

# WATERLOO 115

ATAMA CARMODY GROARKE ECOWORKS

# Five ideas rooted in heritage

## 1 Urban Connections

Opening up the plinth and courtyards connects the project to its context and increases accessibility on all sides of the building.



Street scene with courtyard access.

## 2 Restoring the crown

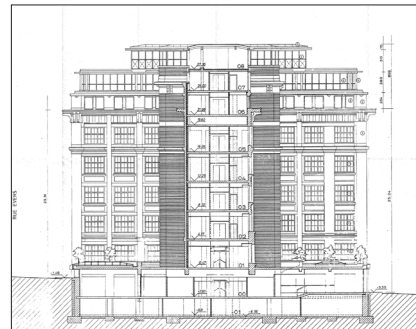
Historically the cornice was a closed part of the facade. We will restore it to its original status and promote improved daylight, ceiling heights and living conditions.



Historic facade with closed cornice.

## 3 Optimising the hidden levels

Don't waste space. By strategically optimising the free height of the lower ground and of the 'hidden' sixth level, we reduce development risks and win an extra floor of valuable space.



Section building application 1996

## 4 Good living

In both the existing spaces and the new extension, our ambition is to reveal the original qualities of the built heritage, such as generous clear heights and optimal daylight conditions.



Interior image with daylight, characteristic rooms.

## 5 A hotel is a destination

The hotel will become a landmark destination for Brussels; reinforcing its distinctive architectural character with complimentary additions that amplify its heritage.



Main entrance with listed framing.

