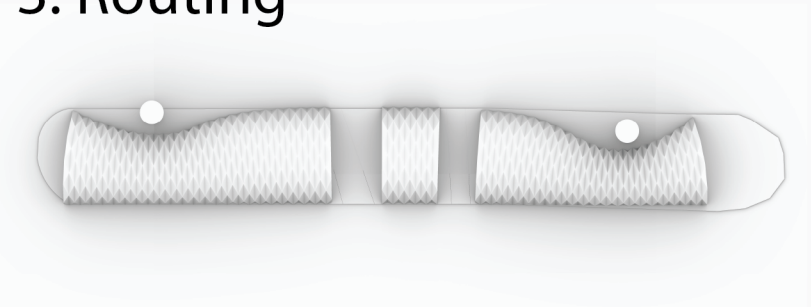
1. Boundary plot



2. Context conditions

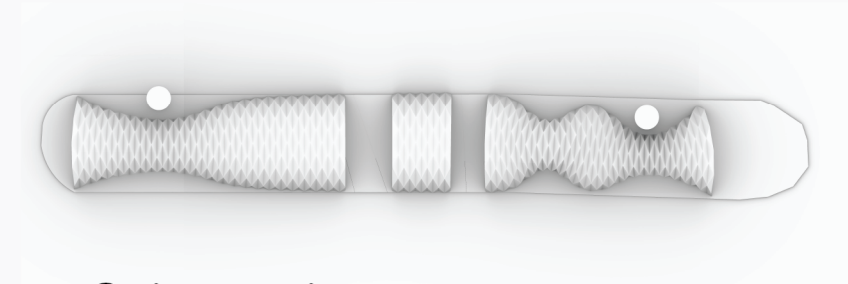


3. Routing

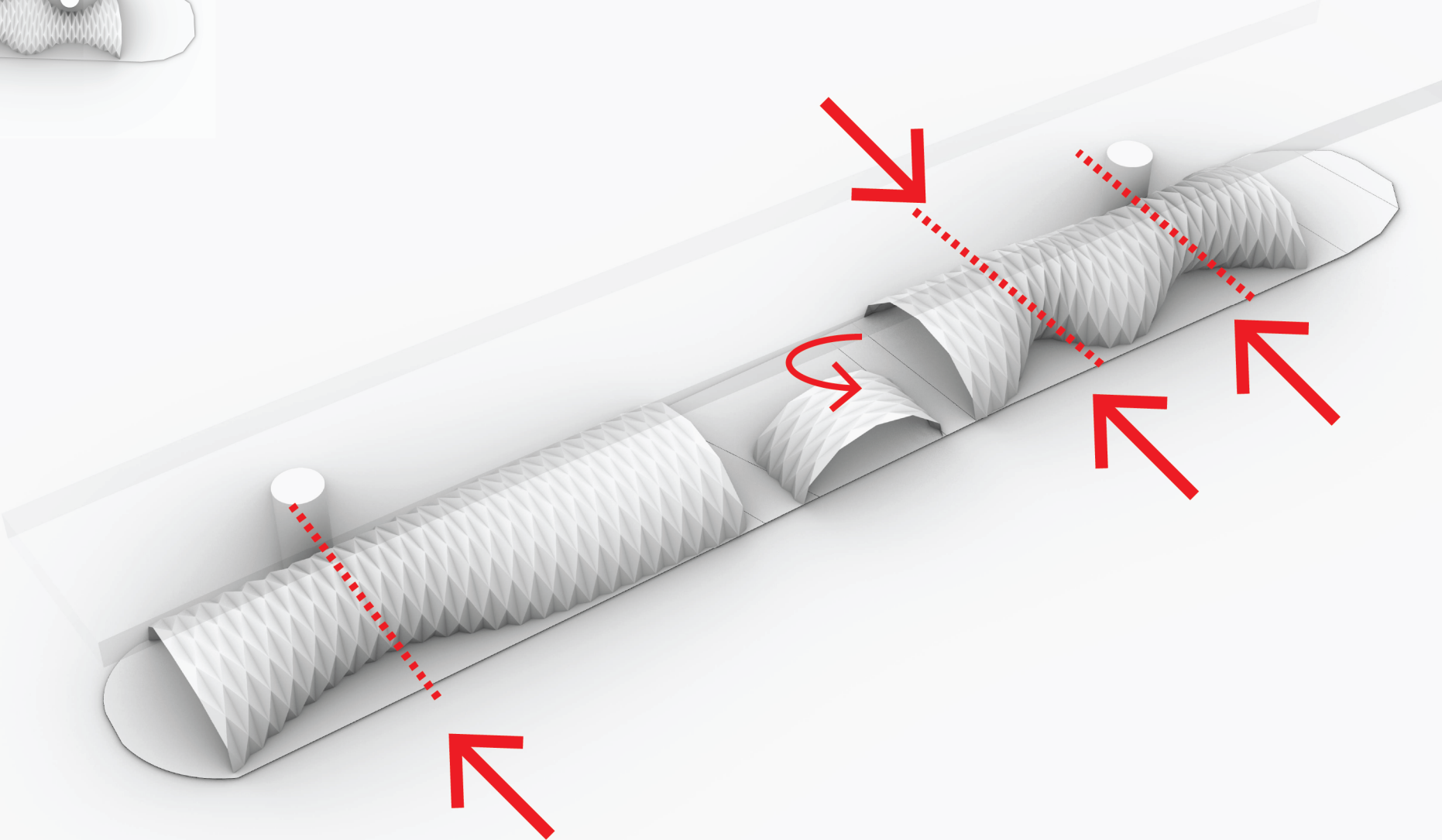
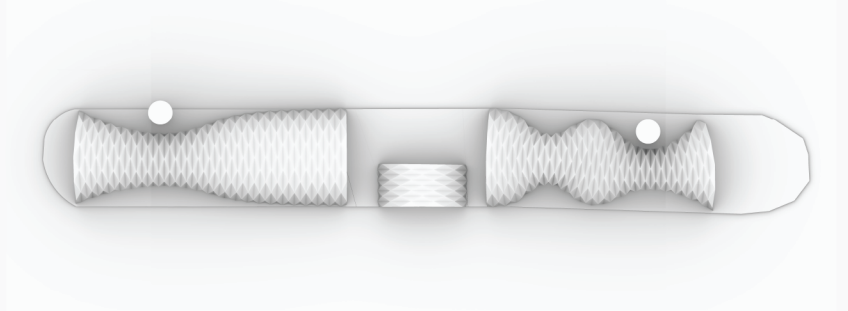


