

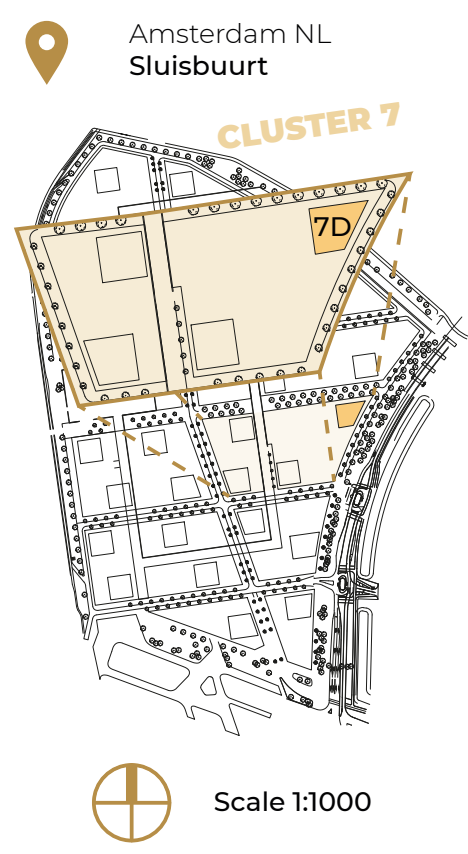
The City Blocks

HIGH

Scale 1:200
0 2 4 6 8 10 m

- Private (dwellings)
- Semi-public (commercial)
- Public (shared)

AR2FST010 - Studio 'High Rise Culture'
Final presentation | week 10
Thomas Kaasschieter (4696956) - cluster 7



Scale 1:1000

STORY

The High Blocks are located in cluster 7, placed on the plot most to the east. Because the bridge starts just a bit more south, this spot is not directly linked to the road next to it. This creates a quieter atmosphere, but also a good opportunity to have a view over the buildings east of the cluster.

The building is split up in 5 different blocks, placed on top of each other with an offset. They are between 4 and 8 floors. The offsets create an outside area on top of each block. All the blocks are split in half by a central public corridor. This corridor is used for transportation, but also for meeting, always with an opening to one level higher and lower.

Each block follows the same pattern in function and shape, with only the lowest being an exception. Here, at plinth level, there are only public and commercial functions, giving the building a good connection to the cluster. The other blocks all have a public layer at the bottom with an office floor one layer higher. The rest of the floors are dwellings. The public layer also has a connection with the top of the block below, which creates a public balcony with a view over the city. The public layers have a visually different structural system, which is not only needed for transferring forces, but also will give people the sense that they are on a special floor. The rooftop is next to a terrace also a park, a place where residents, employees and guests can meet each other, chill for a bit, and enjoy the view over the city and the IJ.

This unique way of mixing the functions creates a lively environment where people can meet the others. Where you'd normally have all the offices all concentrated on a few levels, splitting them up can create cohesion between the dwellers and the workers of the building.

The building is changeable over time, for this reason a column system and flexible facade are used. For instance, offices may be transformed to dwellings, of extra dwellings are added by replacing the walls.

The lift system is split into two parts. The two lifts that take you through the whole building will only stop once at each block. The other lifts will take you to the right floor inside of the block. You can reach that lift via the public space below or on top of your level where you want to be. This way, the inhabitants and other users of the building will come across other people. It's in a way taking away some of the convenience of the direct lift, to have people meet others.

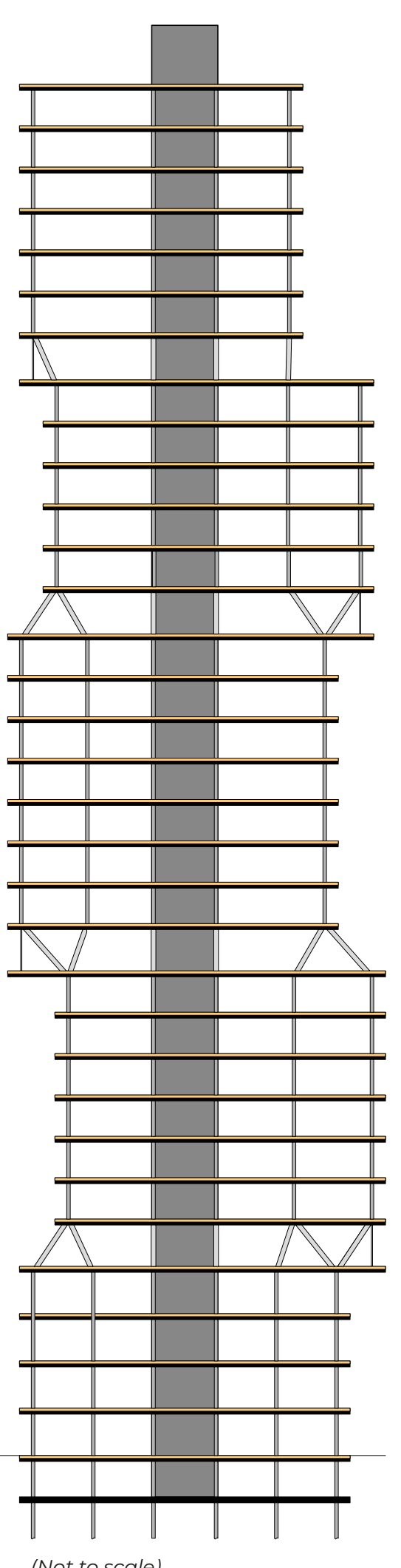
DATA

Building height: 122 m
Number of floors: 34 (incl. basement)
Volume: 83.10 m³
Number of lifts: 7 lifts (in 4 shafts)

