

DZH
DZH
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de zwarte hond
architecture
urbanism
strategy

Bio-based Brutalisme

Circulair en voor de eeuwigheid

20/03/2023



de zwarte hond
architecture urbanism strategy



University Leiden
Leiden



Rode Weeshuisstraat
Groningen



De Familistère
Utrecht



Station Assen
Assen



School Zuiderkroon
Hoogezand



Nieuwe Ellener Hof
Bremen

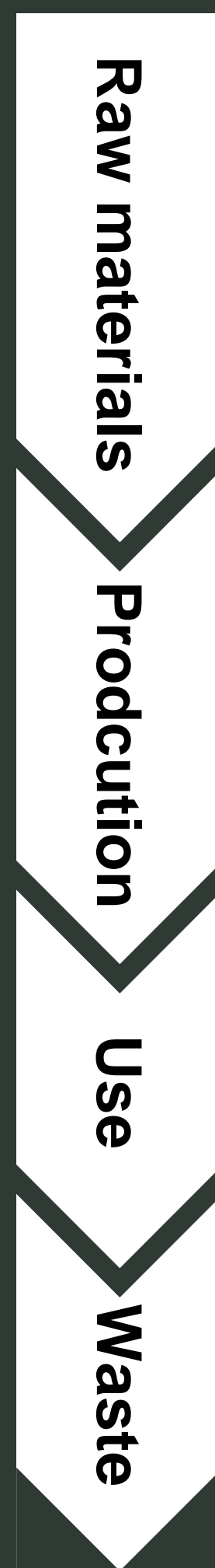


Central Innovation District (CID)
Den Haag

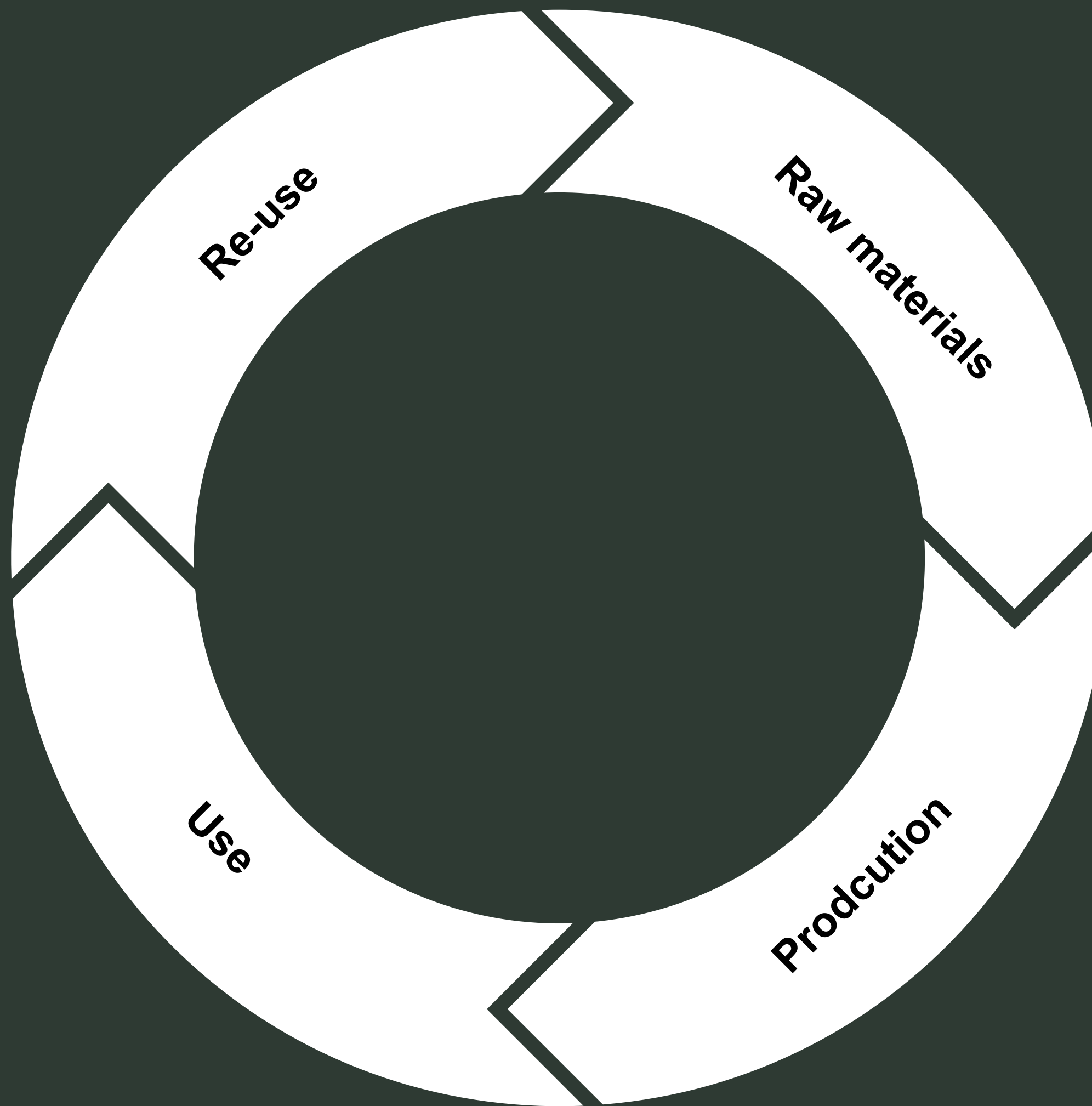


Villa Manatee
Schiermonnickoog

LINEAIR



CIRCULAIR



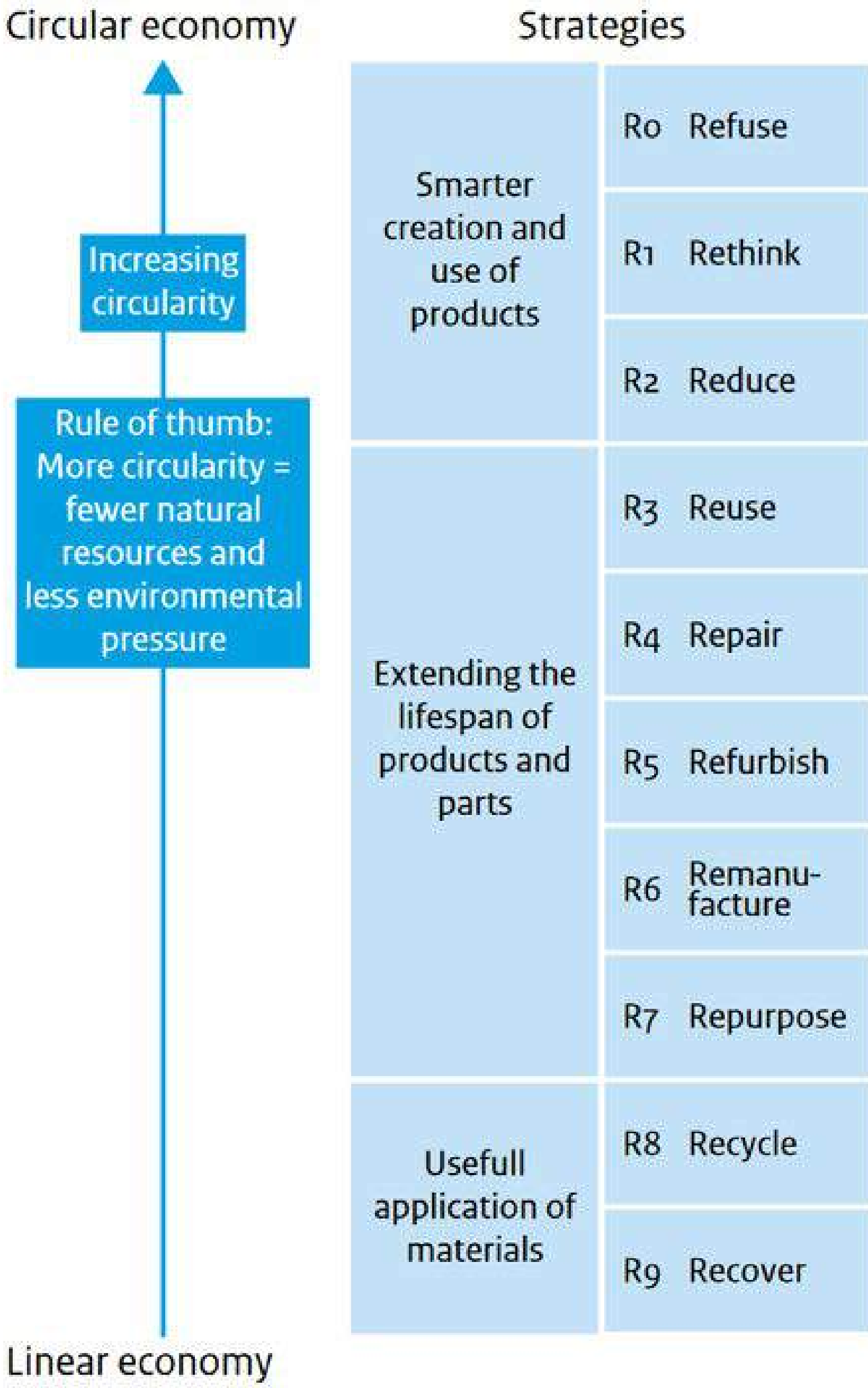
CIRCULAIR BOUWEN

een contradictio in terminis



NIET SLOPEN!

Circulariteit?



THE CONSTRUCTION MATERIAL PYRAMID

THINK ABOUT TRANSPORT

about the pyramid

choose impact category
Global Warming Potential (GWP)

choose unit
m³

filter by material group
no filter

filter and sort by "functional unit"
according to declared unit

[GWP [kg CO₂ eq / m³]]
[module A1-A3]

↓ scroll down to "CALCULATOR"

select materials in the pyramid (click) to include them in the calculator.

See the data used for the materials by double-clicking on the material.



