

MORE WITH LESS

Een sociale en duurzame aanpak voor transformatie van sociale huur

Renger Heijnen | Architectural Engineering | P5 | 30-10-2025

Fascinatie

Degrowth Architecture

Waarom? / Doel

- Reduceren van consumptie, productie and exploitatie
- Bevorderen van duurzaamheid en *sufficiency*
- Versterken van sociale en ecologische waarden

Hoe? / Strategie

- Minder bouwen: prioriteit bij renovatie and transformatie
- Gebruik van hergebruikte, biobased en locale materialen
- Ontwerp voor *sufficiency*; focus op de ware behoefte
- Creëren van kleinere, multifunctionele en flexibele ruimtes
- Stimuleren van delen en gezamenlijk gebruik

1960's sociale woningbouw

- Veelvoorkomende typologie in Nederland
- Grote behoefte aan renovatie
- Vaak gelegen in kwetsbare wijken
- Slechte leefkwaliteit





Casus introductie: Klipperbuurt

Ontwerplocatie



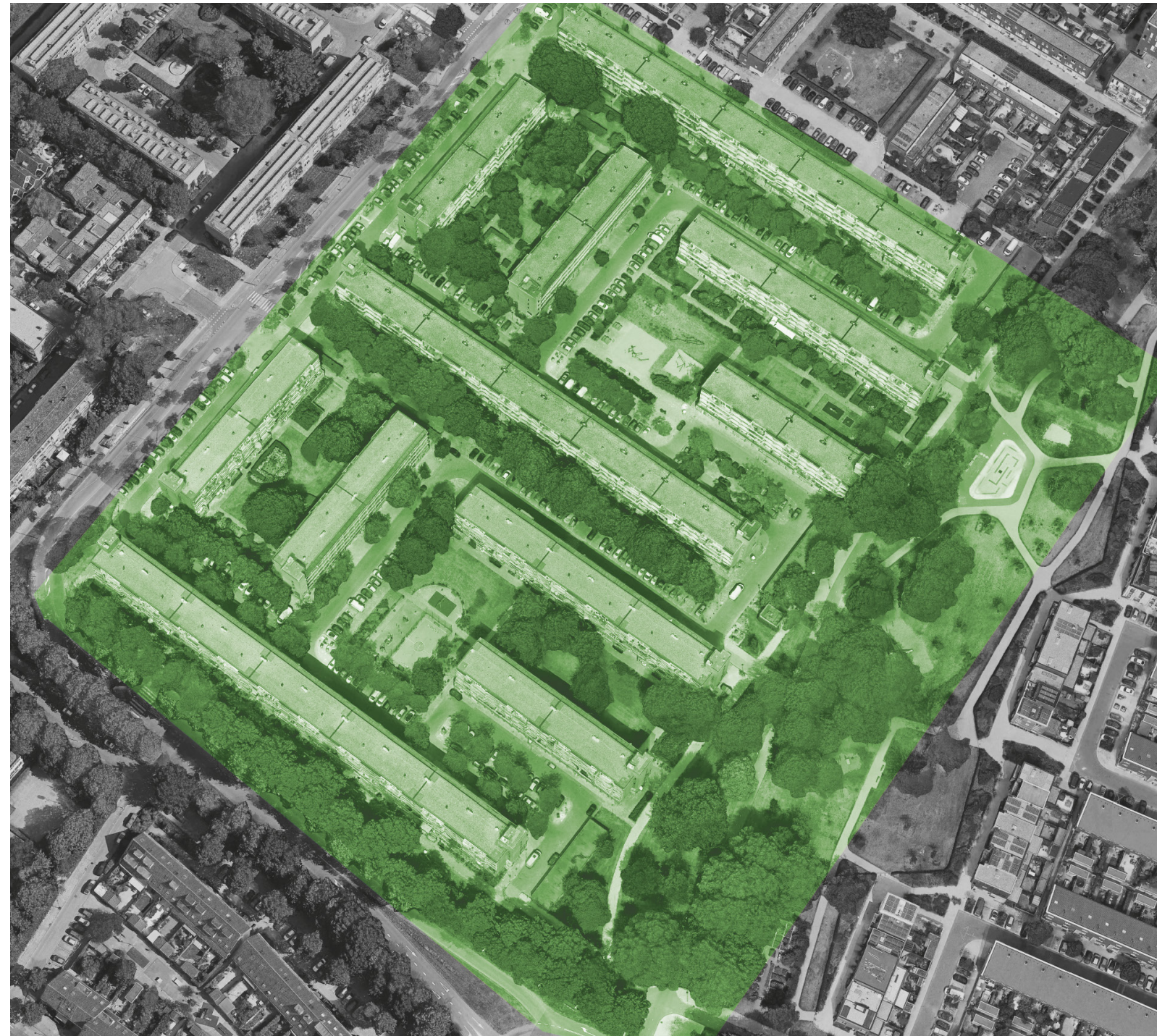
Luchtfoto 1:50.000

Ontwerplocatie



Luchtfoto 1:10.000

Ontwerplocatie



Luchtfoto 1:2.000

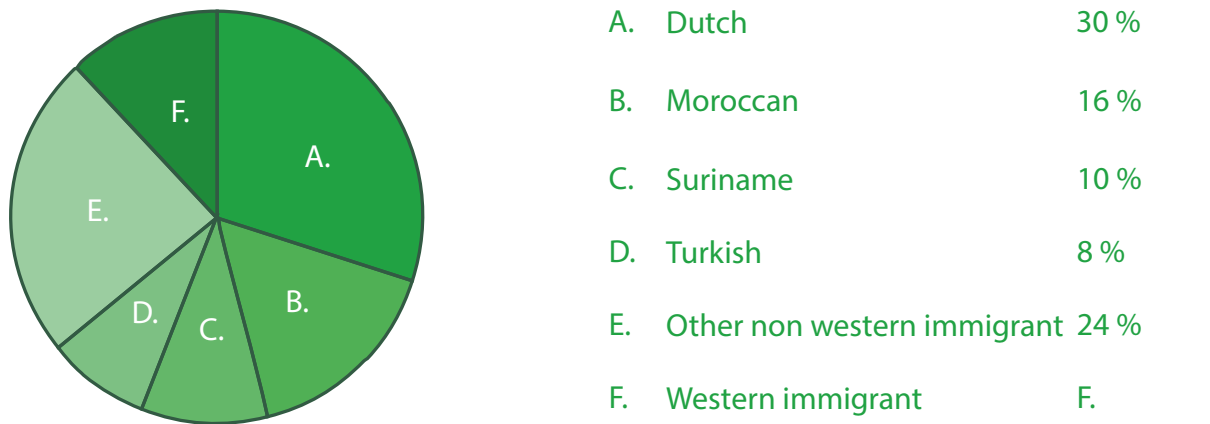
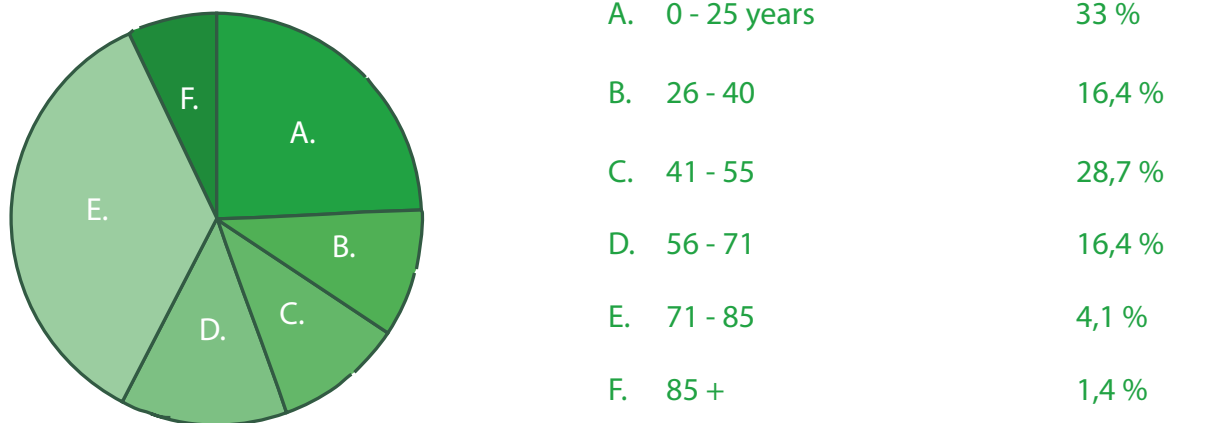
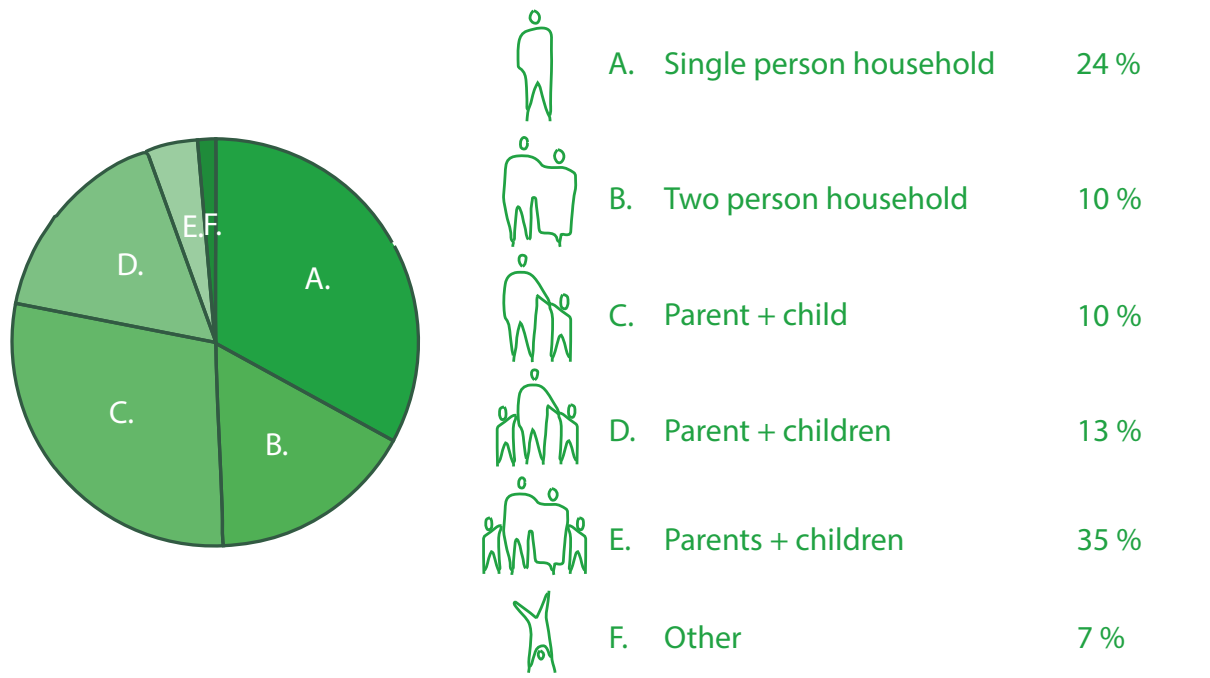
Context gebouw