Context conditions / site specific input

1. Function division

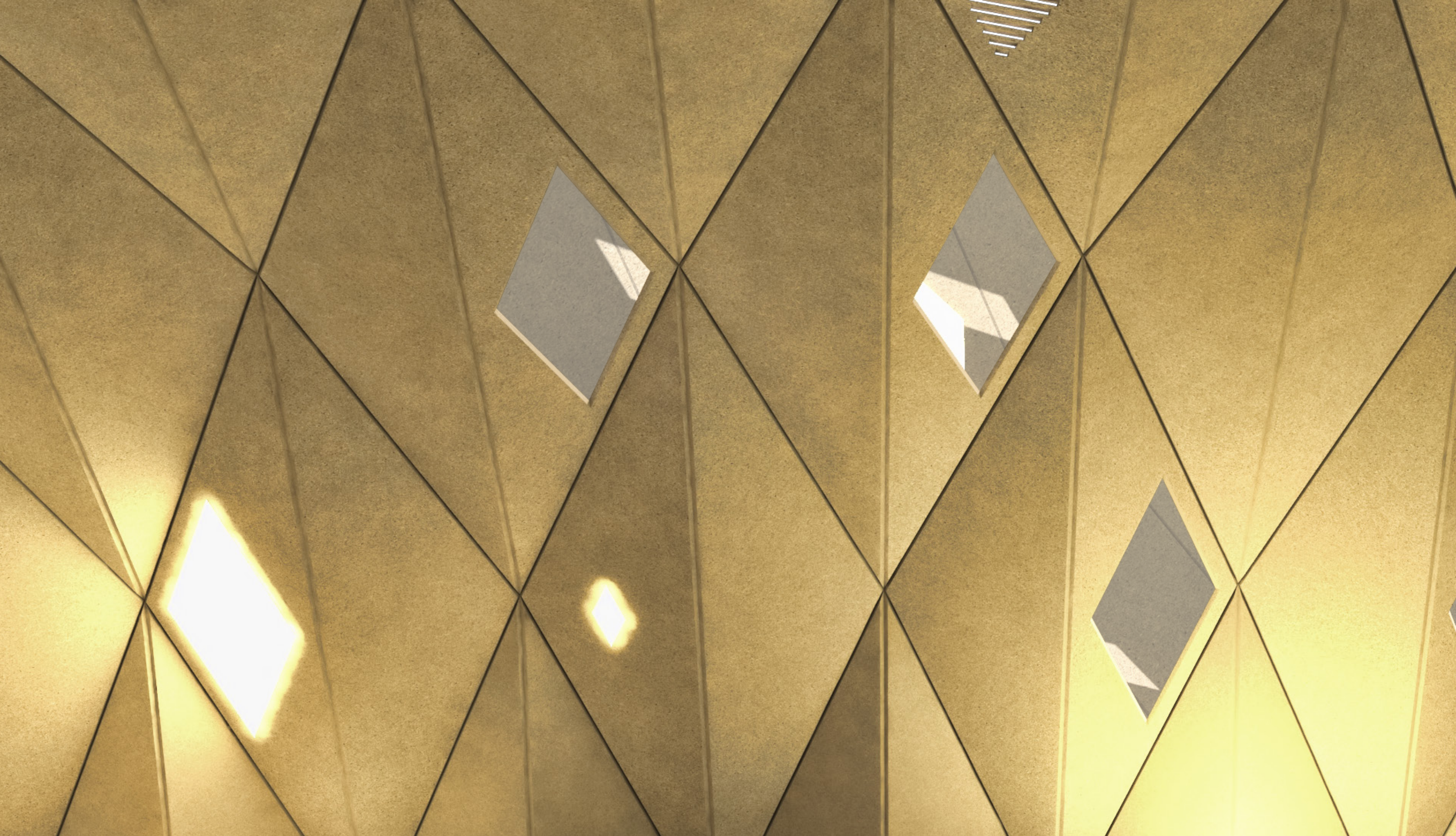


2. Orientation

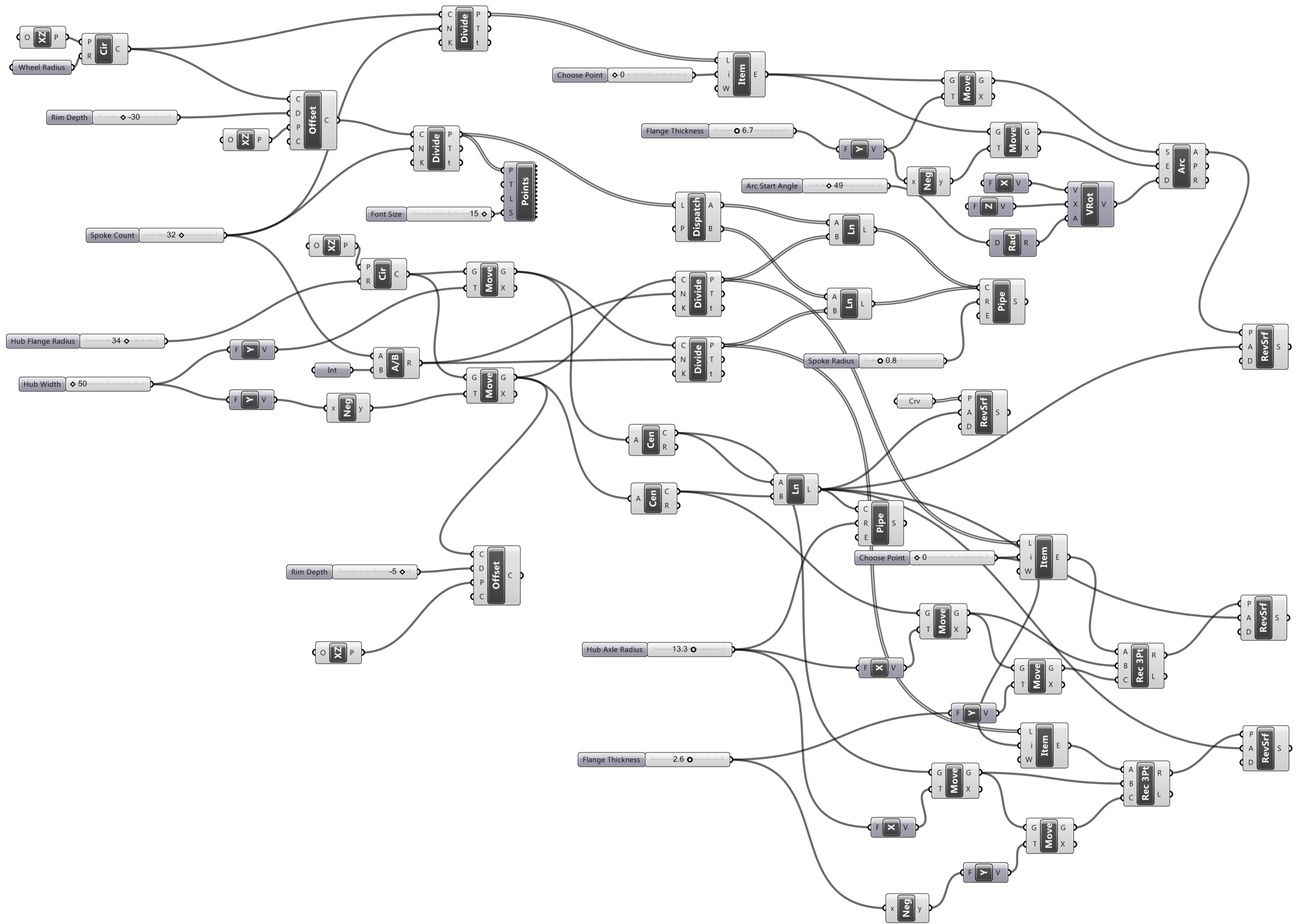