40000-00 1-3

40000-00 1-3

40000-00 1-3

40000-00 1-3

40000-00 1-3

40000-00 1-3

40000-00 1-3

Superhub Meerstad



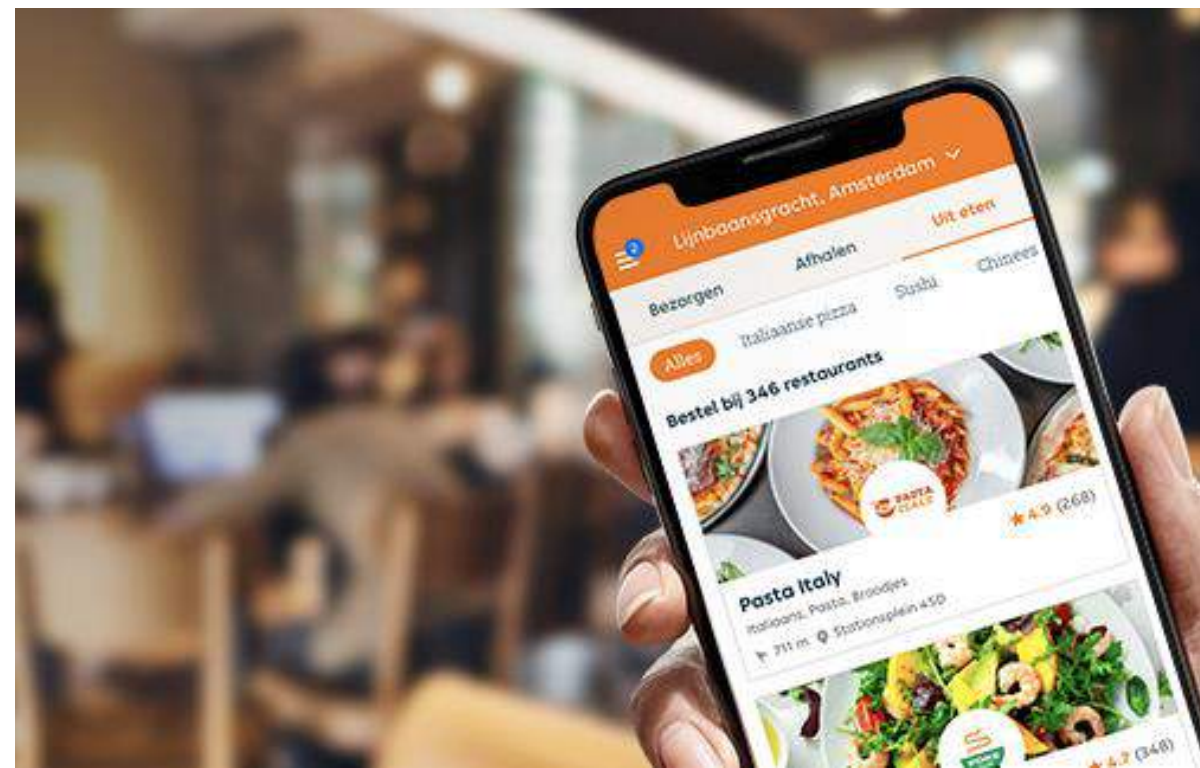
Superhub





Nee!



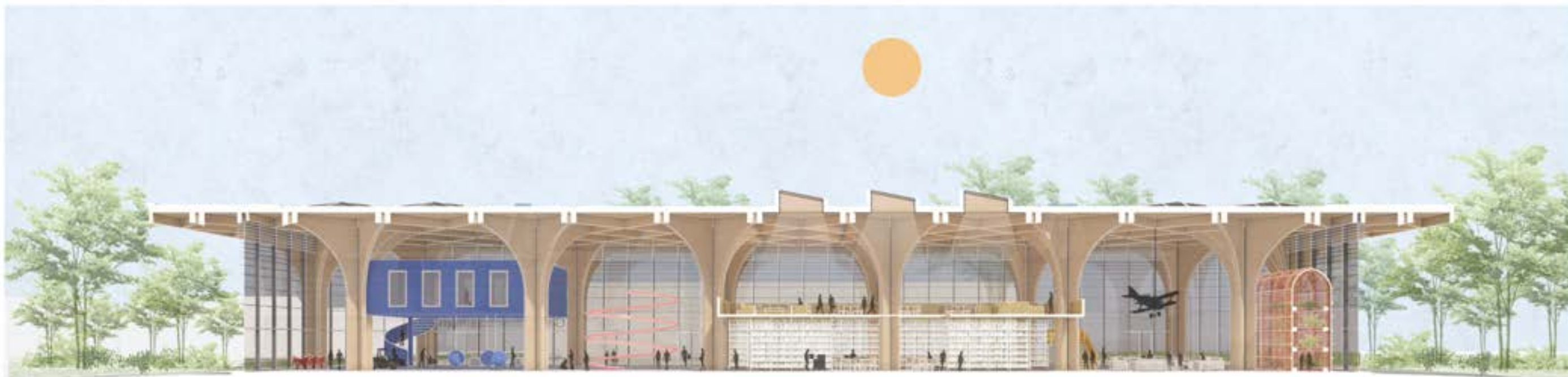




Supermarkt en restaurant



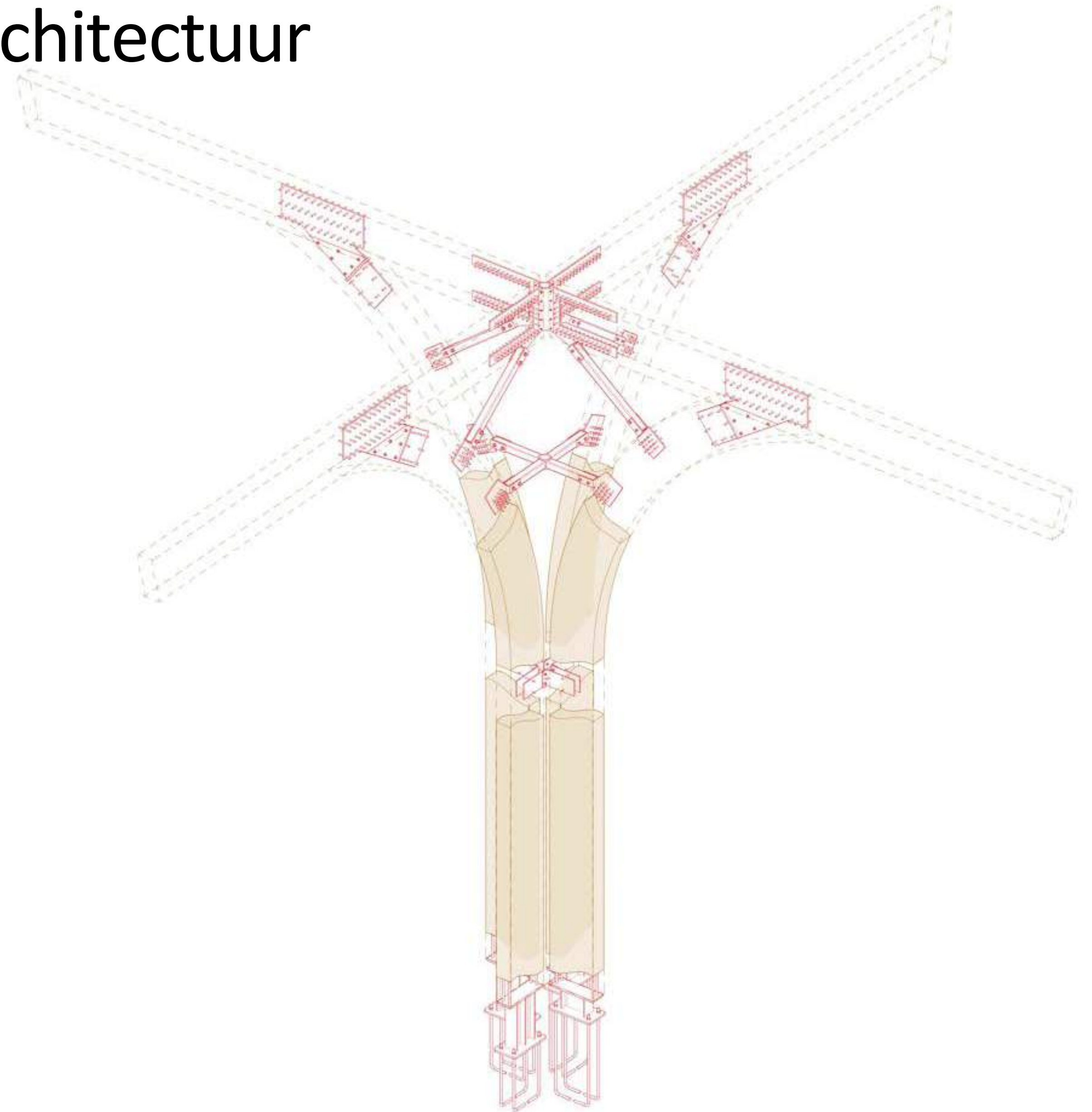
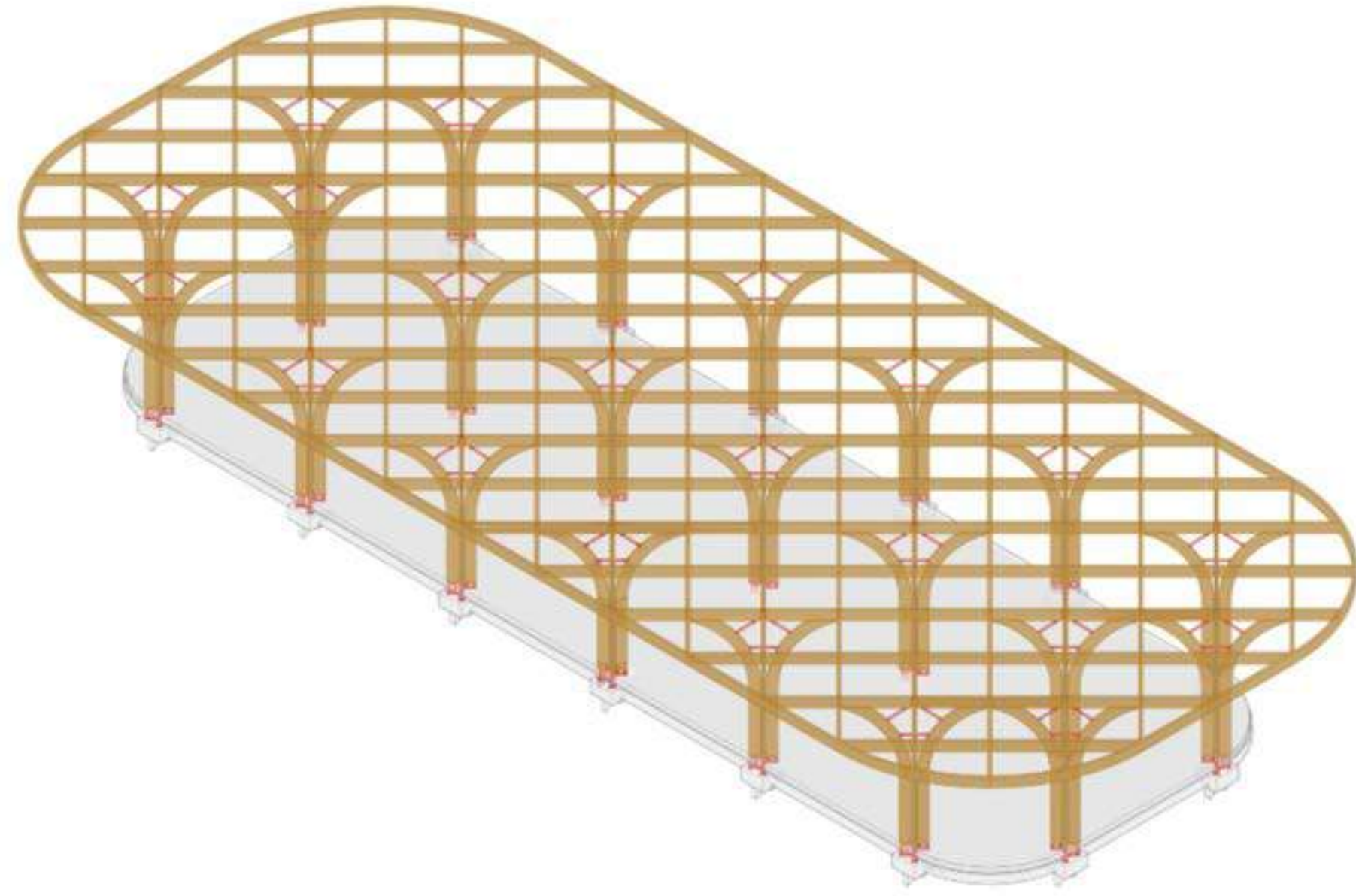
Bibliotheek en theater