Floor area:
Inside: 26.347 m²
Outside area: 24.976 m²
1.371 m²

Public and transport:
Commercial: 12.528 m²
Dwellings: 3.750 m²
8.718 m²

Number of housing units: ca. 68
Number of trees: ca. 80



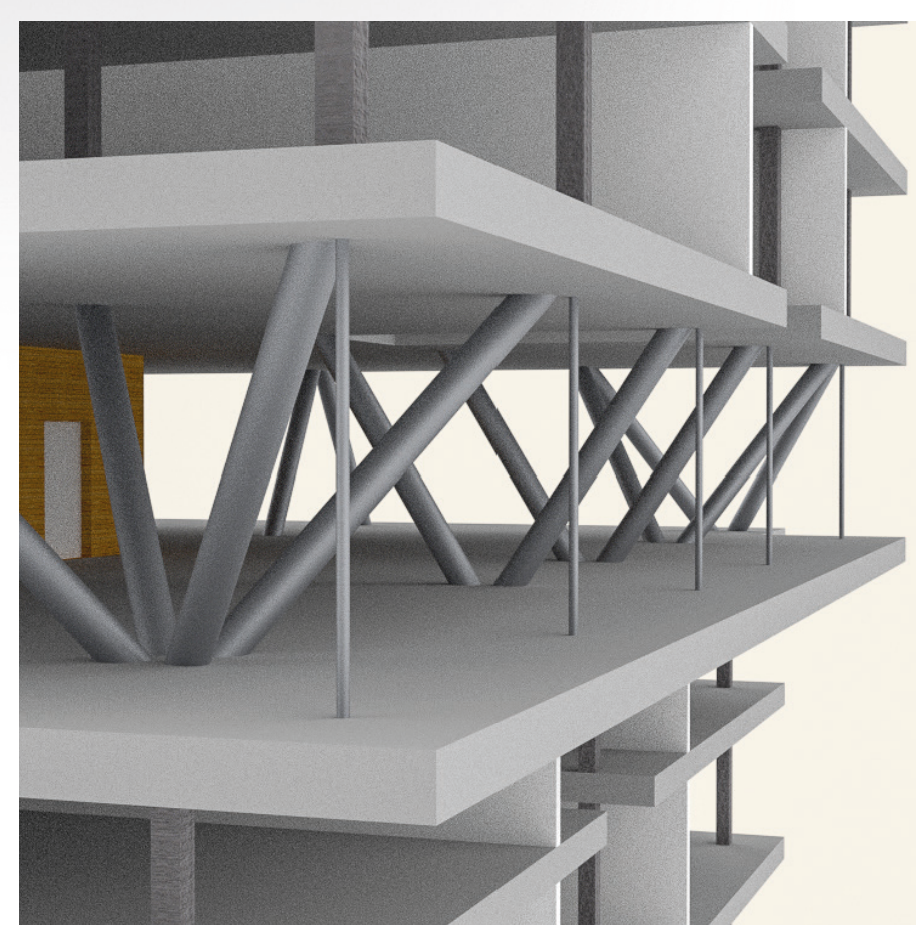
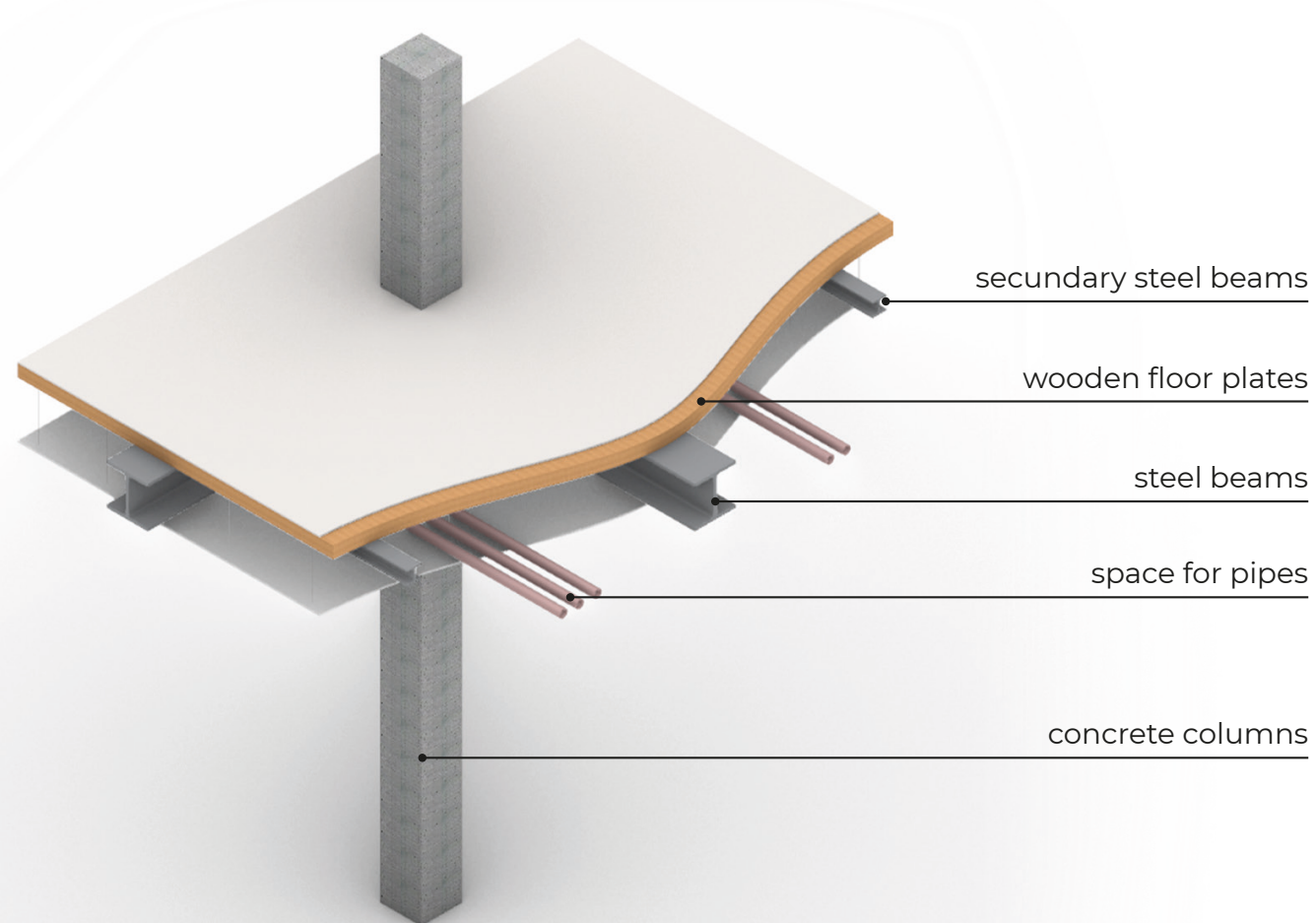
(Not to scale)

STRUCTURE

The building uses a column system rather than a disk structure, this way the interior of the building can easily be changed if needed. Also, the amount of housing and commercial units can change this way.

The building uses a true hybrid structure. The regular beams are made from concrete, which is best for compressive forces. The beams are made of steel, best for traction. And the floor plates are made from wood, for sustainability and the light weight of the material. To overcome the shorter spans possible with wood, secondary beams are added.