# 1 Urban connections

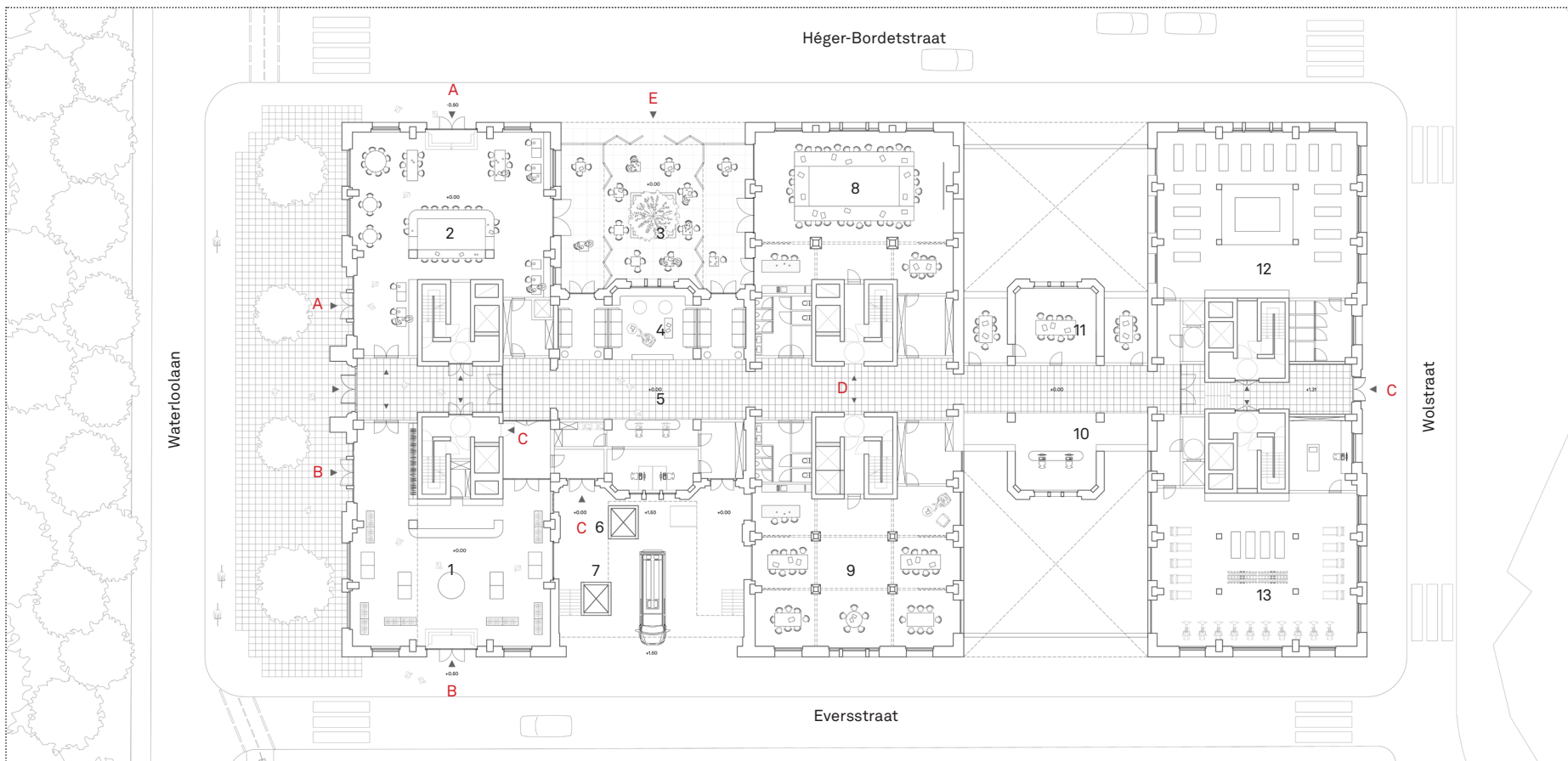
## Urban Connections

The plinth of the building will be opened up and animated with new public functions. A new restaurant, on the corner of Waterloo Avenue, will be accessible from both the street and the interior. A partly covered space in the inner courtyard will create an all-weather hospitality space, that can expand in good weather using folding glazed doors, to fill the entire courtyard. Planting in the courtyard will be chosen to withstand the urban climate and improve biodiversity. Carefully located planting on the new balconies will help to control privacy between hotel and residences and help lend a residential character to the building in the street.

New awnings at street level signify the increased public activity of the ground floor and help extend the activity of the building into street life.

The courtyard on Evers Street is similarly conceived but serves as a discrete residential access and a services point for the Hotel. The topography around the site was carefully studied and maximum accessibility is ensured.

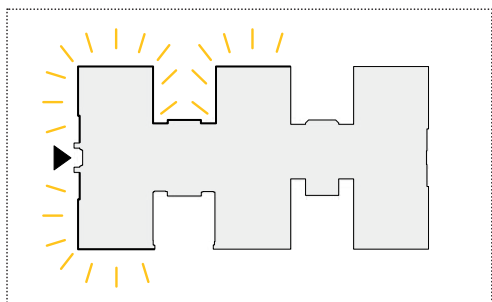




Plan ground floor  
Legend:

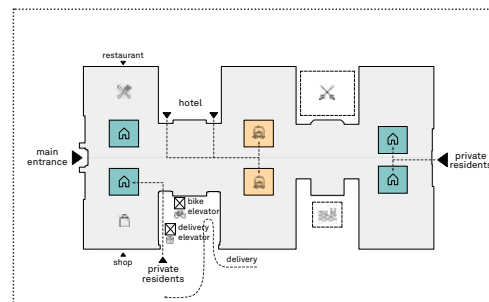
1. retail shop
2. horeca
3. hotel courtyard
4. hotel lobby
5. hotel reception
6. bike p. elevator
7. goods elevator
8. meeting room/  
convention room
9. offices/meeting  
rooms
10. sports reception
11. meeting rooms
12. sports
13. sports

- A. entrance horeca
- B. entrance retail
- C. entrance residents
- D. access hotel rooms
- E. access courtyard



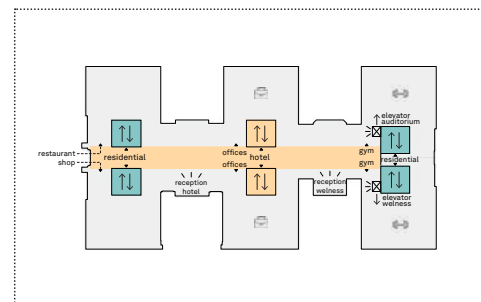
### 360° active edges

The project adapts itself to the urban fabric intelligently, positioning the more engaging programs on the front edges, creating a clear front to the building at the level of the plinth.



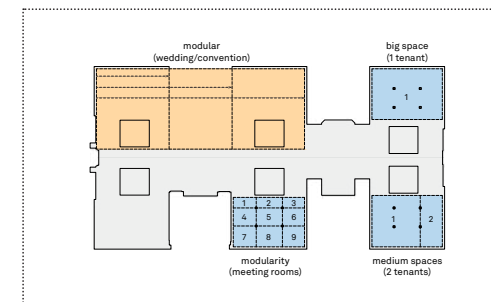
### A legible ground floor

All flows in the building have been carefully studied so that they can happen independently. Extra attention goes to residents who have separate entrances. Crossing to the underground car park is also logically situated.



### Flows

Three new circulation cores are logically located along the central axis. The central core serves only the hotel. Two receptions are located along the central axis: one for the hotel, the other for the sports/spa facility. Separate lifts lead to the auditorium at +1 and to -1.



### A flexible ground floor

The restaurant, courtyard and large meeting room can be used together for events or small conferences. The meeting rooms can be divided into different sizes. The shop can be divided into two separate shops.