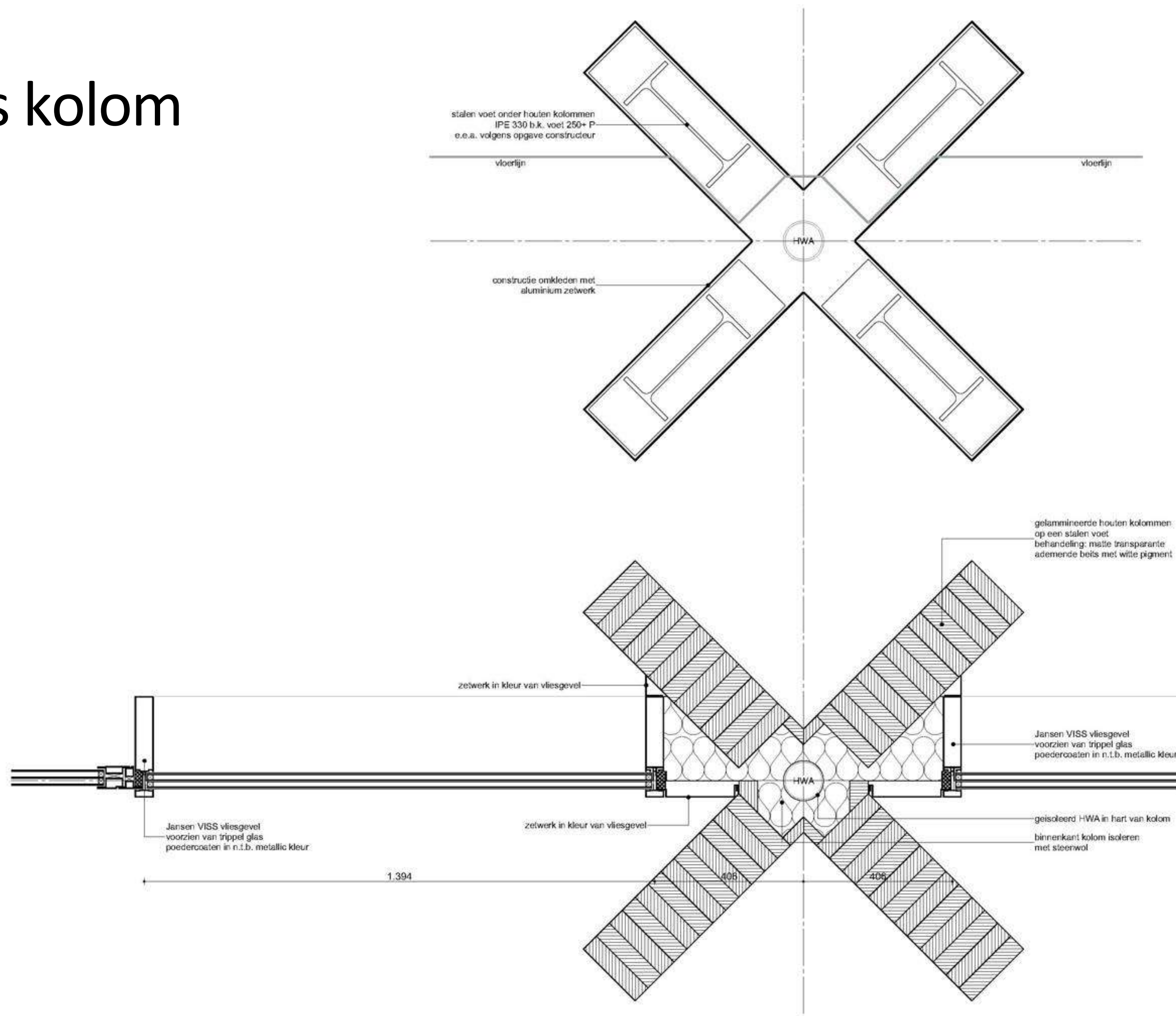
Gezondheidscentrum en sport



Samensmelting constructie en architectuur



Kruis kolom



Hout hout hout







Klimaatimpact

350 houten kolommen en balken

Vuren uit Zweden

Larijs van Staatsbosbeheer

GPR score 8.5

CO2 opslag: - 226.248 kg CO2



Alliander



Wij werken aan uw energieherstel.
Denk aan onze medewerkers, houd voldoende afstand.

Safety icons: No smoking, No open flames, No mobile phones, No eating/drinking, Hand hygiene, 1.5m distance.

KOM OP AMSTERDAM
WEE AMSTERDAMMER

In deze stad komen we voor elkaar op.
Weten wat jij kan doen? [Amsterdam.nl/komop](https://amsterdam.nl/komop)

Liander
beheer werk voor gas en stroom.