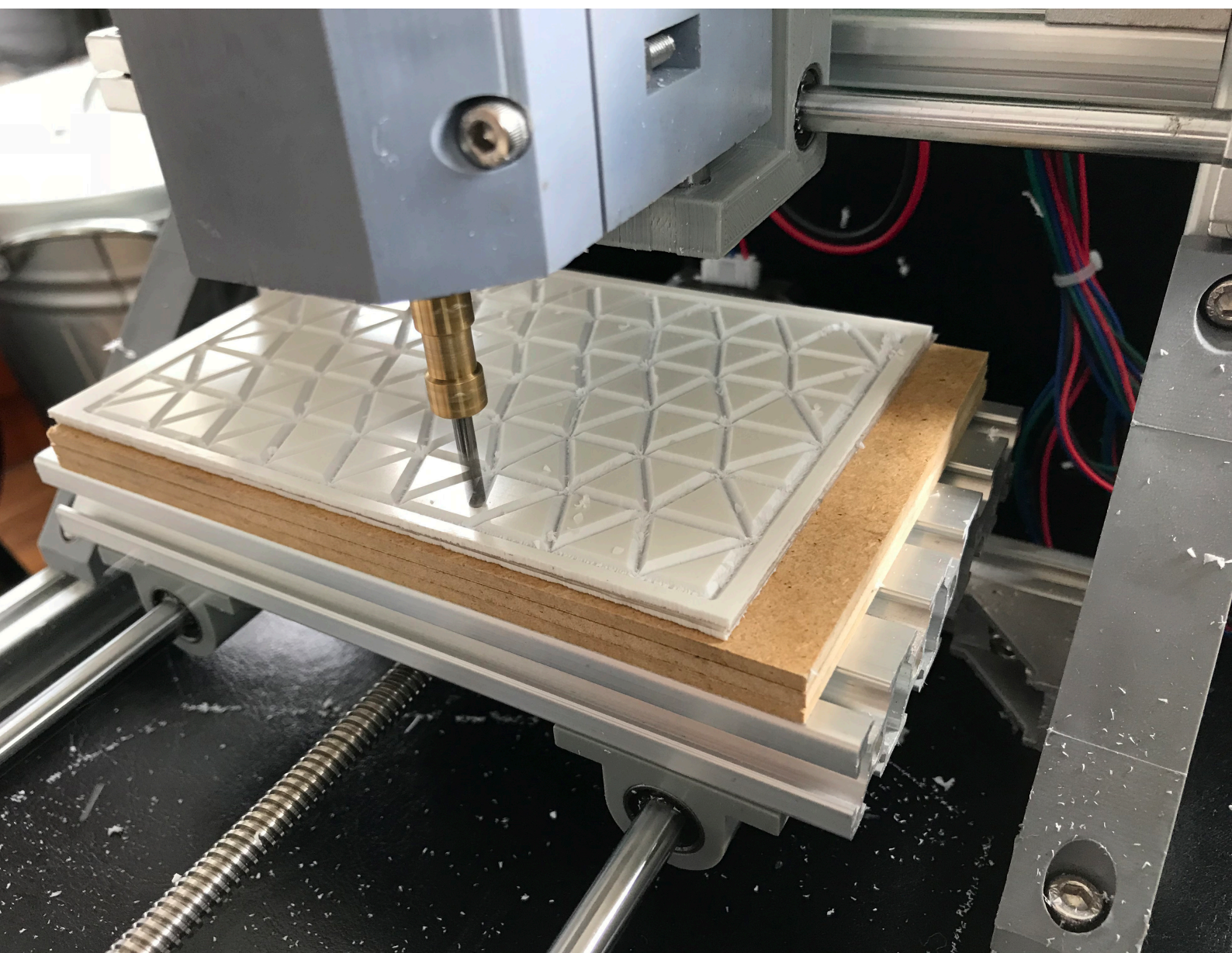
Functionality