# 2 Restoring the crown



## Cornice

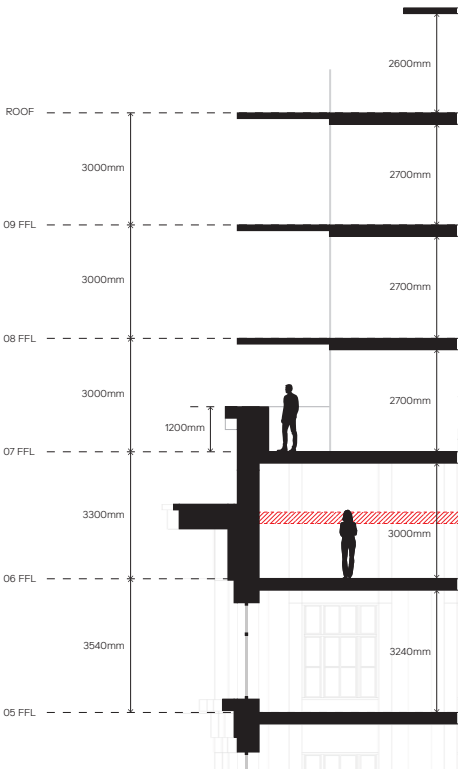
The cornice, originally a closed element of the facade, was partly opened up over time by inserting windows. It will be closed again, restoring it to its original state.

The space behind the cornice has limited daylight qualities, offers little or no scope for quality private outdoor space and views are very limited. We see this building layer as a serious development risk. Our approach is to adapt the internal level and allocate it to technical space and private storage, freeing up highly valuable space in the basement to instead be used for sports or conference functions.

## Crown

The addition is respectful of the built heritage, from which it derives certain elements. The first layer above the cornice has a heavier facade construction, with terraces between pilaster elements in the same natural stone as the cornice.

The two upper levels are lighter and are made up of cantilevered metal-clad balconies that recall the gable end of the existing building. Between them, wooden columns are placed at the rhythm of the base. The cladding of the facade is in wood, fully protected by the overhanging balconies.

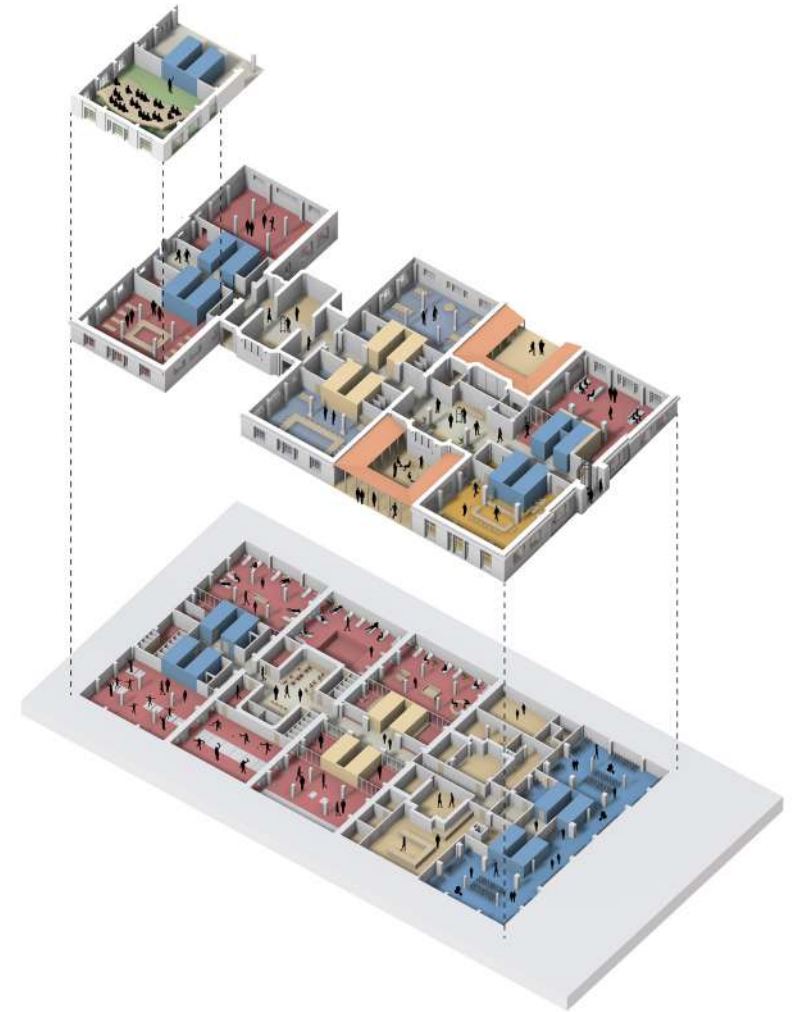


Sectional study



Corniche level today.