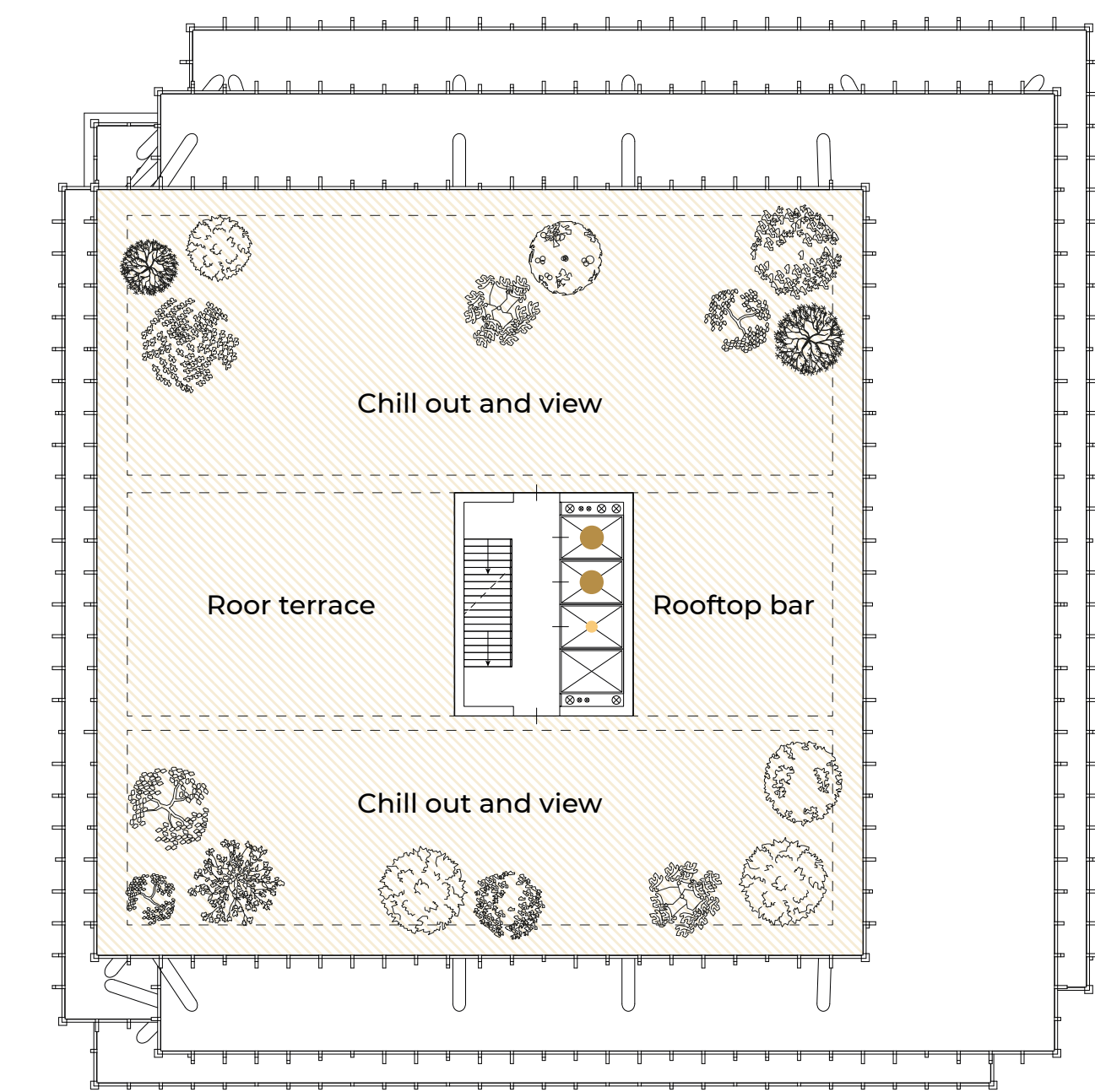
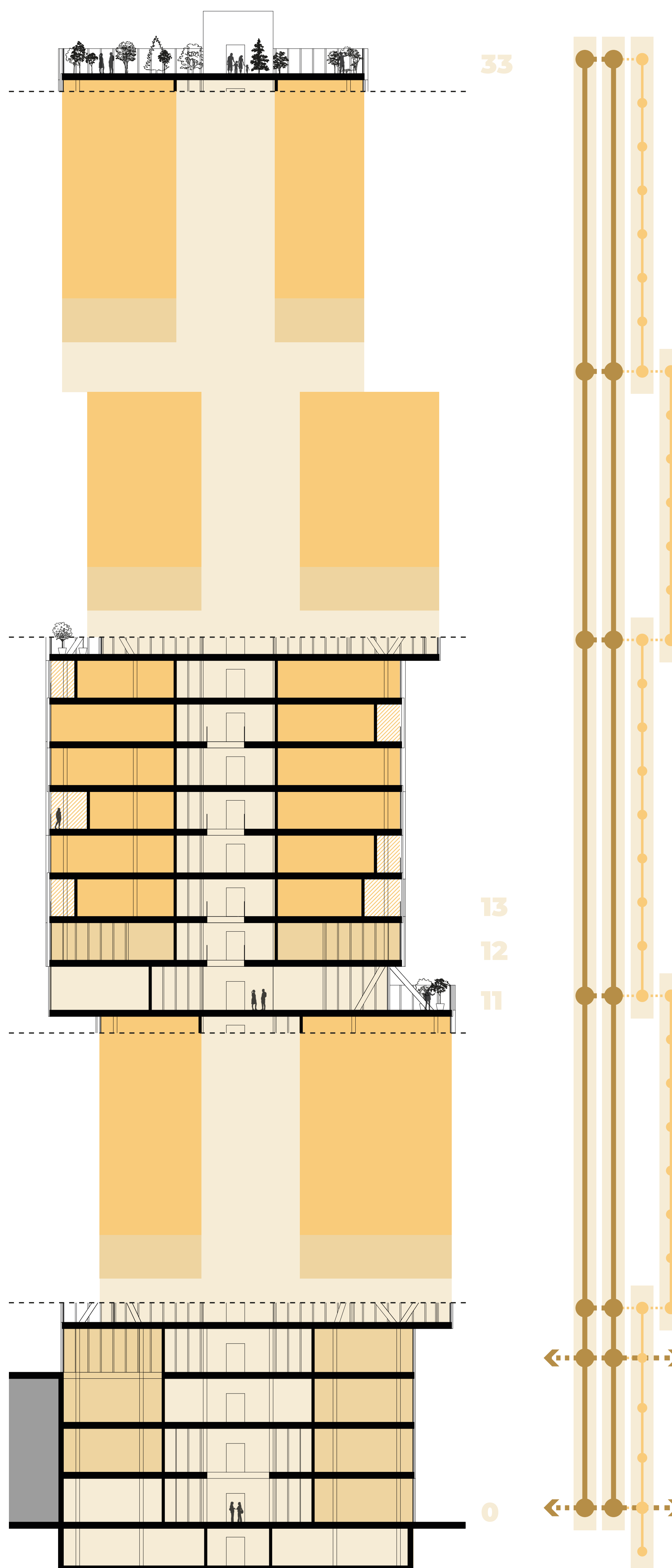
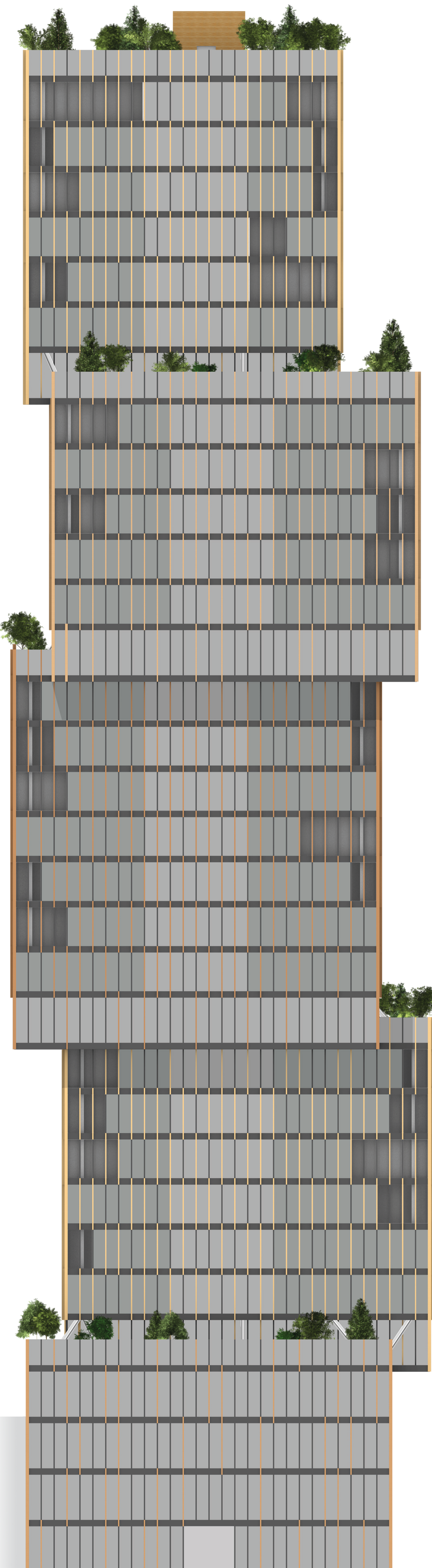
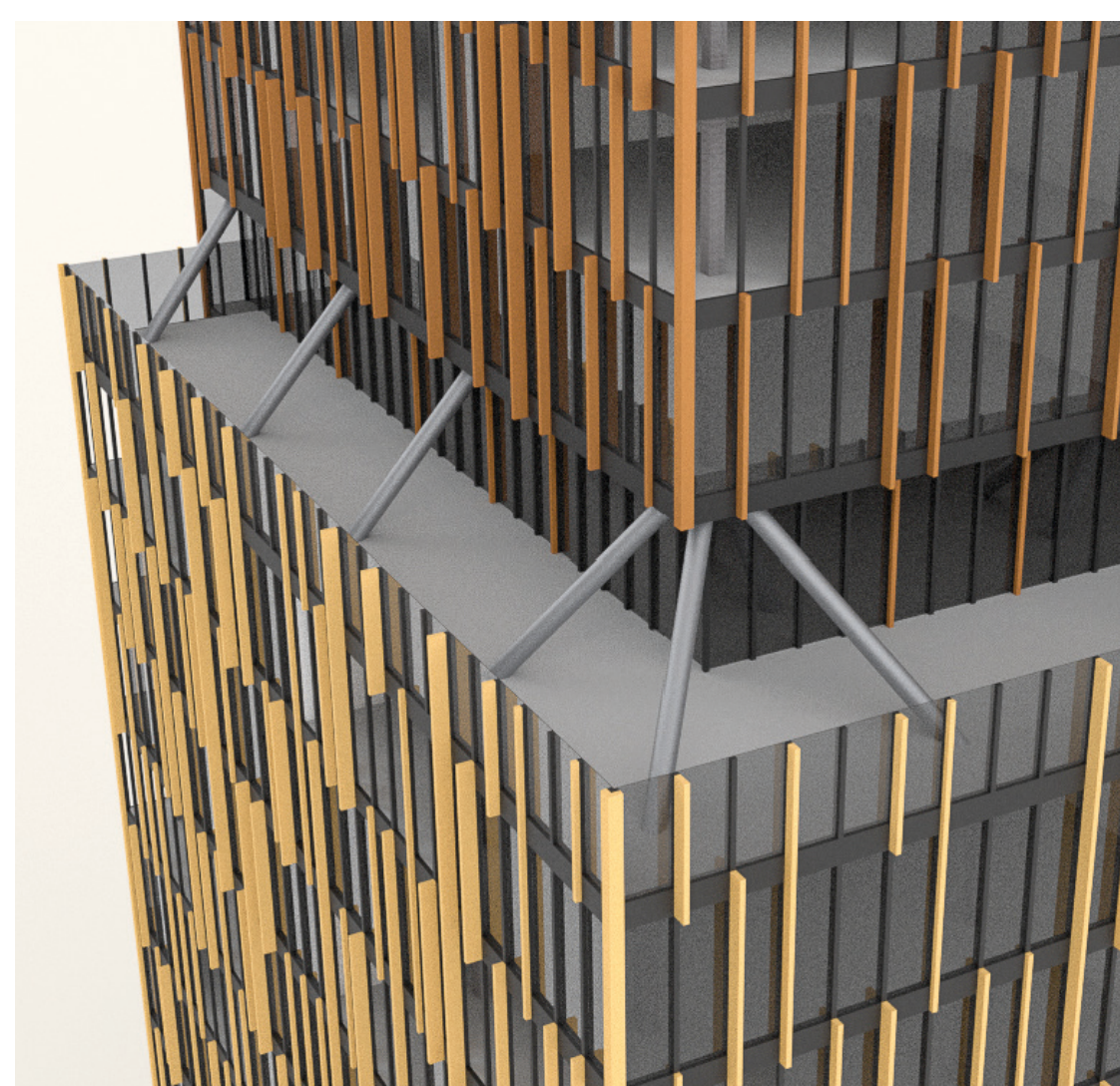