- 1968
- 577 woningen verdeeld over 11 gebouwblokken
- Gallerij ontsluiting



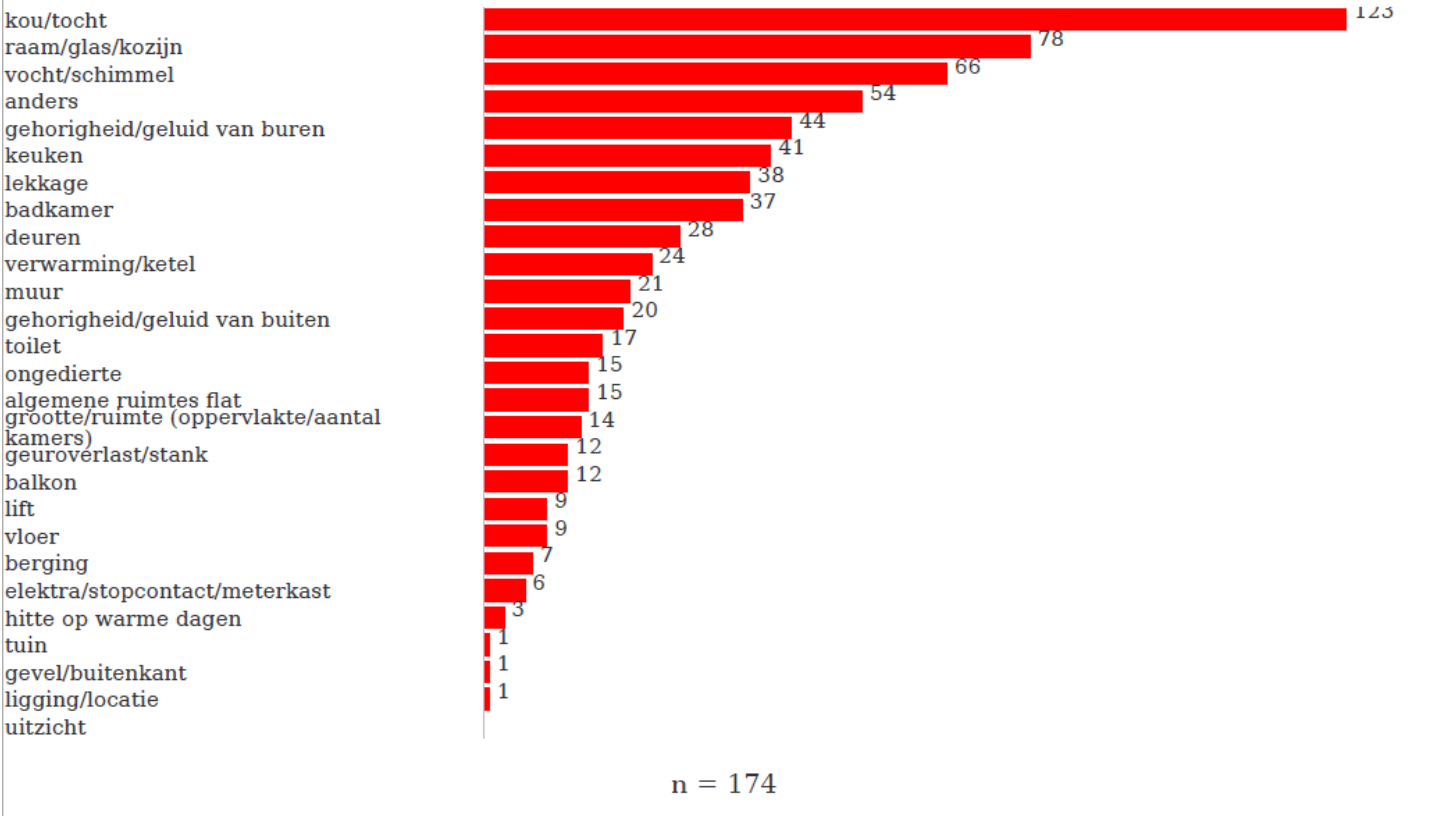
Bewoners



Enquete Bewoners

Waar is men niet tevreden over, als het gaat om de woning?