# 3 Optimising the hidden levels



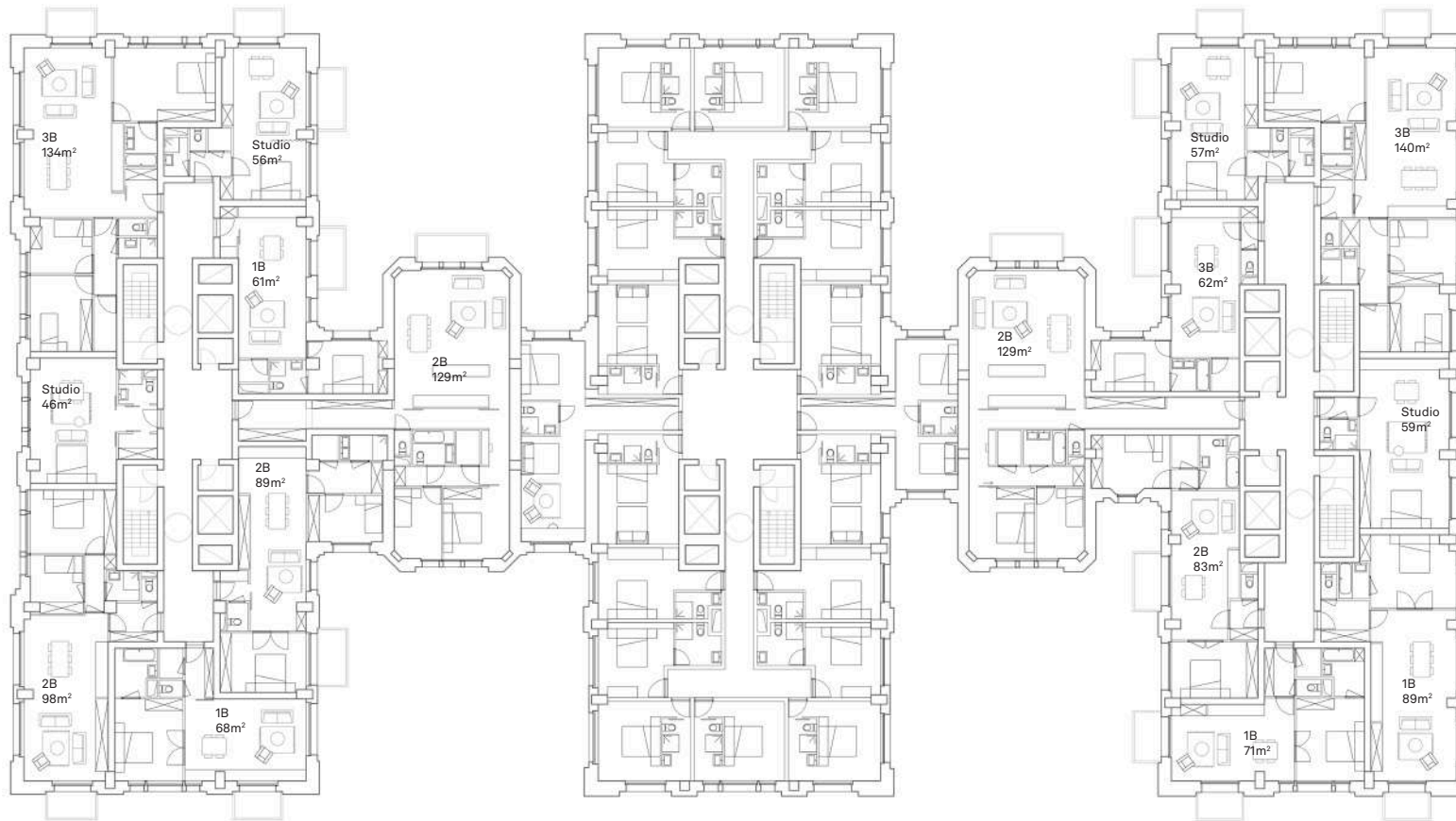
## Liberating the lower ground

By removing the upper slab that caps the transfer structure at level six, we free this zone up and can capitalise upon it. By creating a technical floor behind the cornice, we can take advantage of the basement for other programme, like sports, spa and wellness, and conference facilities. Analysis of the basement shows that we can strategically increase its free height up to 2.8m in the lowest areas, as well as create two large double-height basement rooms up to 4.5m high that benefit from daylight from above.

In the above axonometric view and spatial vignettes, we depict the potential of the plinth (ground and lower ground floors) as an extensive sports-spa-conference facility of up to 3,000m<sup>2</sup>, made possible by the new technical and storage floor at level six. By freeing the basement spaces for other uses, and by strategically adjusting the clear height, development risk is reduced, and the plinth is fully activated.

Axonometric drawing

# 4 Good Living

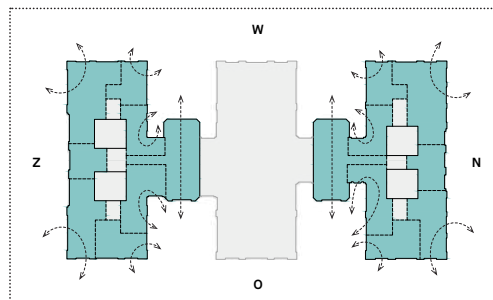
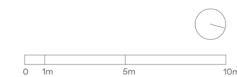


## Good Living

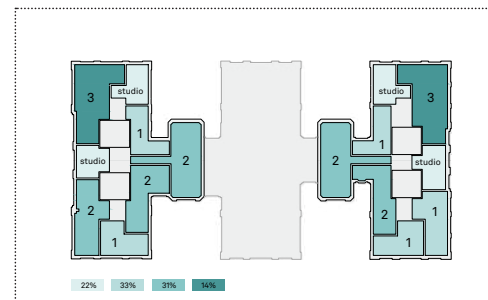
The residences will be arranged in the front and rear wings around compact new circulation cores that comply with high-rise building regulations. Maximum account is taken of the existing structure and window layout.