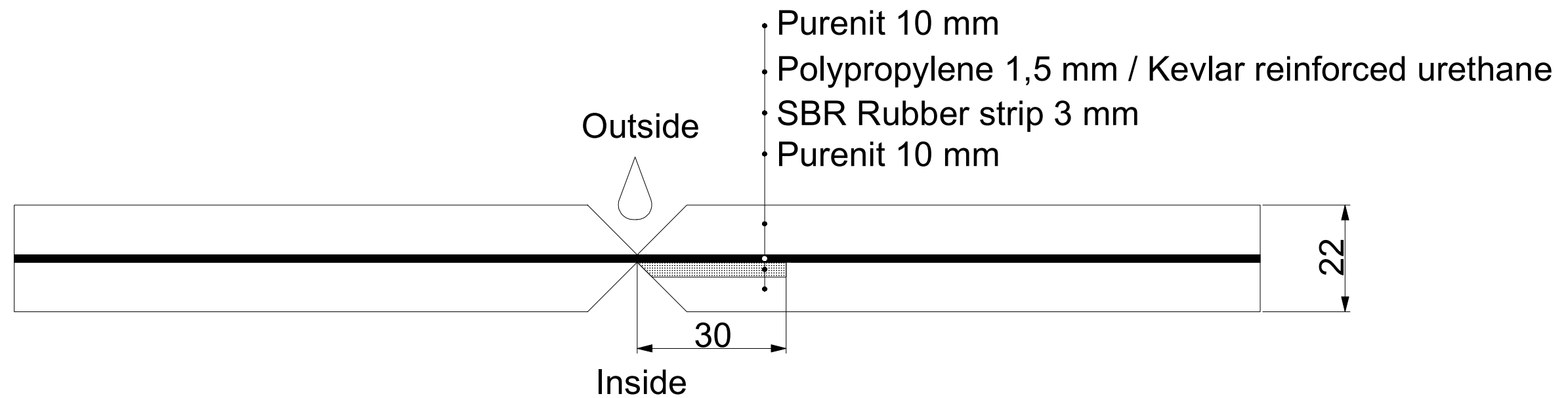
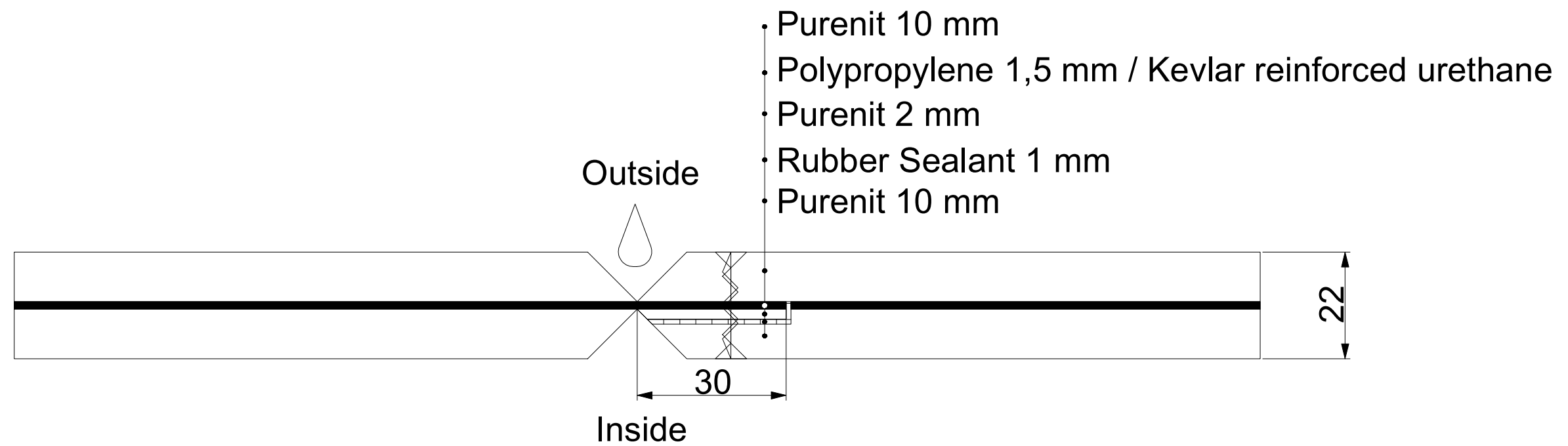