1,5 m
afstand



ZONE
Verbod
toegang



Aliander Spaklerweg Amsterdam Amstel



Nieuwe locatie Westpoort Amsterdam

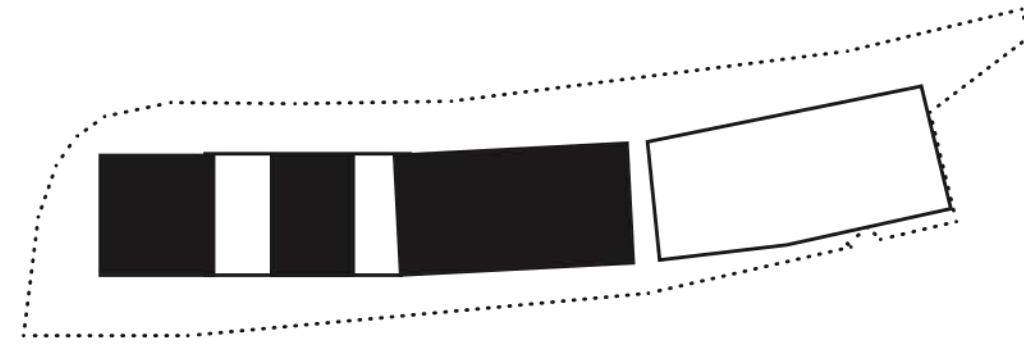
blue collar  white collar 



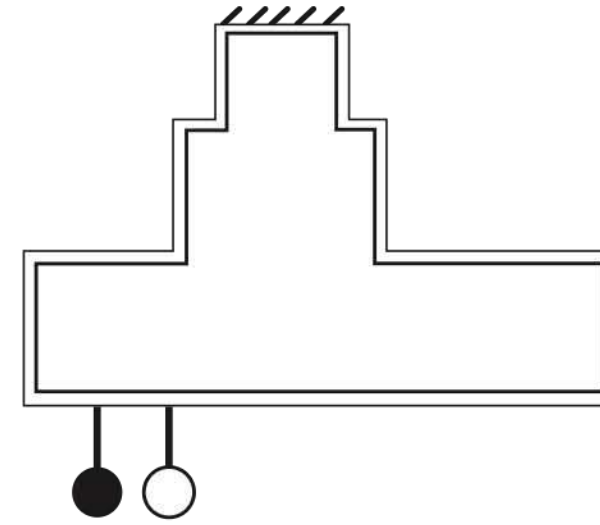
Kantoor en opleidingen
9.000m²

parkeerhub
6.000m²

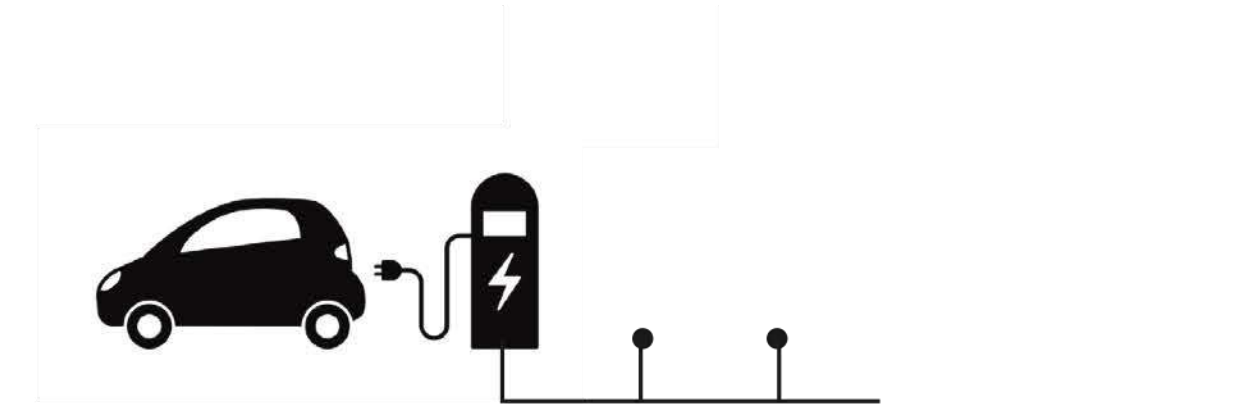
Werkplaats, magazijn en lab
6.000m²



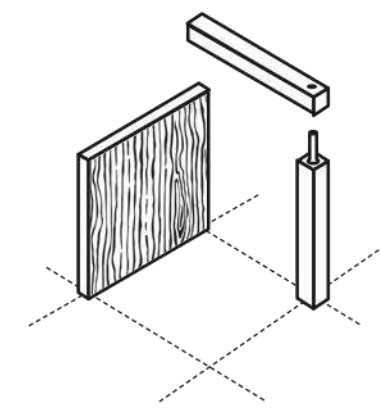
Spatial integration



Sustainable energy



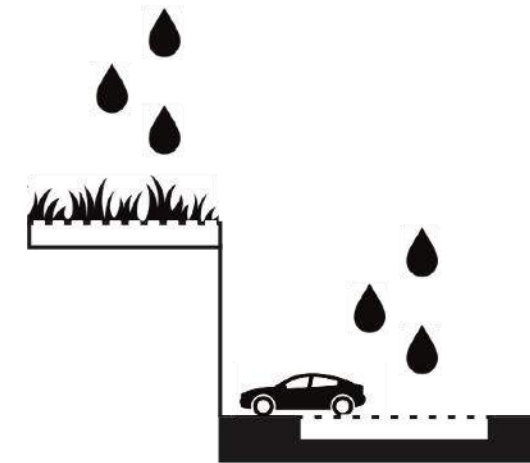
Electric mobility



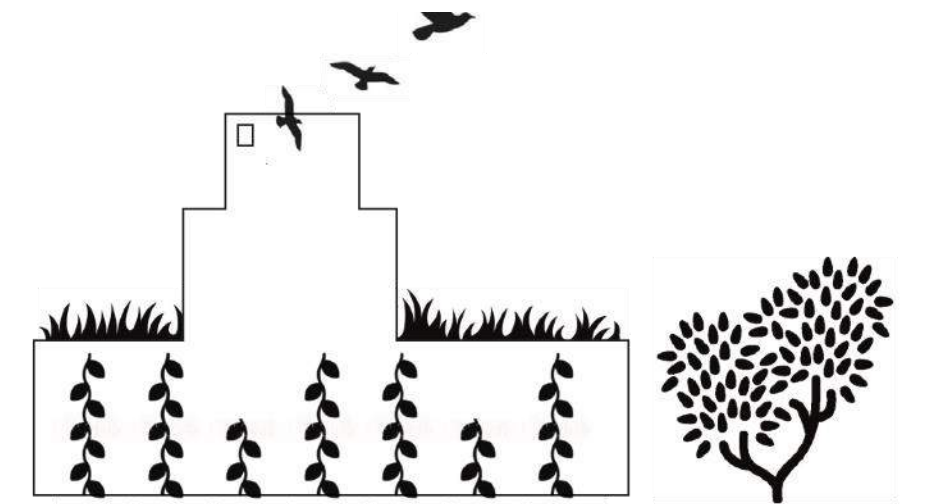
Circulair materialen



Afvalscheiding

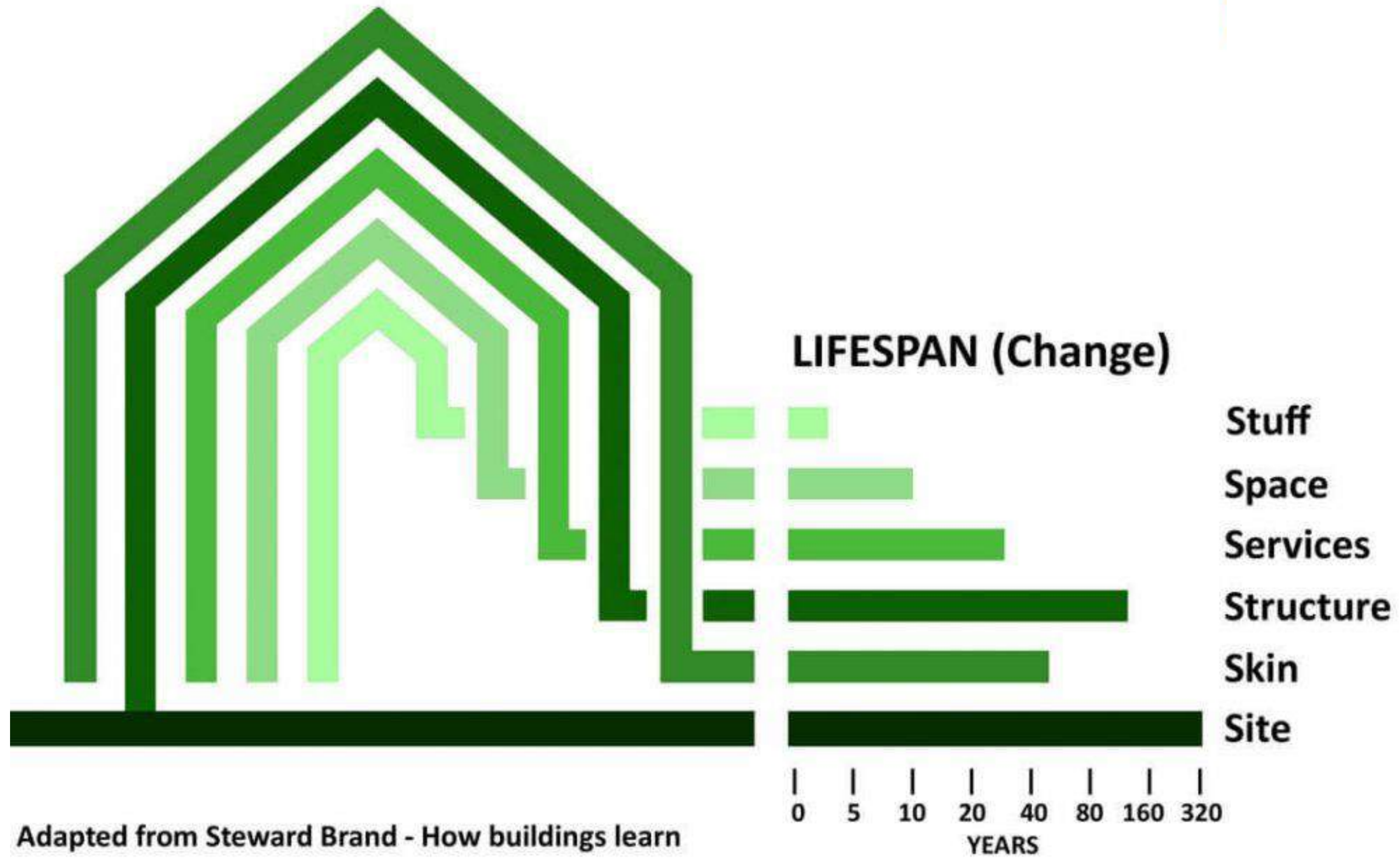


Wateropvang



Natuur inclusief

Flexibel en
aanpasbaar



Flexibiliteit op het kavel



Samenhang

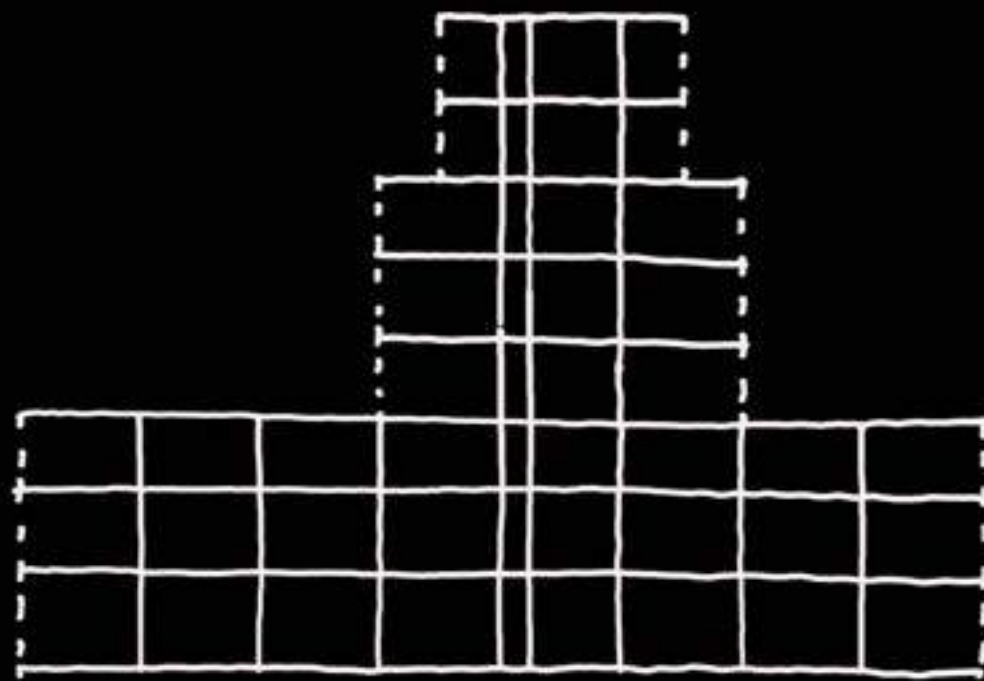


Tussenruimte



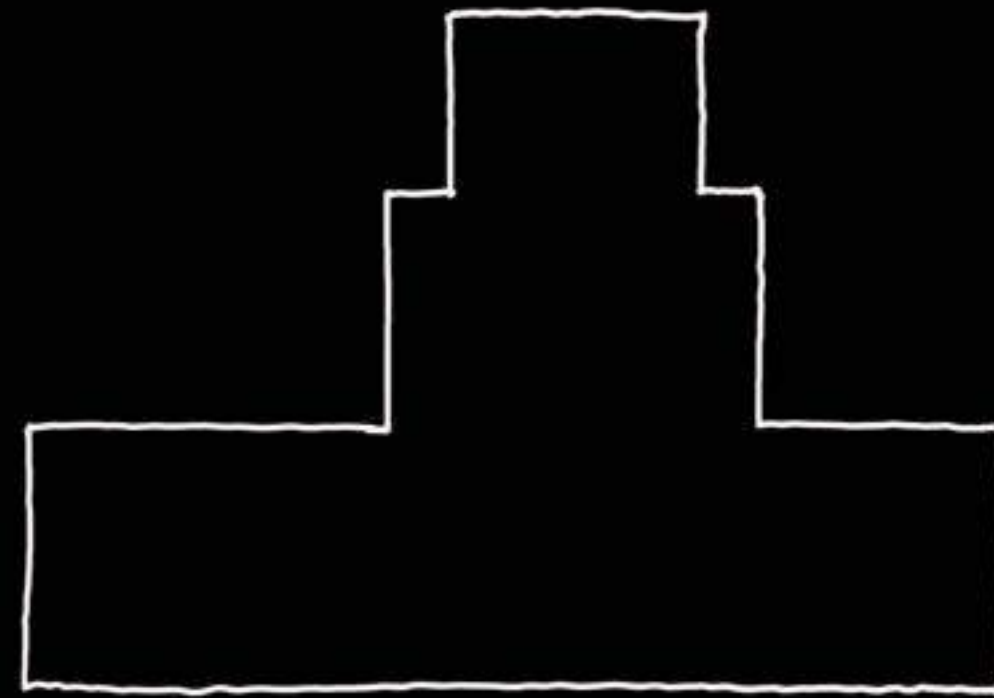
Adaptief gebouw concept

Constructie



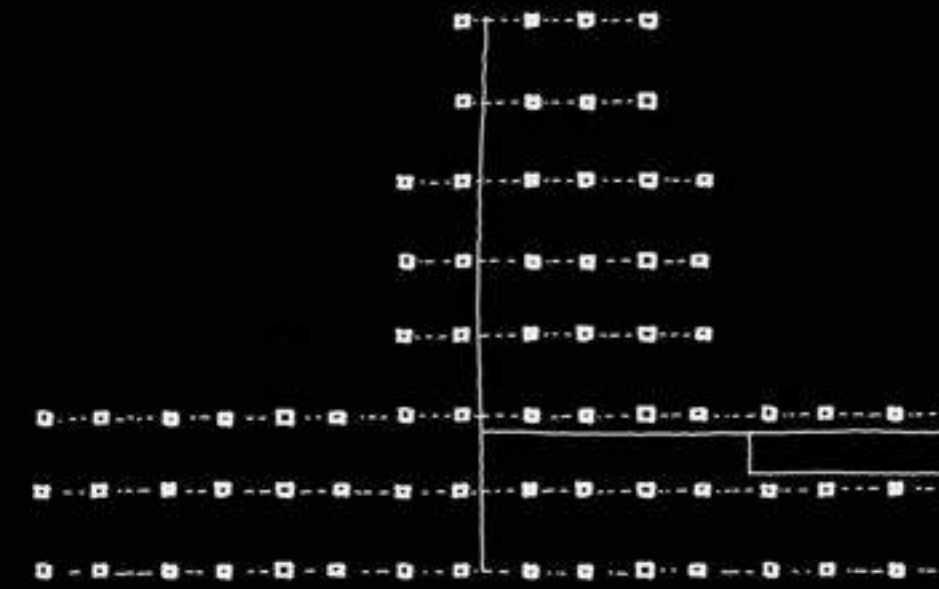
Eeuwig

Gevel



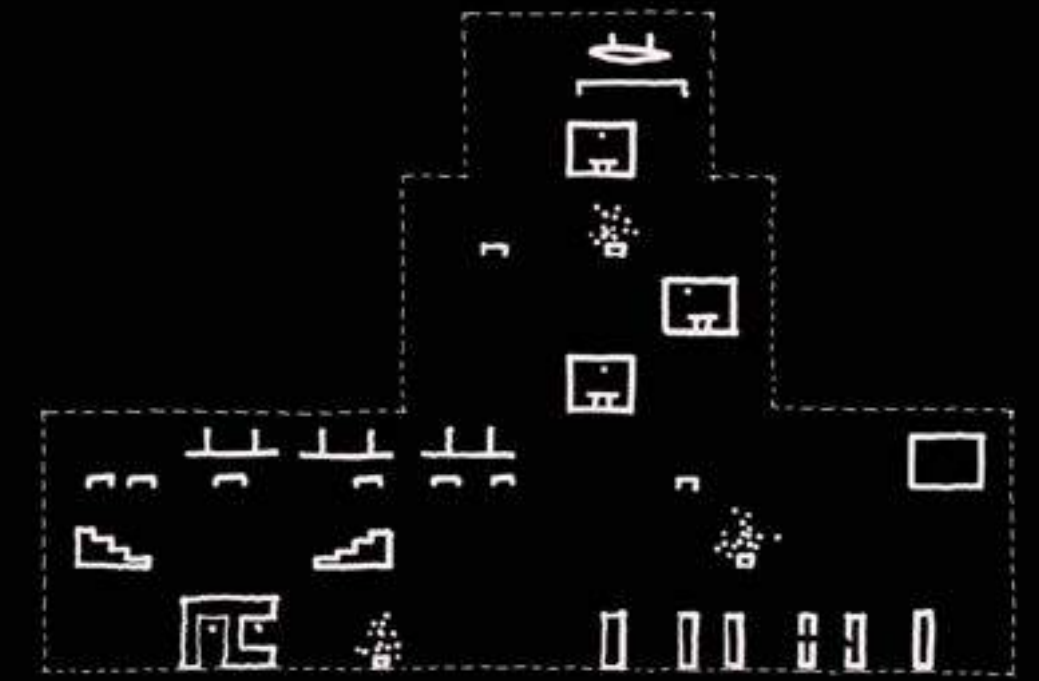
50-100 jaar

Installaties



20-50 jaar

Interieur



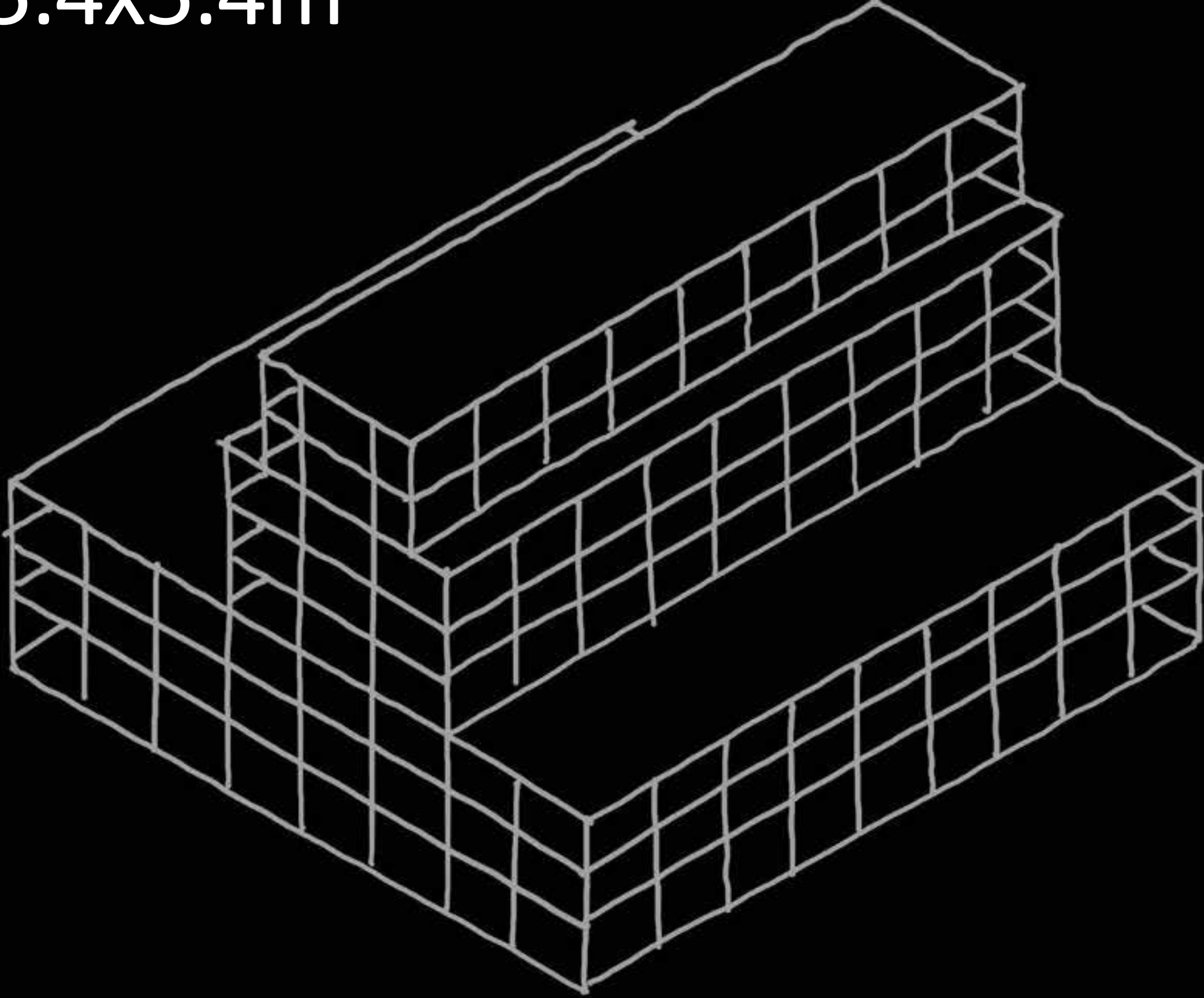