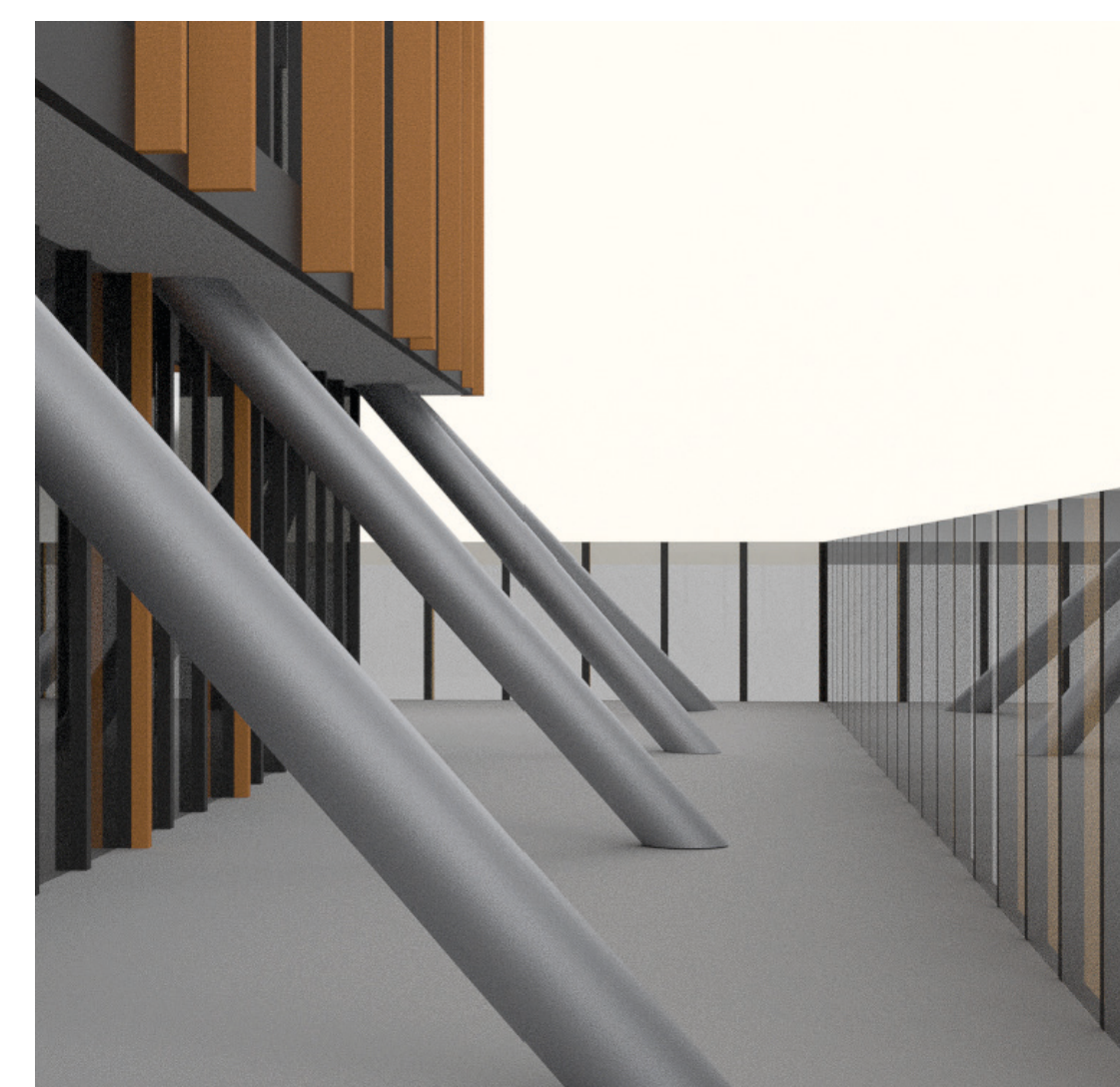
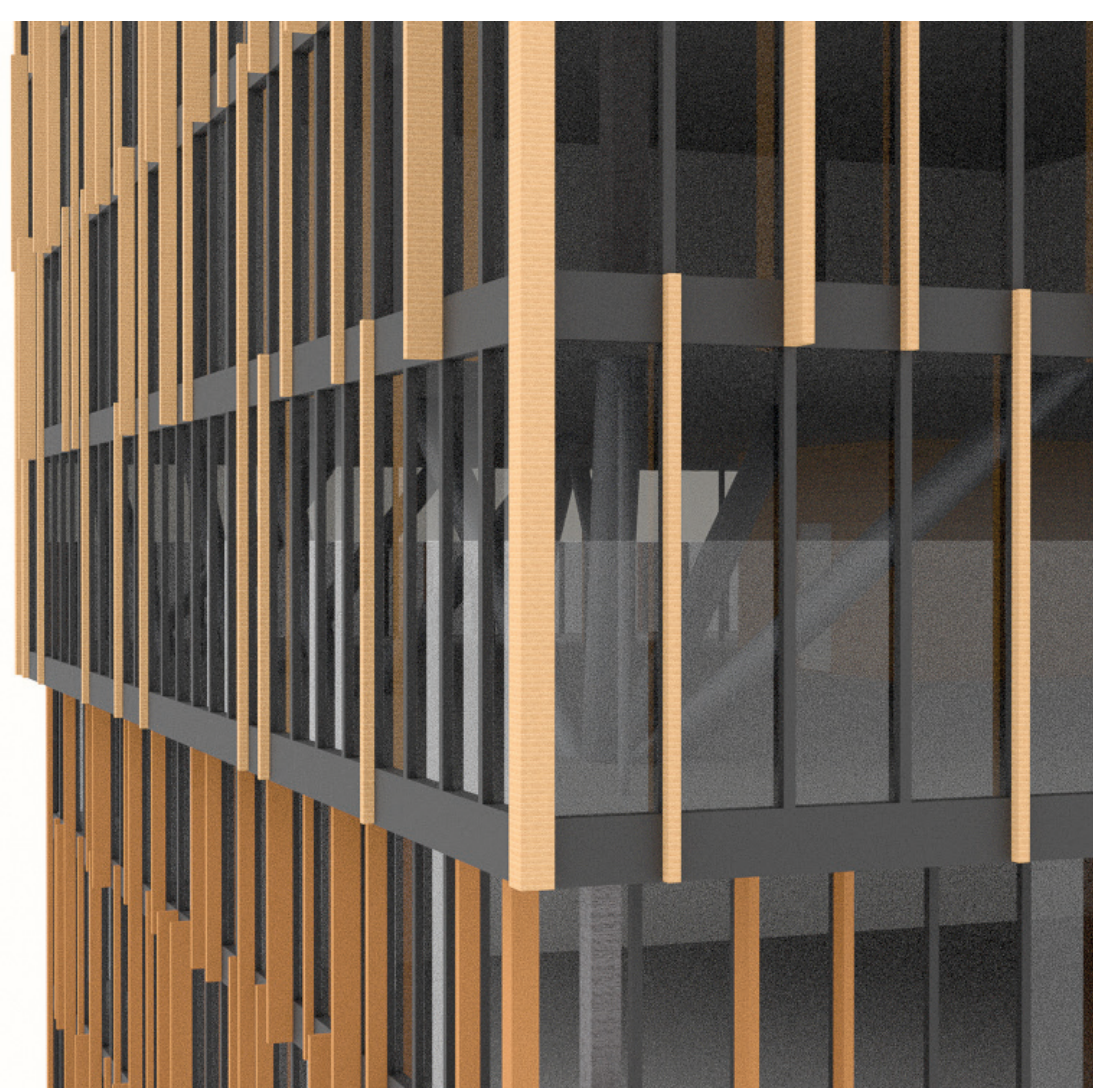
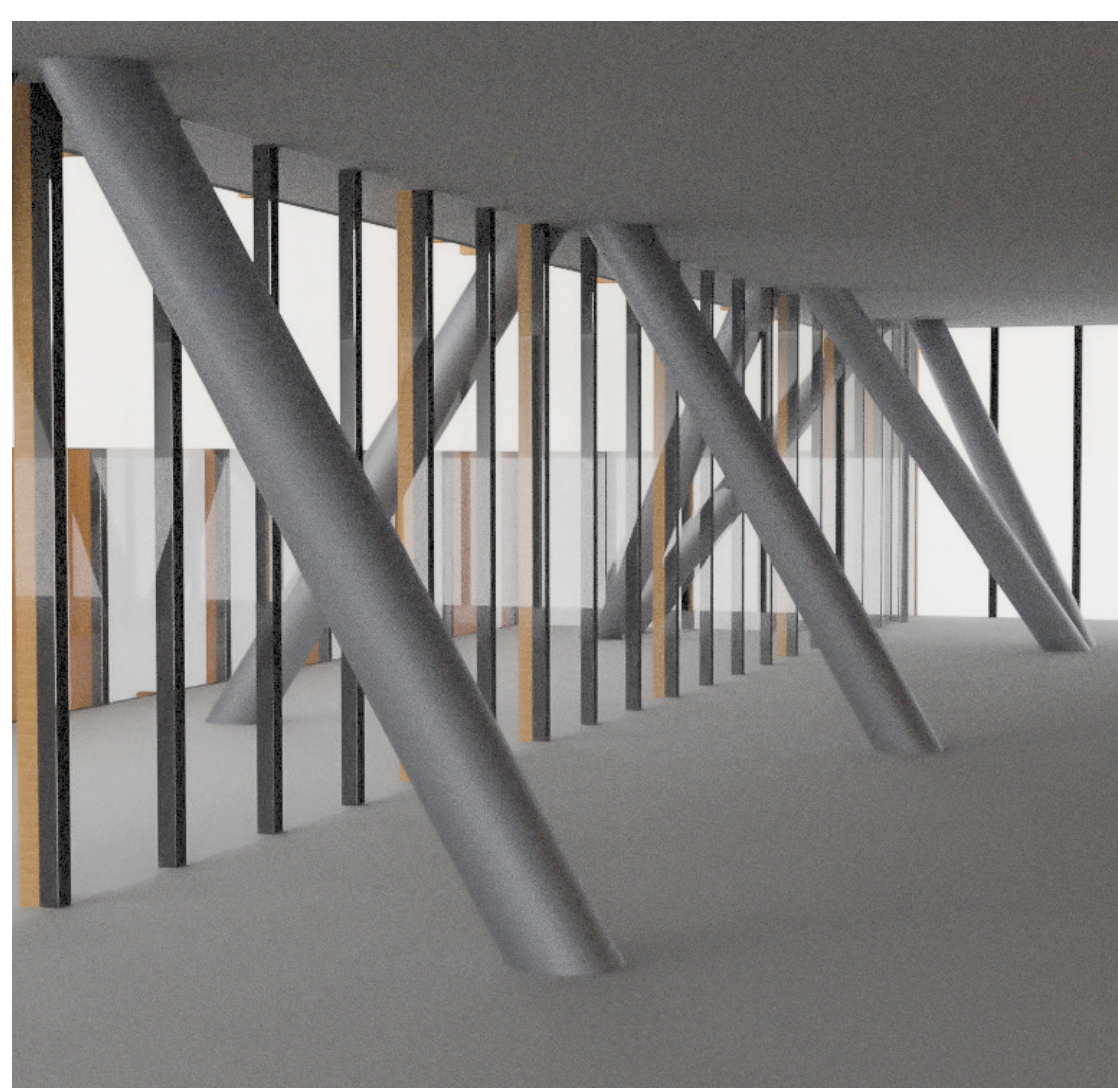