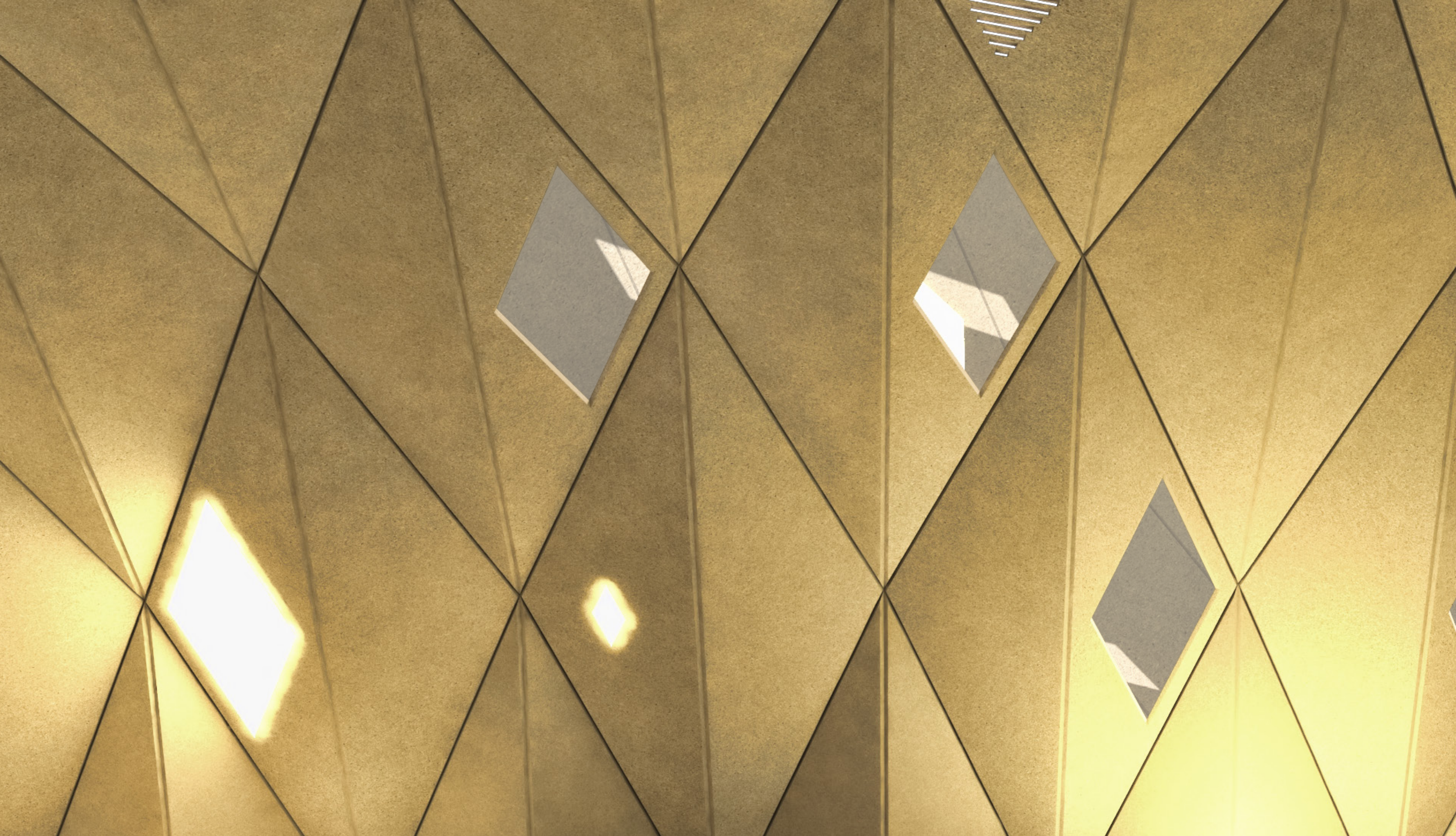
REFLECTION







1:1



THANK YOU