Almost all flats have two facades and a private outdoor space in the form of a carefully designed balcony of lightweight metal construction, taking their cue from those visible in historic images of the building. Bathrooms and (technical) storerooms are placed centrally, so that all rooms enjoy maximum daylight.

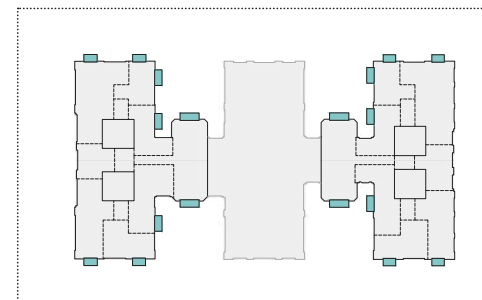
Privacy between hotel and residences is guaranteed by avoiding conflicts in the inner corners of the plan, where hotel and apartments are closest to each other. The regional urban development regulation (GSV) is respected.



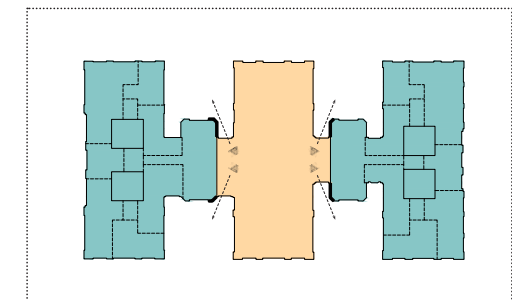
A maximum of flats with multiple facades was obtained.



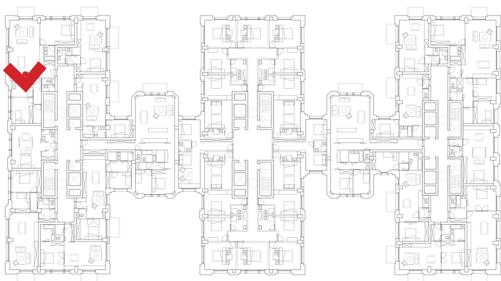
Distribution of flats by size.



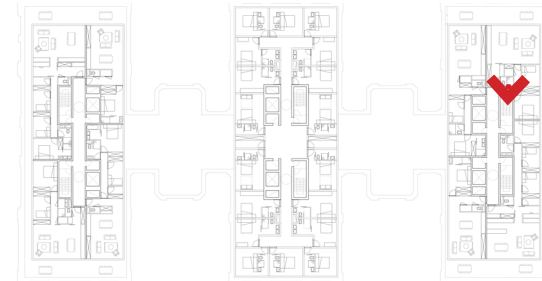
The position of private outdoor spaces.



Privacy between hotel and apartments is managed by precisely designing the internal corners.



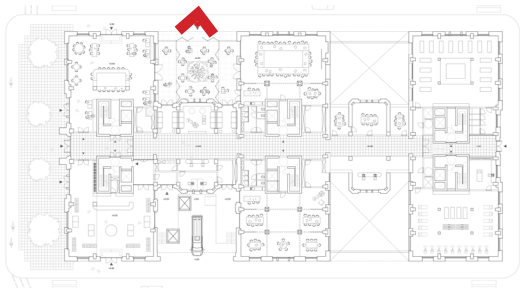
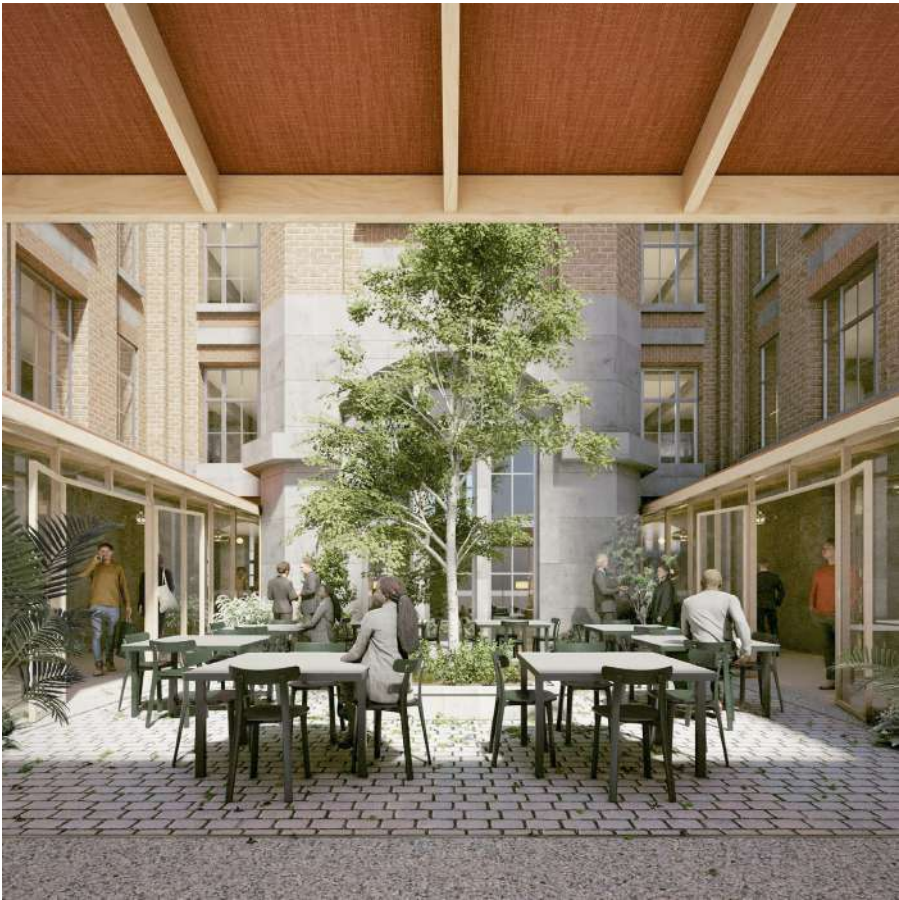
Interior view of an apartment in the existing building, taking advantage of the generous existing window area to allow for maximum natural daylighting.