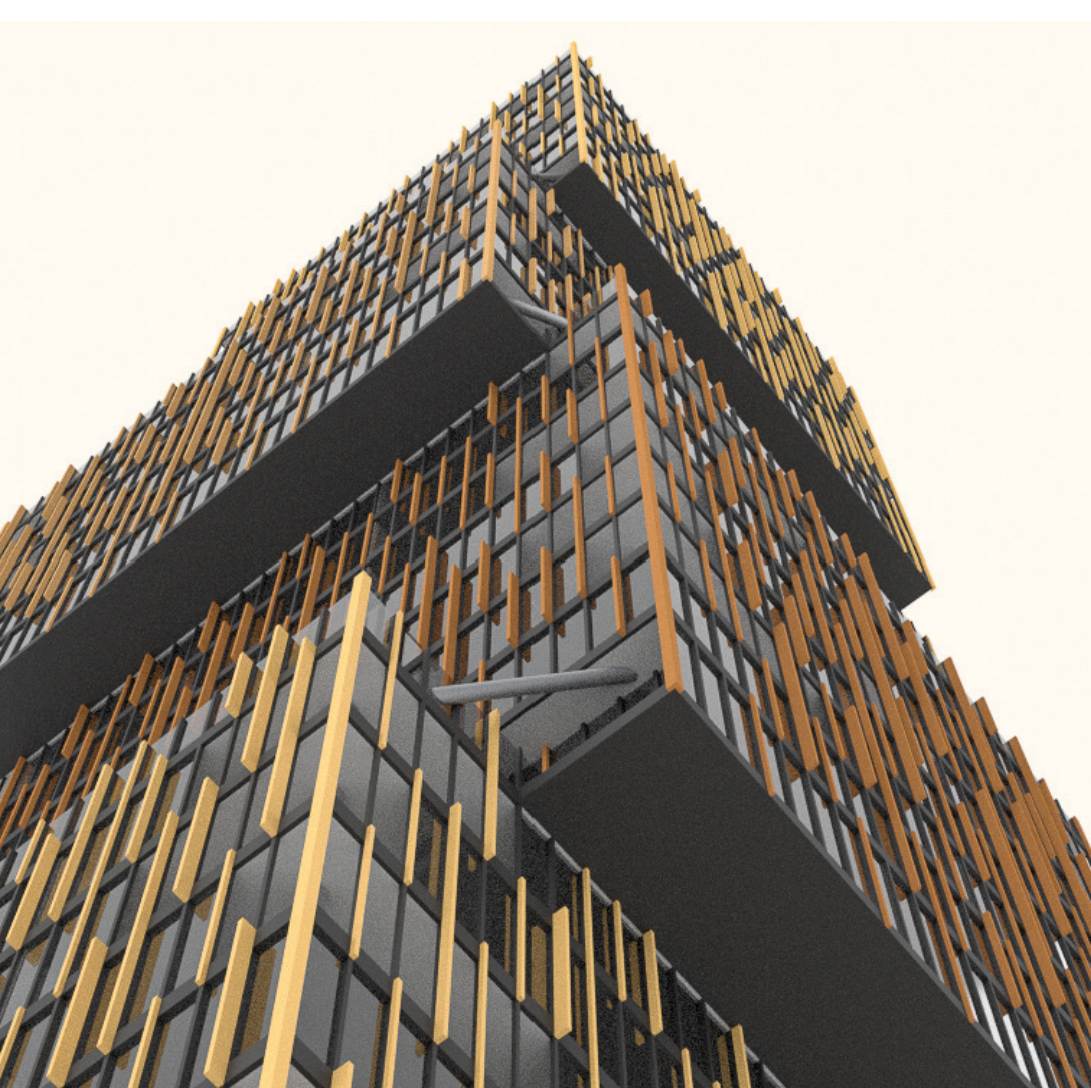
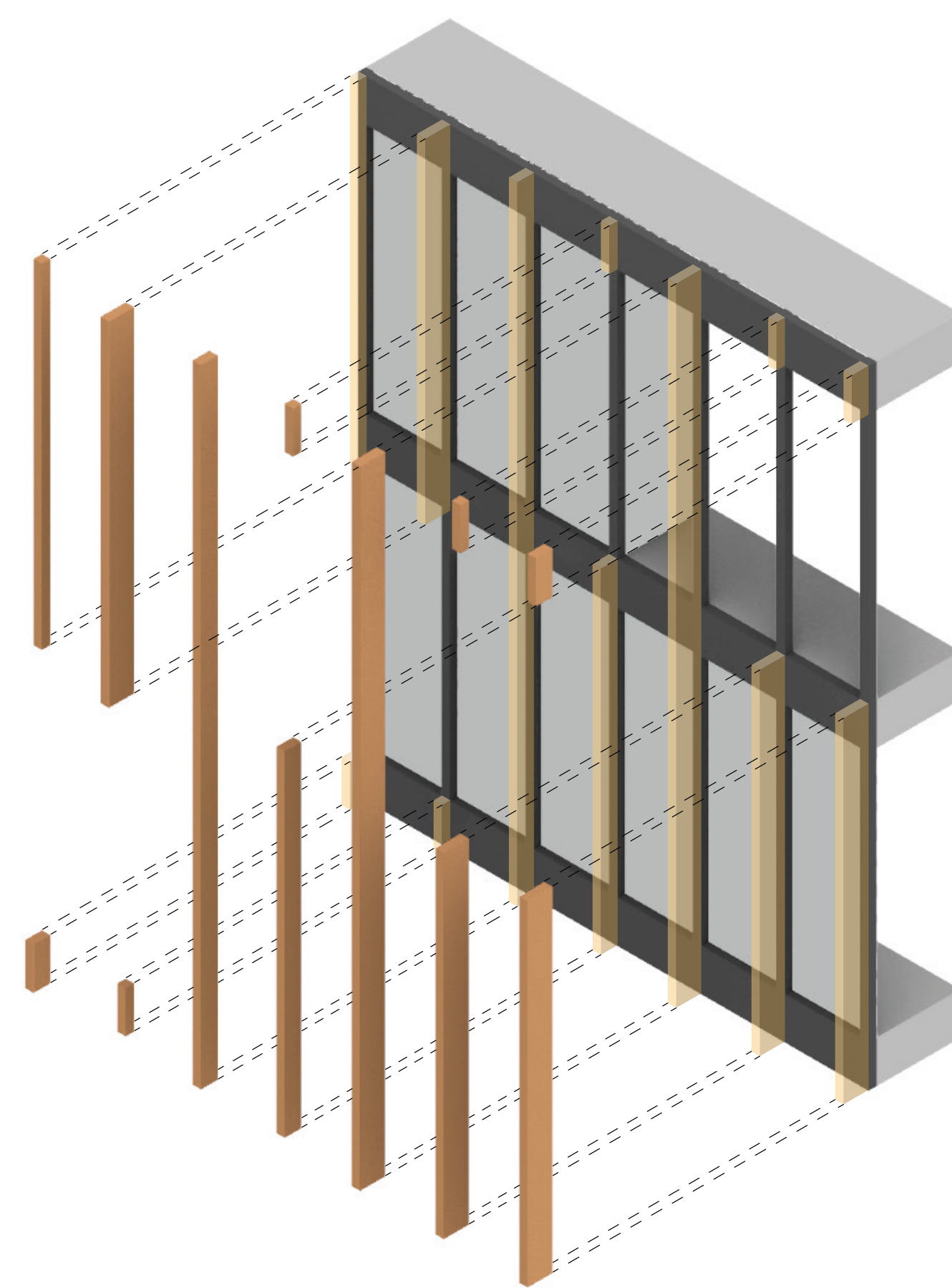
The floors in between the blocks have special diagonal beams, transferring the forces from one grid to another. These beams are round and made from steel to work the best. Smaller cables hold the floors not carried by the columns below.