5-15 jaar



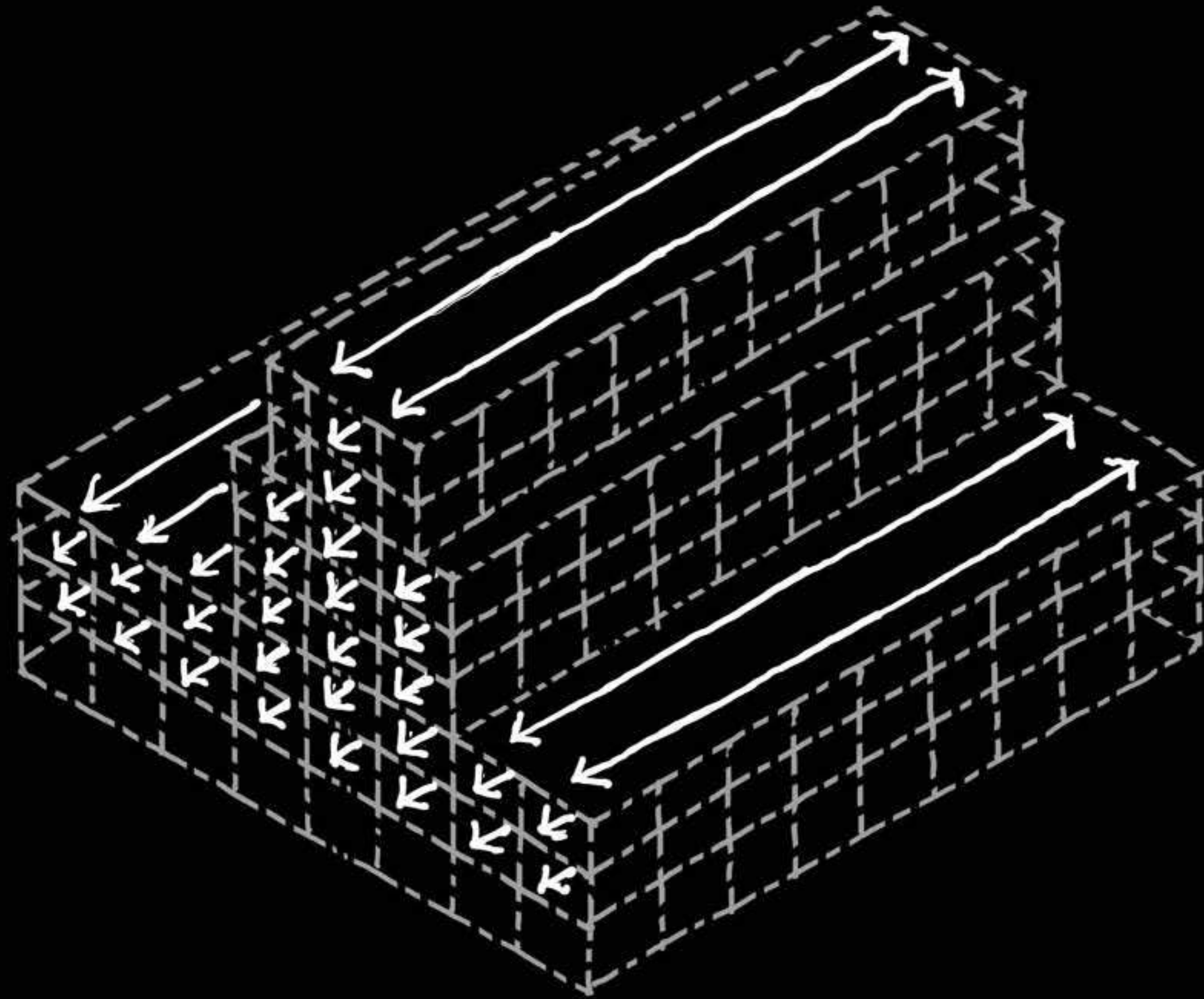
Mooie veroudering



Hout constructie 5.4x5.4m



Flexibel grid



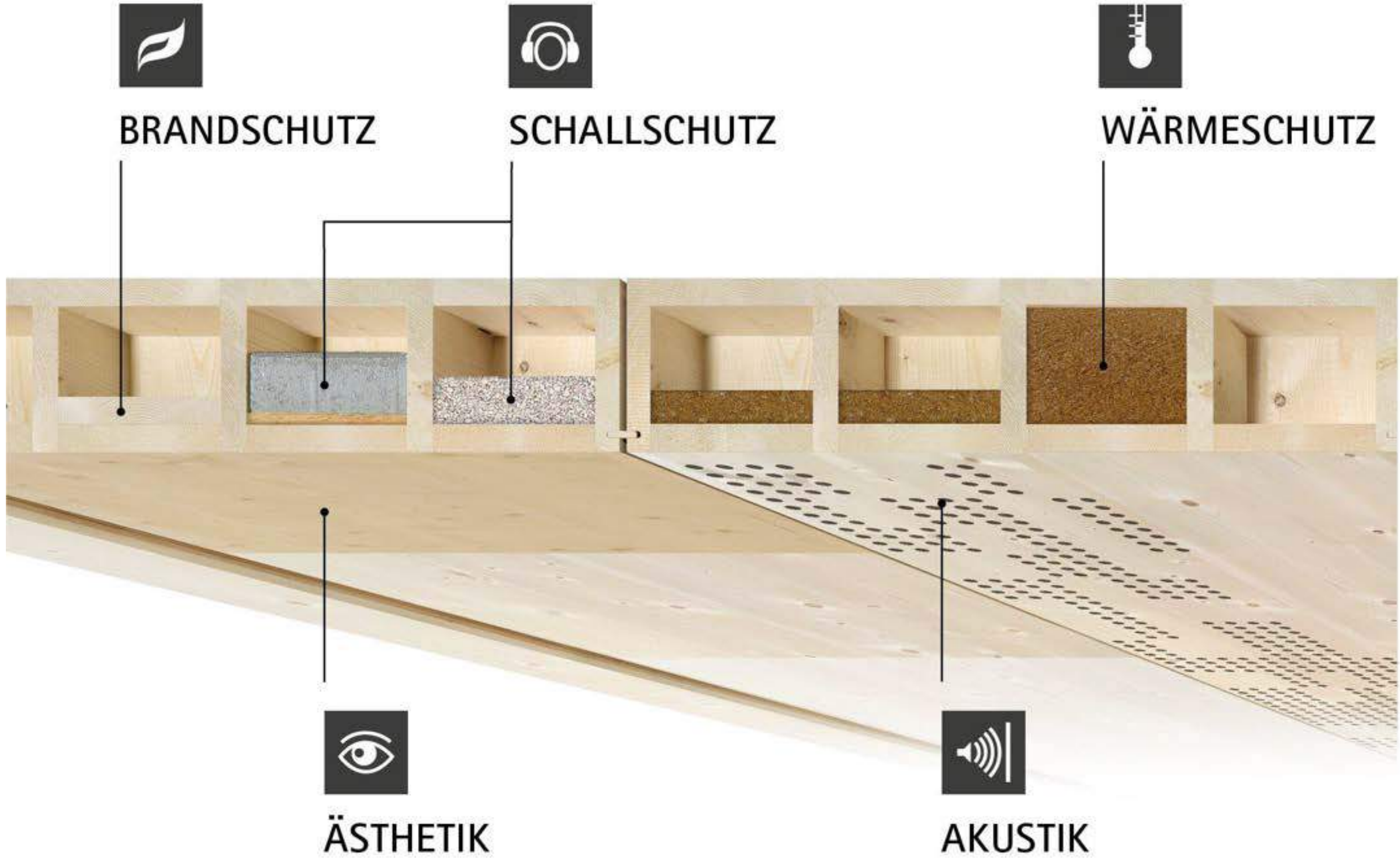
Gezond en warm



Flexibel casco



Lignatur





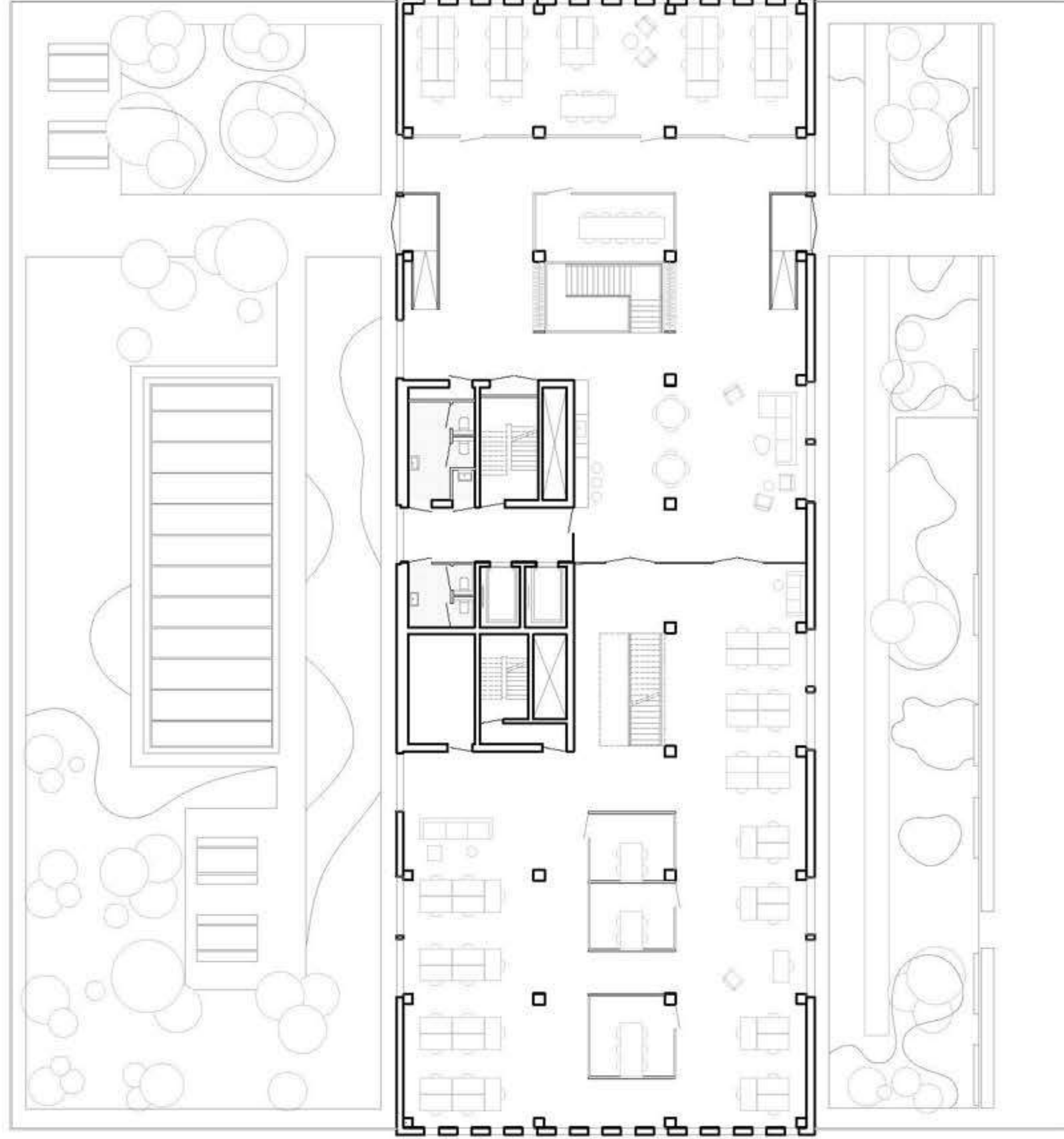
Grid



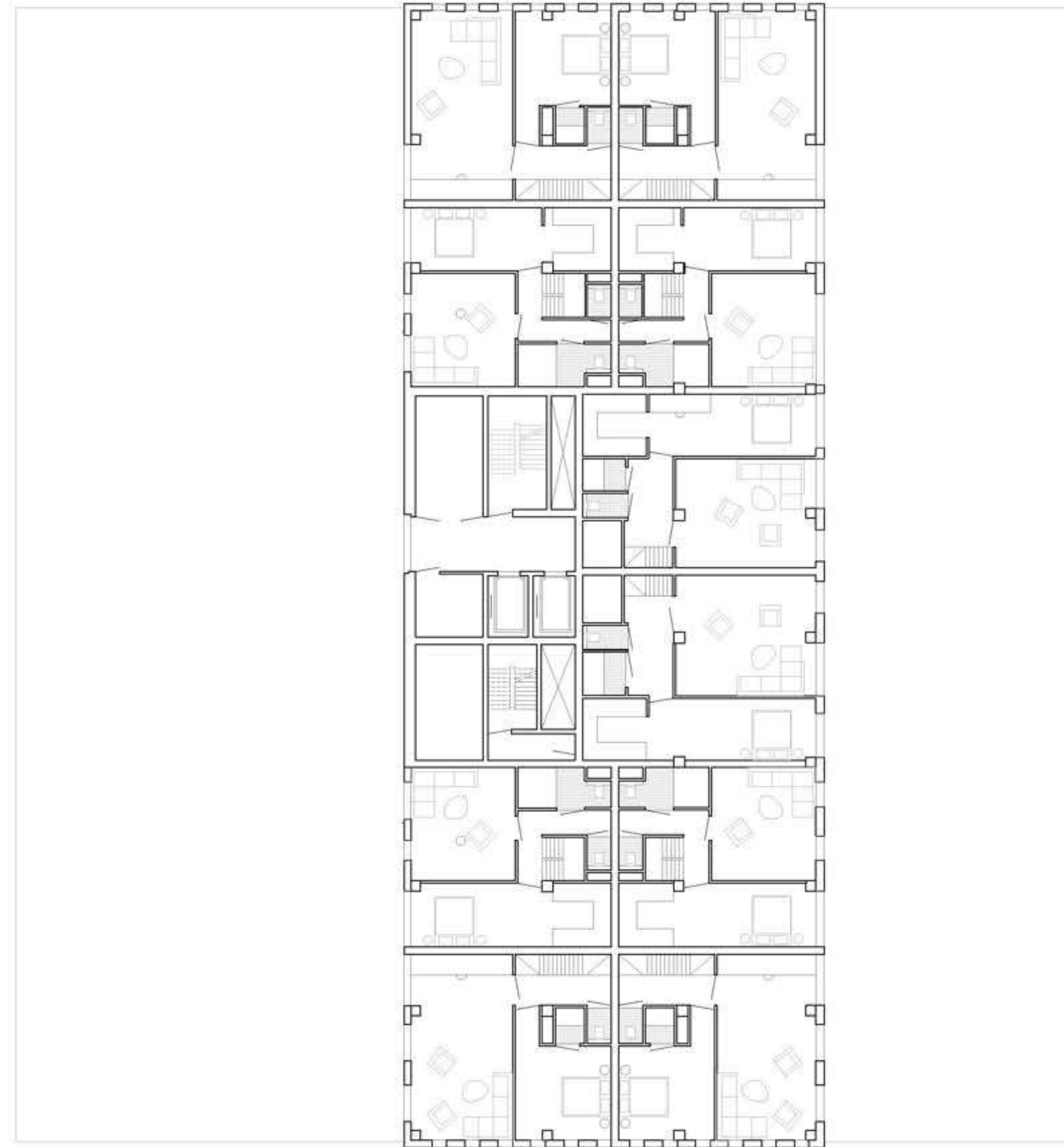
Techniek in het zicht



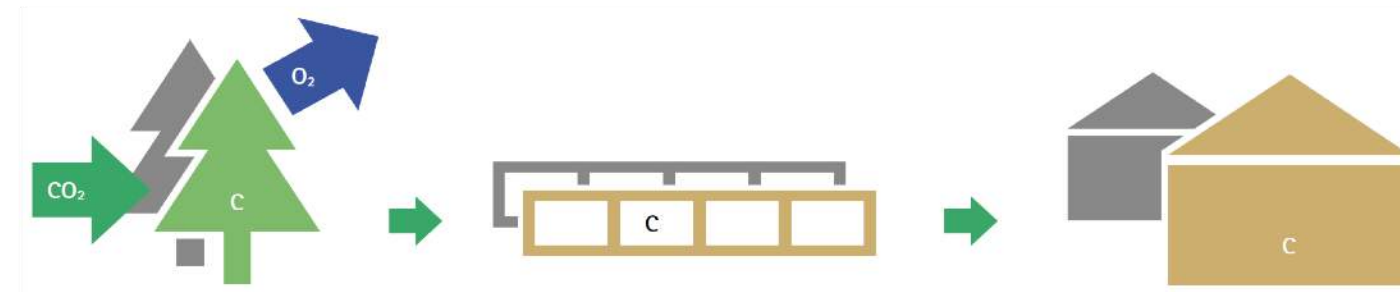
Nu



Toekomst



CO₂ - reducer



Forest and timber are the only resources that reduce CO₂ emissions
 The carbon C is stored in the wood. The oxygen O is released into the atmosphere. So the greenhouse gas CO₂ is permanently removed from the atmosphere.

61.8 tons of CO₂ have been removed from the atmosphere by this LIGNATUR-order.

Project no.: **20200961**

Order no.: **39572**

Project name: **Alliander NL-1000 Amsterdam-Sloterdijk 7e verd.+dak**

Article	Acronym	Unit	Quantity	CO ₂ capture in tons	
				per unit	Total
110.3280	L31 LFE 280x1000	m ²	331.680	0.070	23.320
110.6280	L40 LFE 280x1000	m ²	322.040	0.081	26.238
210.3104	LFE Massiv 40	m	40.000	0.006	0.247