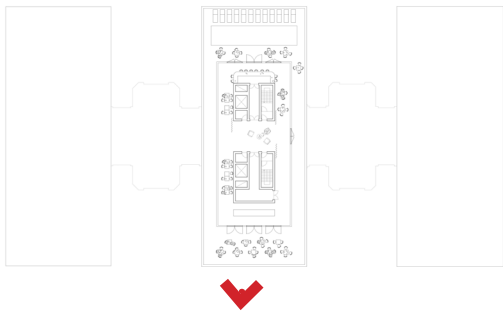
Interior view of an apartment in the new extension, featuring floor-to-ceiling glazing and sizeable outdoor terraces.



# 5 A hotel is a destination

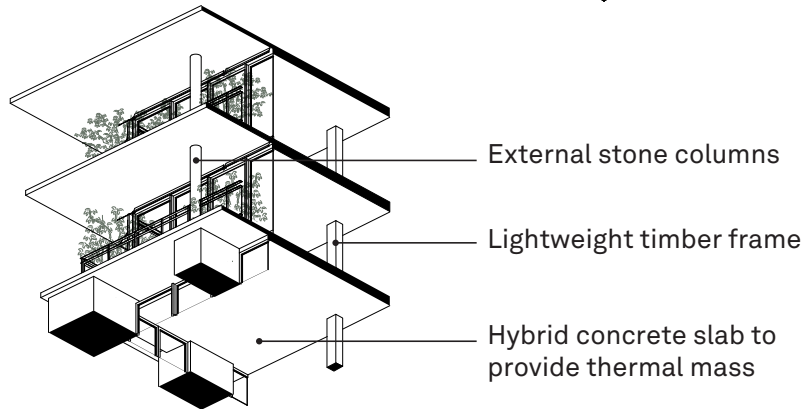
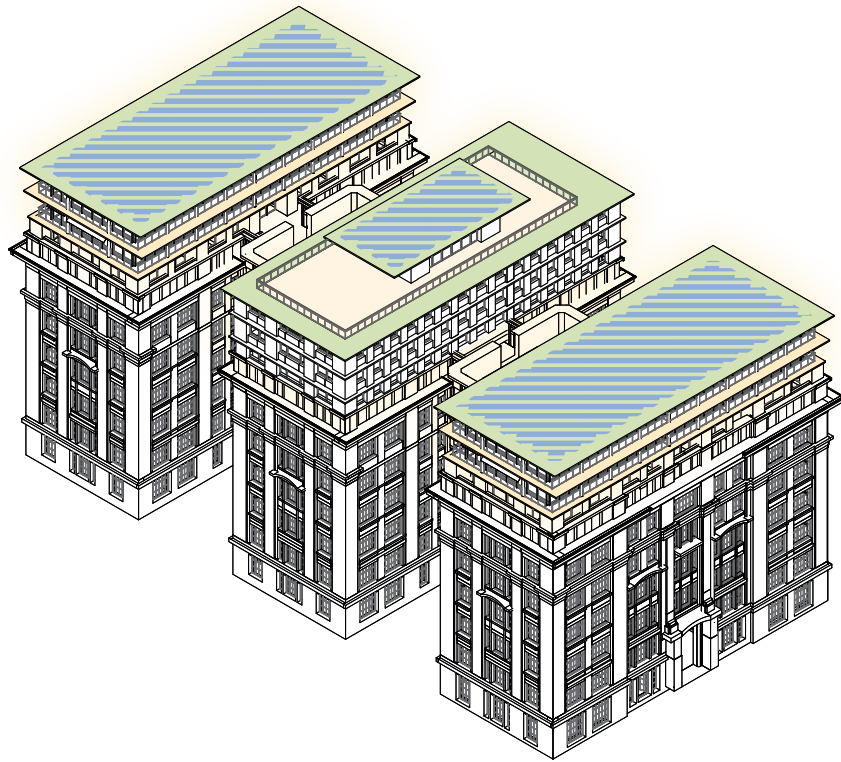