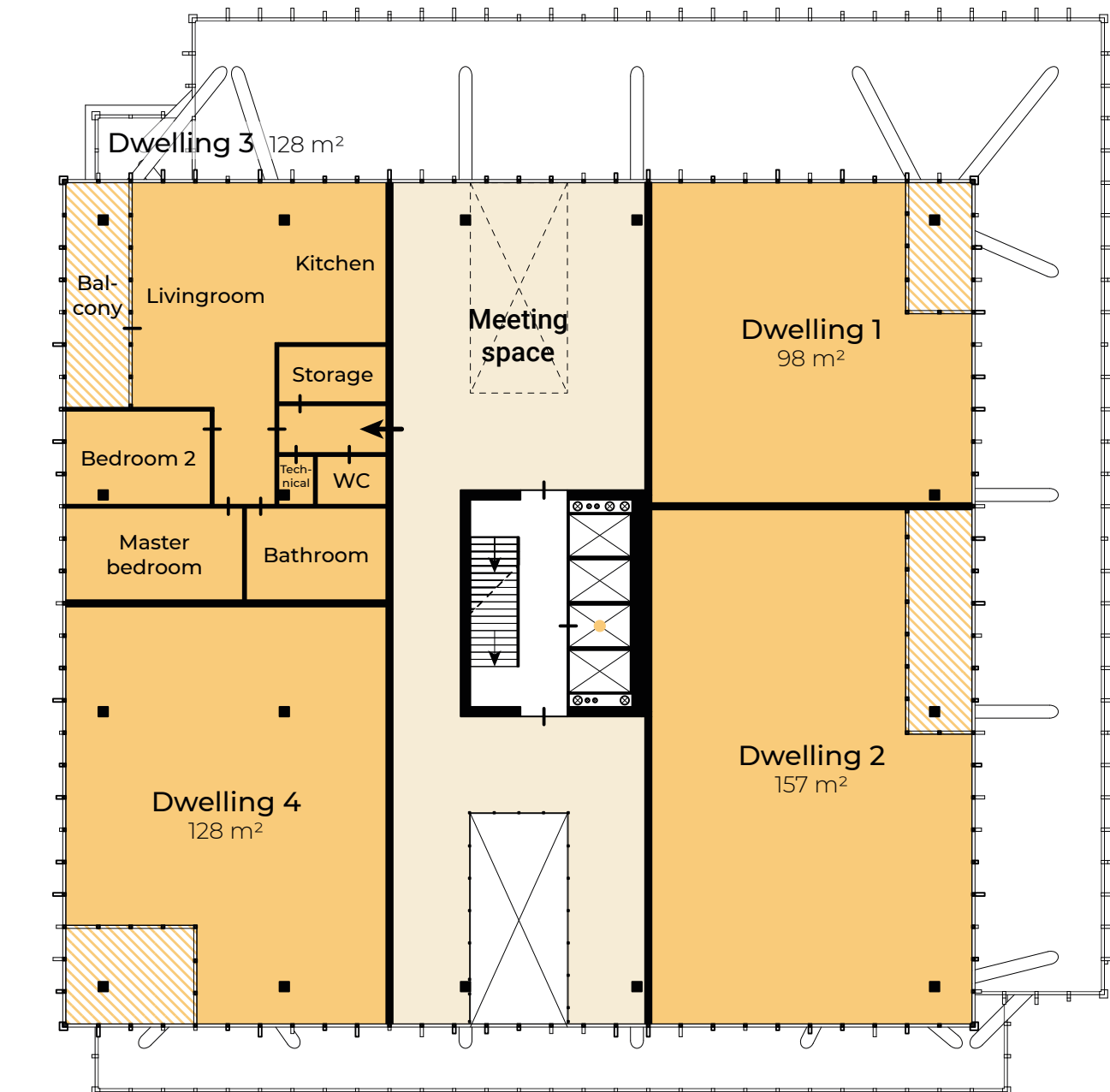
FAÇADE

To reach a flexible interior, the facade system needs to be logical and easy to change. The facade consists of a basic grid frame of 1 metre, in which each panel can be closed, a glass window or taken out entirely. If taken out, there is a possibility for a balcony behind the facade, so these balconies are inside of the facade frame. The panels can be exchanged. To enhance the differentiation, each building block is made from a different wood (colour).

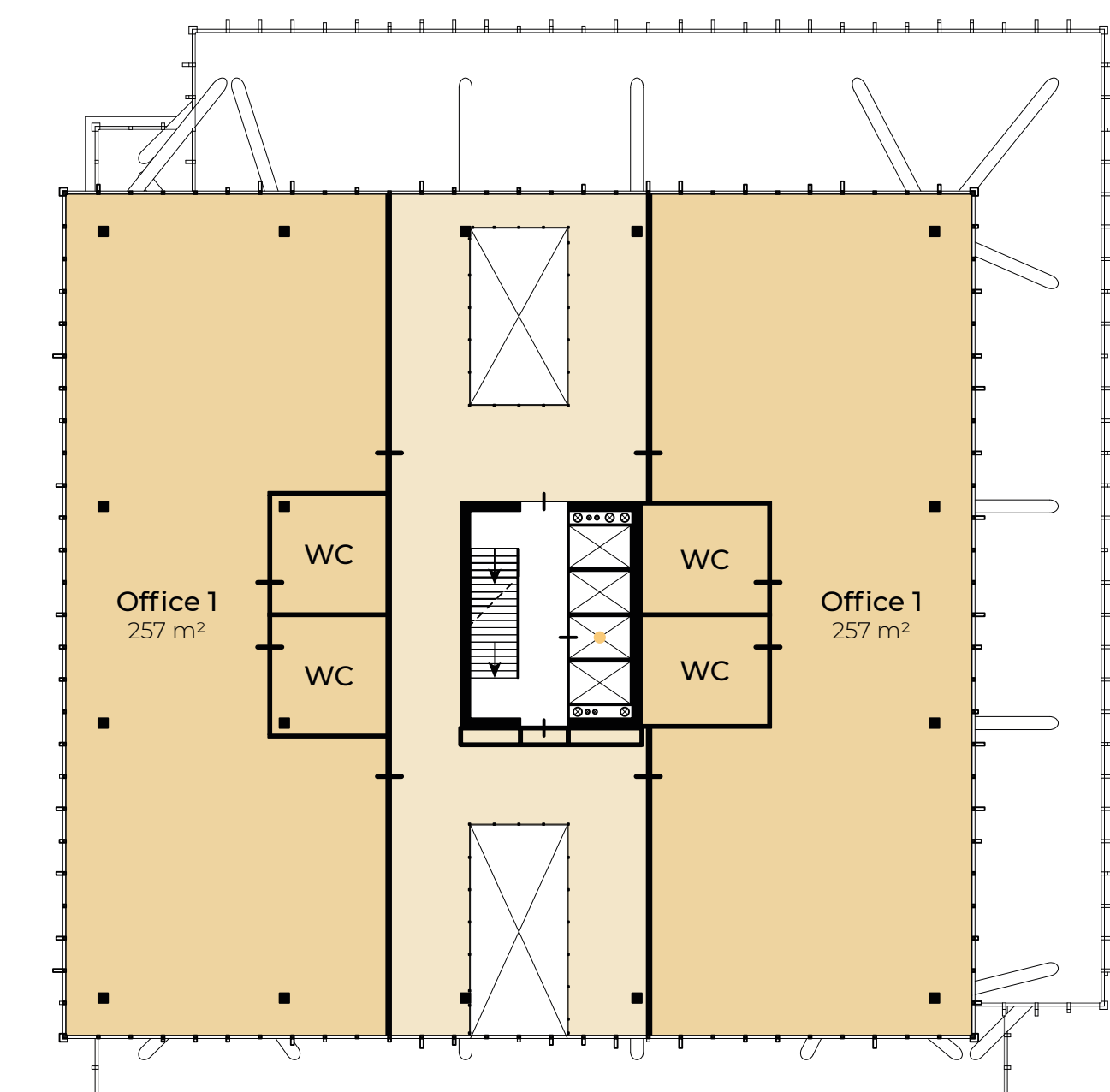
Outside of the frame, wooden beams are mounted to the main frame in a pseudo-random way. They can be in three different thicknesses (100, 200 and 300 mm), and may span one or more floors. The areas where the facade covers private floors, such as dwellings, the beams will be more prevalent and thicker. Public floors have less and only the thinnest beams.