210.3120	LFE Massiv 200	m	8.400	0.031	0.259
220.6090	L40 LFE REI90	m ²	201.000	0.026	5.205
220.6095	L40 LFE REI90 ohne Akustik	m ²	99.000	0.032	3.159
420.3031	LFE Typ 3.1 - N031	m ²	553.860	0.006	3.331
Total CO₂ capture					61.759

*) is equivalent to the amount of carbon bound in 84.14 m³ / ~37.863 t spruce or fir wood (bulk density 430-510 kg/m³)

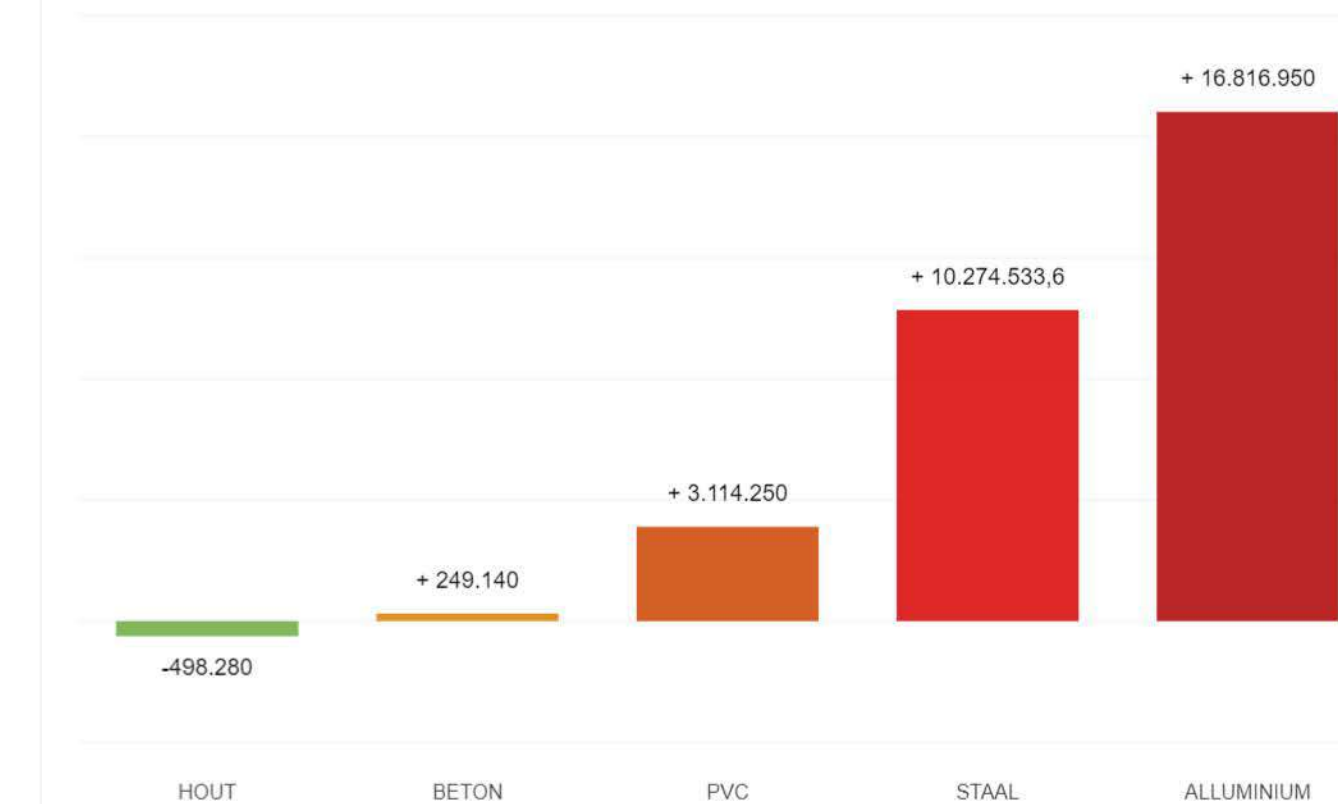
An initiative of the forestry and timber industry
 The CO₂-institute is an international project of the forestry and timber industry. It calculates, verifies and documents the reduction of CO₂ by the use of timber from sustainable forest management. For Switzerland it is managed by the "Schweizerischer Verband für geprüfte Qualitätshäuser (VGQ)".
 You can find further information under: www.co2-institut.ch.

Your contribution to climate protection – simple to determine
 You are a constructor or building owner and want to register your object built with timber? You can easily do this under www.co2-institut.ch. The climate contribution, that you make with our LIGNATUR-products, has already been calculated for you. We would be pleased if you were to share the climate message of forest and timber, to

De hoeveelheid vastgelegde CO₂ in de houtproducten is 498.280kg

Uw referentie: **Alliander Amsterdam**

Houtvolume van de producten:	624,23 m ³
De Europese bossen slaan deze hoeveelheid CO ₂ op in:	37 seconden
Vastgelegde CO ₂ in de houtproducten:	498.280kg CO ₂



Dit compenseert:

- Uitstoot van 3.321.862 km aan uitlaatgassen van een middenklasse auto
- Elektriciteitsverbruik van 554 huishoudens in één jaar tijd.

Dit certificaat werd uitgegeven door de Hout geeft zuurstof-reenmodule 'Opslag van CO₂ in hout'. De waarden op dit certificaat zijn indicaties. Aan de uitkomsten kunnen geen rechten worden ontleend. Fedustria vzw kan niet verantwoordelijk worden gesteld voor oneigenlijk gebruik hiervan. Om zelf de vastgelegde CO₂ in uw houtproducten te berekenen of voor meer informatie over de totstandkoming van de berekening kan u terecht op <https://www.houtgeeftzuurstof.be>.