View of the south-facing courtyard. The partially covered outdoor space is accessible from the street and connects to the restaurant and multifunctional space of the middle wing.



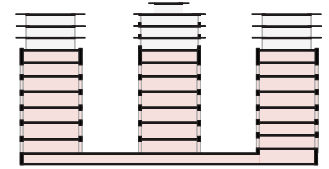
A pavilion with a bar and infinity pool will be situated on the roof, with views over Brussels. Vegetation and an accessible zone up to the appropriate distance from the roof edge guarantee privacy for the flats.

# Doing the Most with the Least



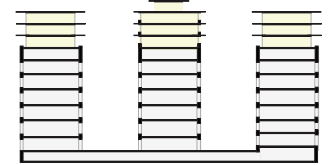
## Designed to Retain

The retention as much of the existing building has been prioritised. Carbon intensive activities such as removing slabs are limited to where they will have the most impact.



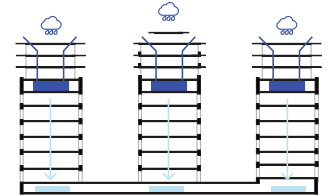
## Designed to Reduce

The new primary structure is proposed as a timber and concrete hybrid. Timber reduces weight whilst concrete slab tops provide thermal mass to the apartments.



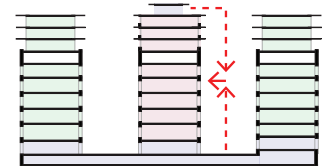
## Designed to Reclaim

The buildings roofs will host a PV array, whilst water will be reclaimed for grey use and irrigation.



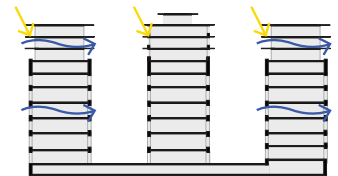
## Designed to Reuse

The buildings systems can be optimised to reuse heat generated from hotel and sport activities in residential spaces and optimised for differing day and night uses.



## Designed for Living

All 1,2 and 3 bed apartments have dual aspect with a balcony. They can be naturally ventilated and have excellent levels of day-light. The new slabs provide solar shading.

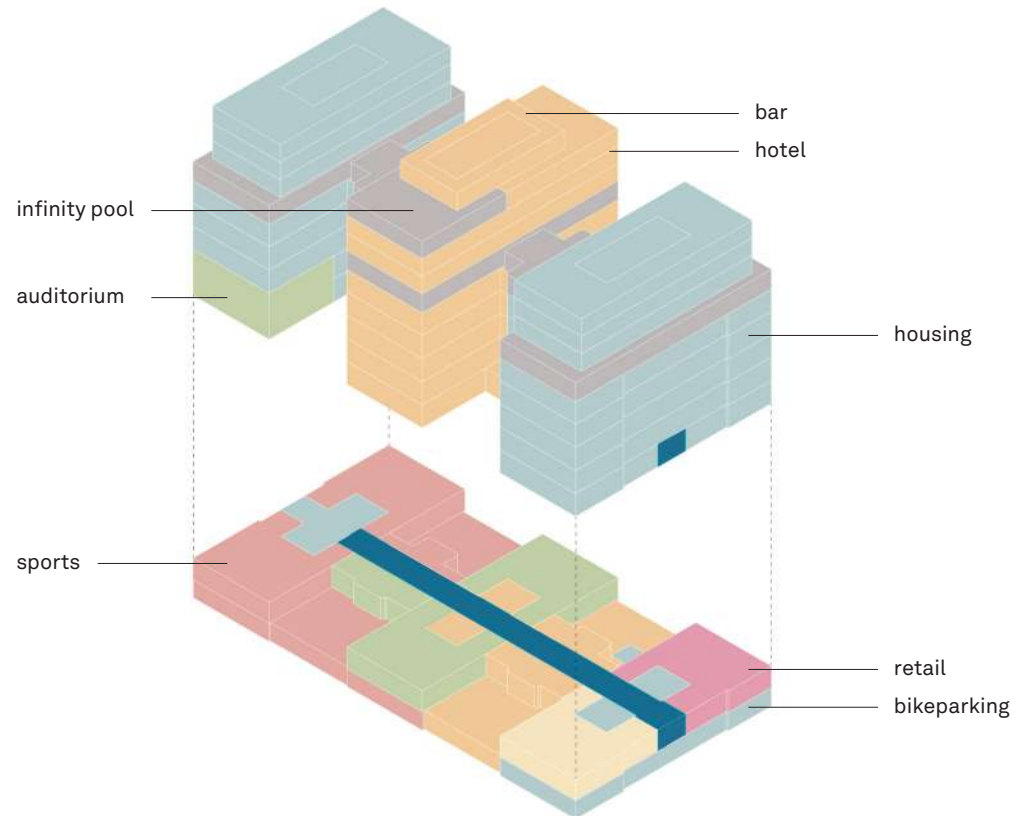
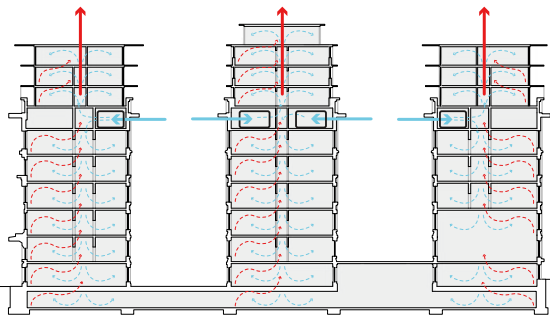