onderstaande grafiek toont hoe vaak de aspecten spontaan zijn genoemd

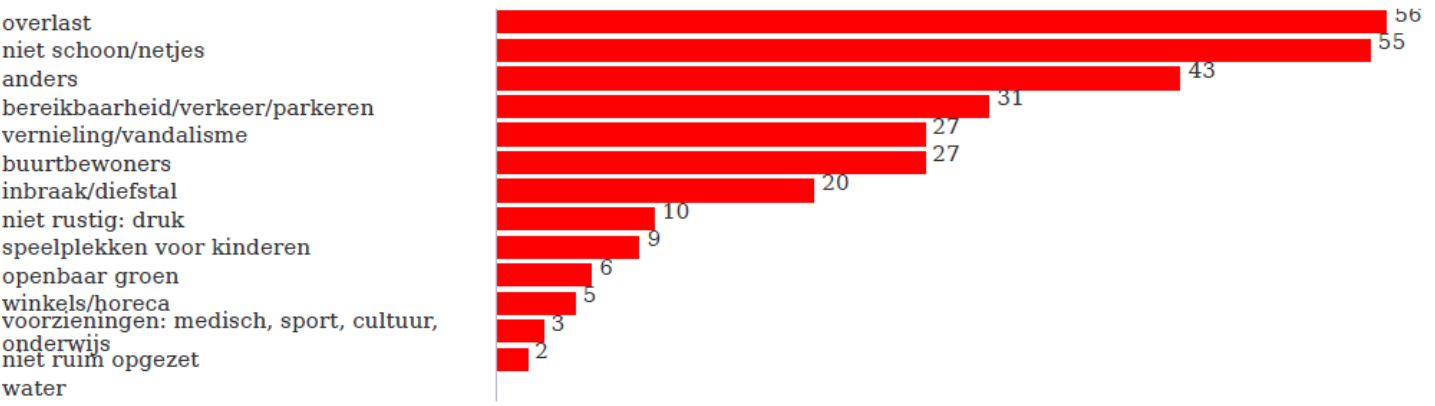


- Grote behoefte aan renovatie

- Gebrek aan sociale cohesie en veiligheid.

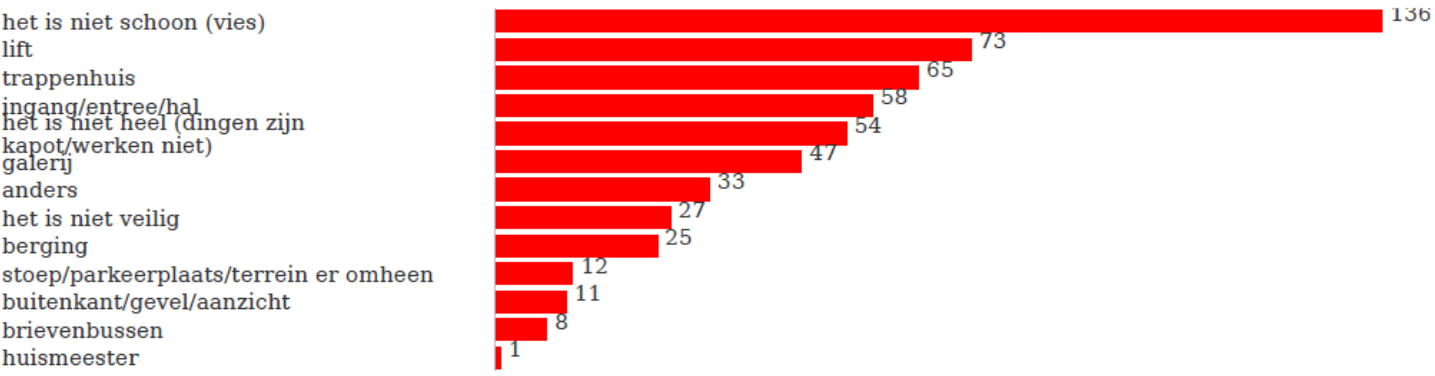
Waar is men niet tevreden over, als het gaat om de buurt?