MPG 0,36

560 ton CO₂ opgeslagen

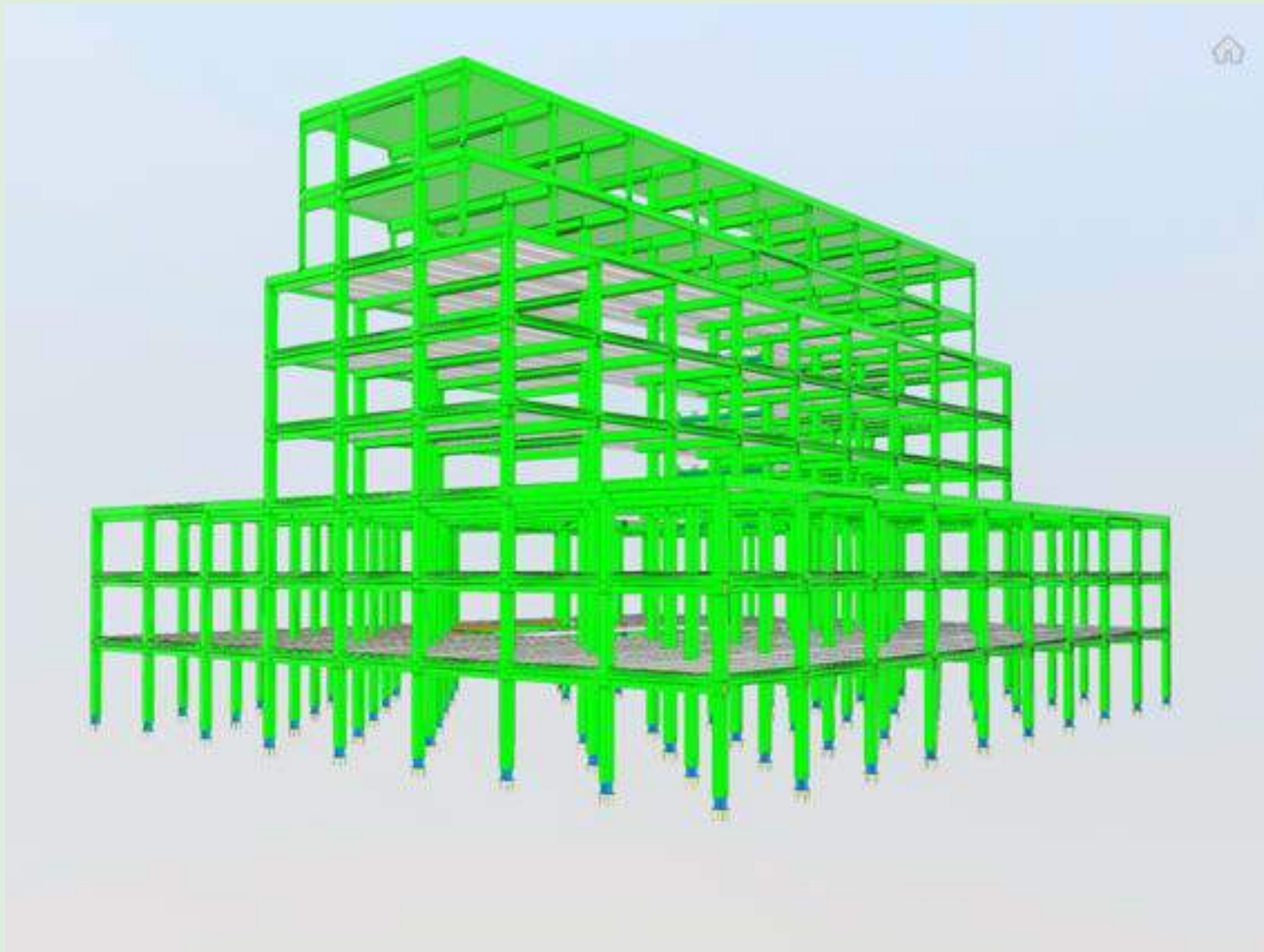
7.000.000 km



1.200



File to factory



Snel bouwen



Short building time

Minder afval





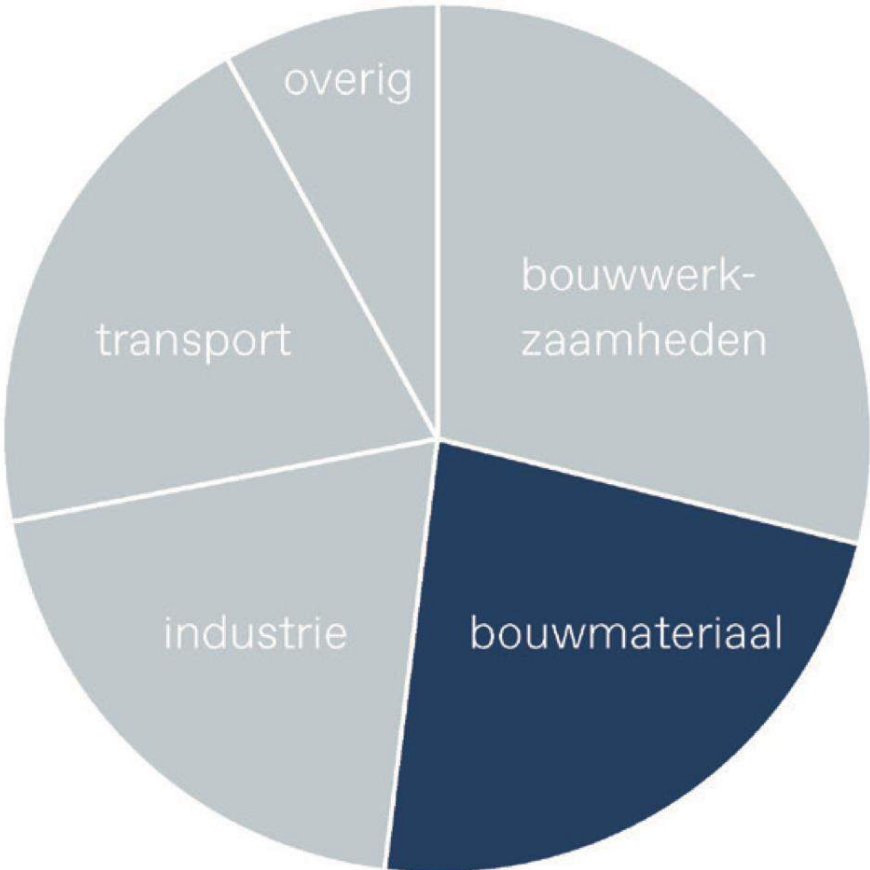


Gevel zo dun als een plank

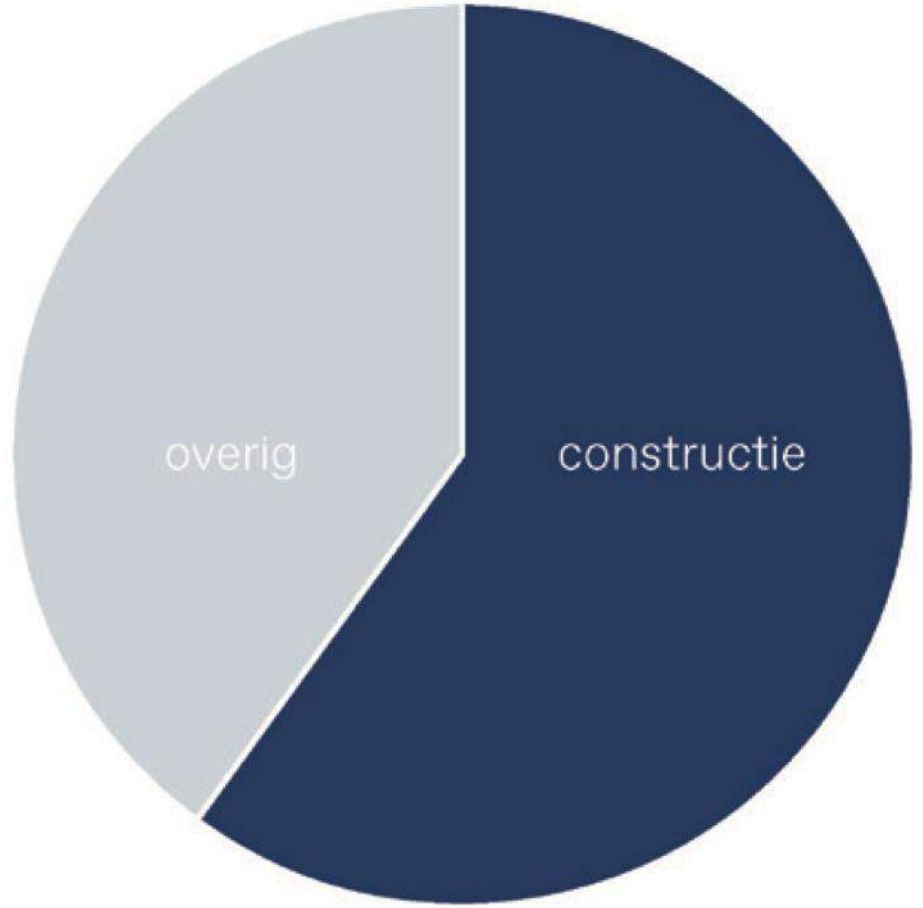


Meeste impact

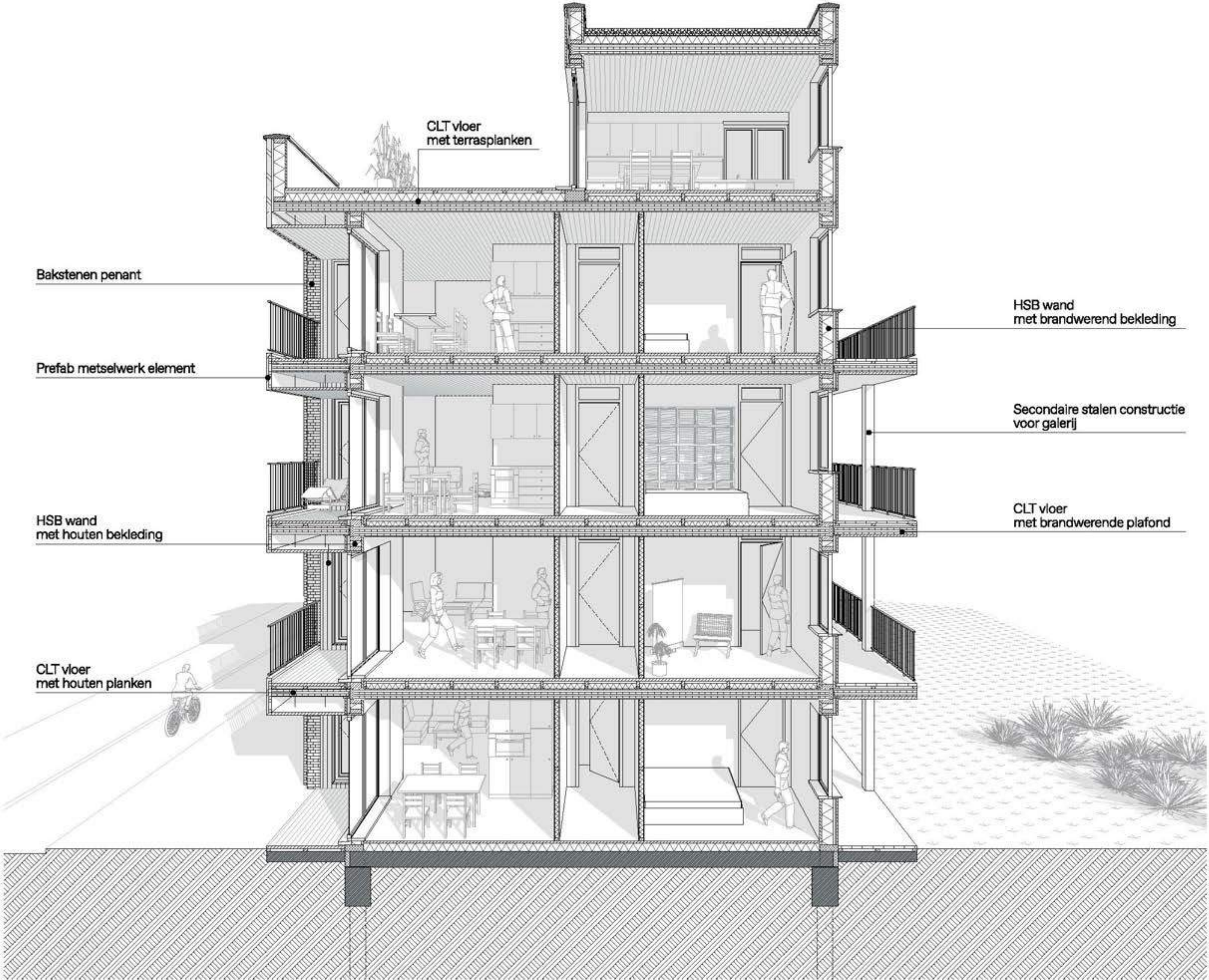
Aandeel bouwmaterialen in CO2 uitstoot (bron: Global ABC Status report 2018)



11% beton
10% staal
2% aluminium



Grunobuurt Groningen



Grunobuurt Groningen





de zwarte hond
architecture urbanism strategy