# Technical information

Table of gross surfaces (excluding balconies & exterior spaces)

	Housing	Hotel	Retail	Sport	Office	Horeca	TOTAL
-1	bikeparking + circulation 710 m <sup>2</sup>	hotel techniques 490 m <sup>2</sup>	-	welness + sport 1.873 m <sup>2</sup>	-	-	3.073 m <sup>2</sup>
0	lobby + circulation cores 340 m <sup>2</sup>	lobby + circulation cores 608 m <sup>2</sup>	shop 250 m <sup>2</sup>	sport + entrance 551 m <sup>2</sup>	workspaces 520 m <sup>2</sup>	restaurant 250 m <sup>2</sup>	2.519 m <sup>2</sup>
1	apartments 1.193 m <sup>2</sup>	hotel rooms + circulation 610 m <sup>2</sup>	-	-	auditorium 215 m <sup>2</sup>	-	2.018 m <sup>2</sup>
2	apartments 1.381 m <sup>2</sup>	hotel rooms 652 m <sup>2</sup>	-	-	-	-	2.033 m <sup>2</sup>
3	apartments 1.599 m <sup>2</sup>	hotel rooms 652 m <sup>2</sup>	-	-	-	-	2.251 m <sup>2</sup>
4	apartments 1.599 m <sup>2</sup>	hotel rooms 652 m <sup>2</sup>	-	-	-	-	2.251 m <sup>2</sup>
5	apartments 1.599 m <sup>2</sup>	hotel rooms 652 m <sup>2</sup>	-	-	-	-	2.251 m <sup>2</sup>
6	storage + techniques 1.586 m <sup>2</sup>	hotel rooms 577 m <sup>2</sup>	-	-	-	-	2.163 m <sup>2</sup>
7	apartments 897 m <sup>2</sup>	hotel rooms 577 m <sup>2</sup>	-	-	-	-	1.474 m <sup>2</sup>
8	apartments 897 m <sup>2</sup>	hotel rooms 577 m <sup>2</sup>	-	-	-	-	1.474 m <sup>2</sup>
9	apartments 897 m <sup>2</sup>	breakfast room 468 m <sup>2</sup>	-	-	-	-	1.365 m <sup>2</sup>
10	-	rooftop bar + pool 237 m <sup>2</sup>	-	-	-	-	237 m <sup>2</sup>
	<b>12.698 m<sup>2</sup></b>	<b>6.752 m<sup>2</sup></b>	<b>250 m<sup>2</sup></b>	<b>2.424 m<sup>2</sup></b>	<b>735 m<sup>2</sup></b>	<b>250 m<sup>2</sup></b>	<b>23.109 m<sup>2</sup></b>

	Studio	1B	2B	3B	S	L
-1	-	-	-	-	-	-
0	-	-	-	-	-	-
1	5	7	0	1	14	4
2	5	5	4	1	14	6
3	4	5	5	2	14	6
4	4	5	5	2	14	6
5	4	5	5	2	14	6
6	-	-	-	-	-	-
7	-	2	4	2	14	4
8	-	2	4	2	14	4
9	-	2	4	2	-	-
10	-	-	-	-	-	-
	<b>22</b>	<b>33</b>	<b>31</b>	<b>14</b>	<b>98</b>	<b>36</b>
	22%	33%	31%	14%	73%	27%
	<b>100</b> 100%				<b>134</b> 100%	



By placing the technical spaces on an intermediate layer, ducts can be limited in diameter. In addition, the extensive air intake can be achieved via the façade, without having to create large shafts throughout the building from basement to the roof (which would add building cost, noise and reduce the sales surface of each floor).