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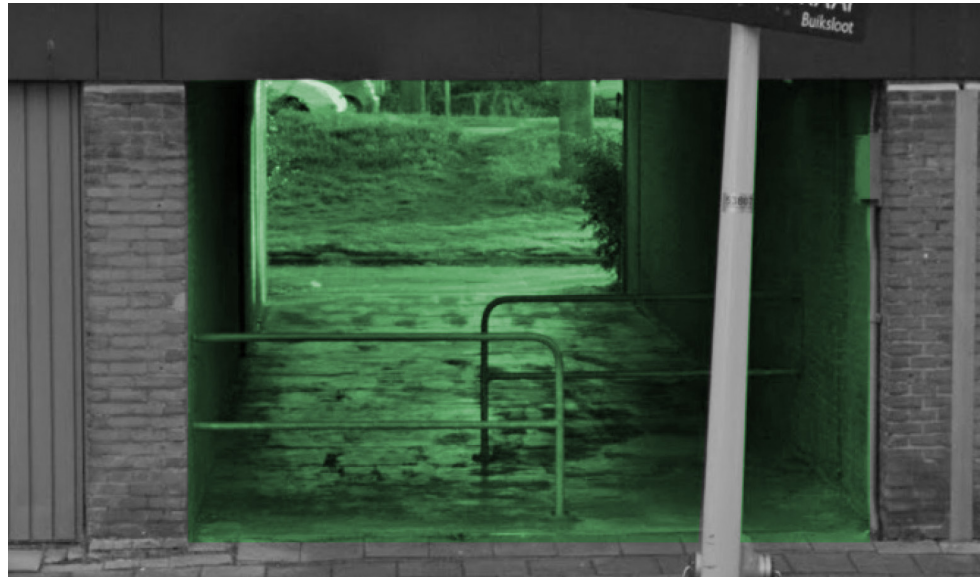


Waar is men niet tevreden over, als het gaat om het woongebouw?