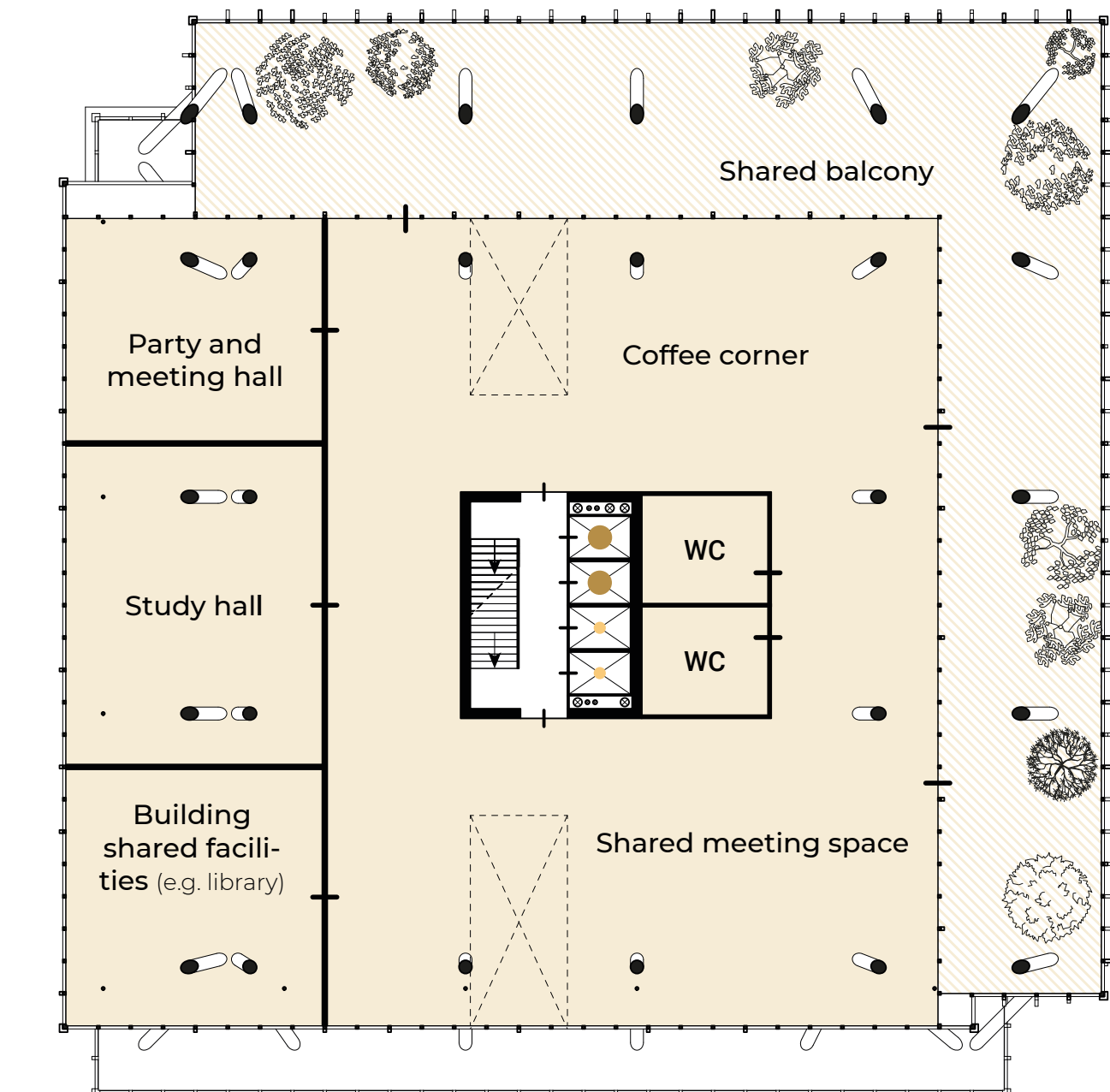
33 ROOFTOP



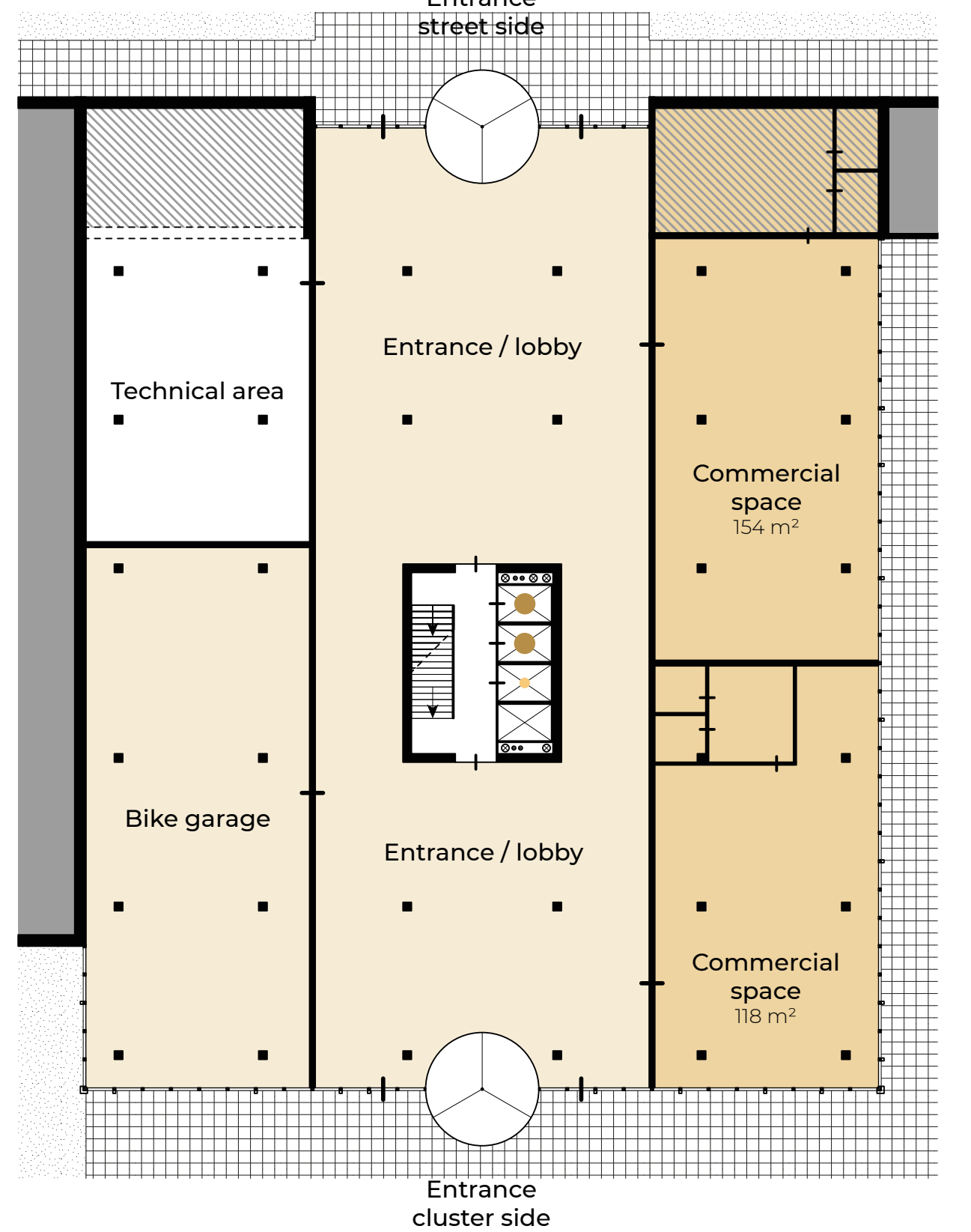
13 DWELLINGS



12 OFFICE



11 PUBLIC



0 PLINTH

PERSONAL HIGH RISE

BY THOMAS
KAASSCHIETER

High-rise can be very overwhelming to live in. You normally enter the building, to go directly into the lift, you cross a narrow corridor and walk in your dwelling without even having said "hi" to anybody. This kind of high-rise only contains dwellings and maybe a public plinth, but for the residents, there is nothing else but their own house. This makes the high-rises very anonymous, leaving the residents to become lonely. Because the residents are becoming used to being alone in the high-rise, this loneliness will even further increase in a vicious circle, so after a while they will not even try to contact their neighbours.

360°, Rotterdam
Kraaijvanger Architecten



The block system provides for recognisability and a smaller scale. It also creates outdoor spaces on top of the blocks, which can be used for a common function. Kraaijvanger designed this concept into their 360°, so that the residents can hang out on the same spot and not in their homes.

The shared functions are on the inside atrium, which will let the residents and employees walk straight into their neighbours when leaving their house. The lowest level of all the blocks is also shared, with some functions (such as working spots and a chill out) are focussed on the residents of the blocks, whilst others (such as a gym and bar) are meant for the building and even city as a whole. Every block has these public functions, so the blocks don't become isolated islands in the city.

This lift transferring system is like a tram line. You must first go to the station, before you can enter the line, walking past your neighbours and public functions. In the building you first have to take the block interior lift (the walk to the station), before you can take the lift that spans the whole building (the tram line).

Tram 26, Amsterdam
GVB



Zuiderzicht, Antwerp
KCAP architects & evr-architecten



The best and sociable neighbourhoods are not monotone but have a high level of mixed use and various people. Also, varied places tend to be more resilient to crisis, so it stays a vibrant place. The building needs to be flexible to accommodate this mixture. So, the variation can change over time. KCAP Architects designed the Zuiderzicht in Antwerp with this in mind. The target group of the project is 'everybody', but of course that changes over time. The structure is created in such a way, with a column structure, for the inside to be changeable. If needed, larger or smaller offices and dwellings can be created.