onderstaande grafiek toont hoe vaak de aspecten spontaan zijn genoemd

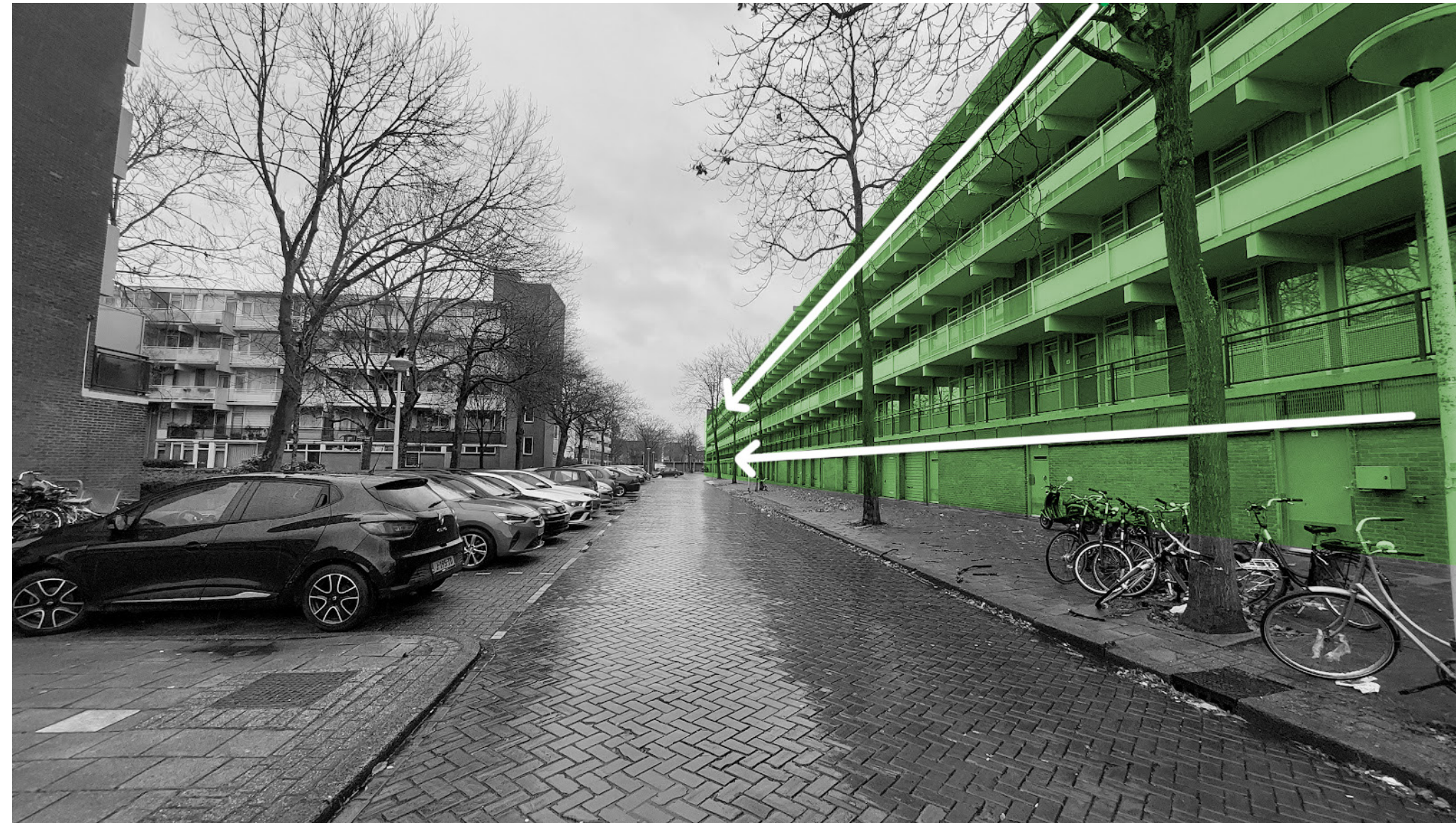


Onveiligheid



‘In de Banne wordt de onveiligheidsbeleving onder bewoners voornamelijk veroorzaakt door jeugdoverlast, een gebrekkige sociale cohesie, criminaliteit en verloedering.’

Locatiebezoek



- Lang & monoform blok

Locatiebezoek



- Gesloten plint

Locatiebezoek



- Breed, stenen straatprofiel

Locatiebezoek



- Veel ruimte voor auto's
- Rondslingerende fietsers

Locatiebezoek



- Galerij

Doel van ontwerpproject

Doel

- Verbeteren van sociale cohesie
- Verbeteren van leefkwaliteit
- Bevorderen van duurzaamheid
- Toevoegen & verdichten
- Mix van woningtypes

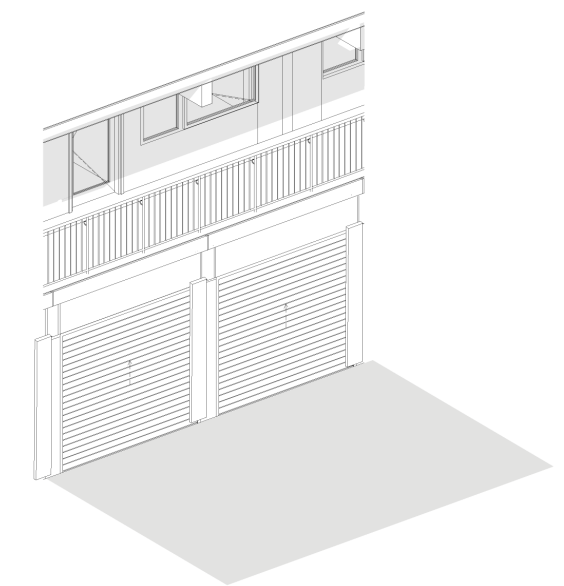
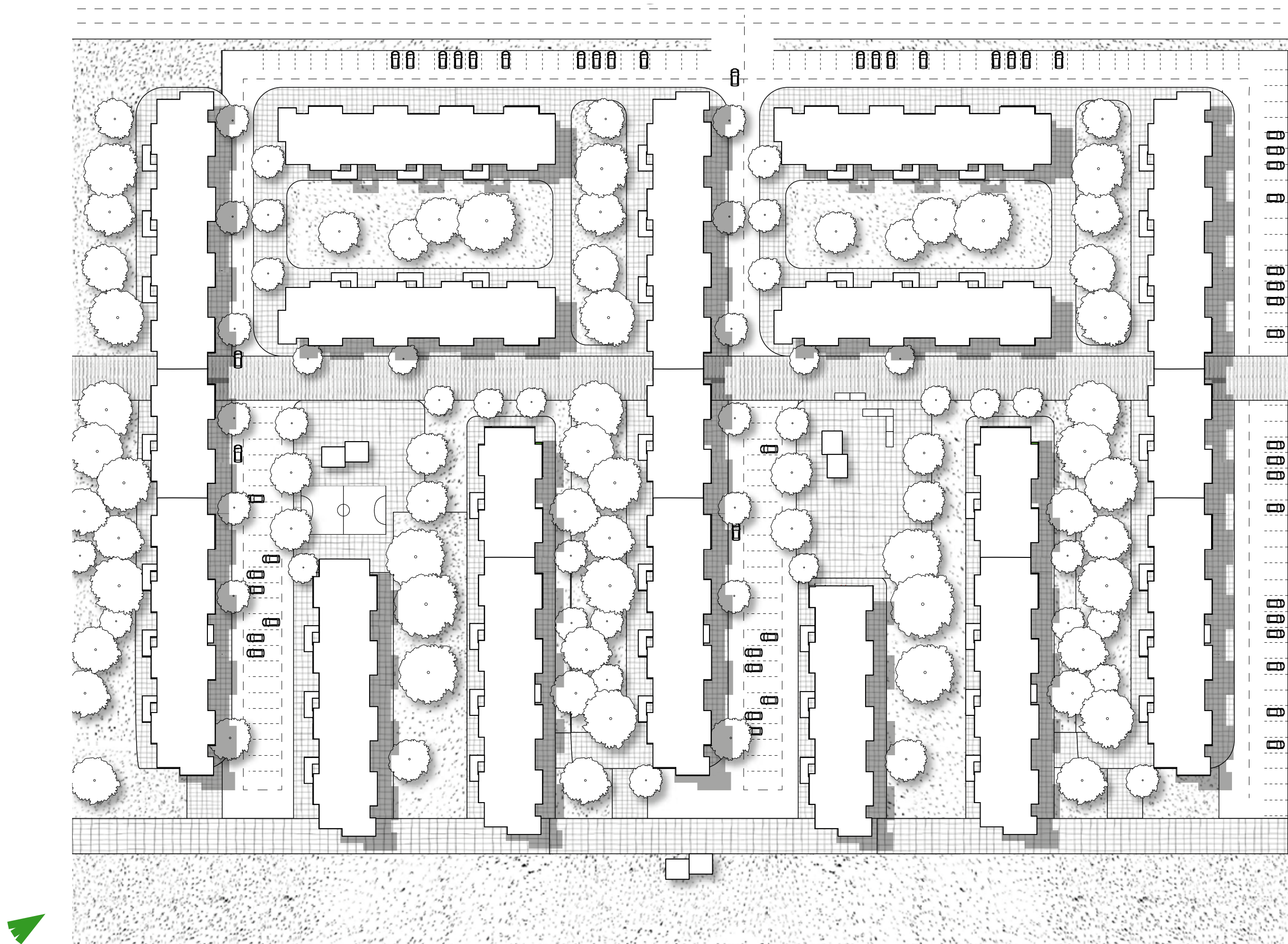
Strategie

- Openen van de plint
- Doorwaadbaar maken van de buurt
- Introduceren van delen via publieke en gemeenschappelijke ruimtes en woonvormen
- Verduurzamen van de woningen
- Woningen toevoegen en diversifiëren binnen en bovenop de bestaande structuur.

An aerial photograph of a city, likely Amsterdam, showing a dense urban layout with a grid of streets and numerous buildings. A canal runs diagonally from the top left towards the bottom center. A specific area in the center of the image is highlighted with a bright green, semi-transparent rectangular overlay. The text "Stedebouwkundig ontwerp" is overlaid in white, bold, sans-serif font across the lower-middle part of the image.

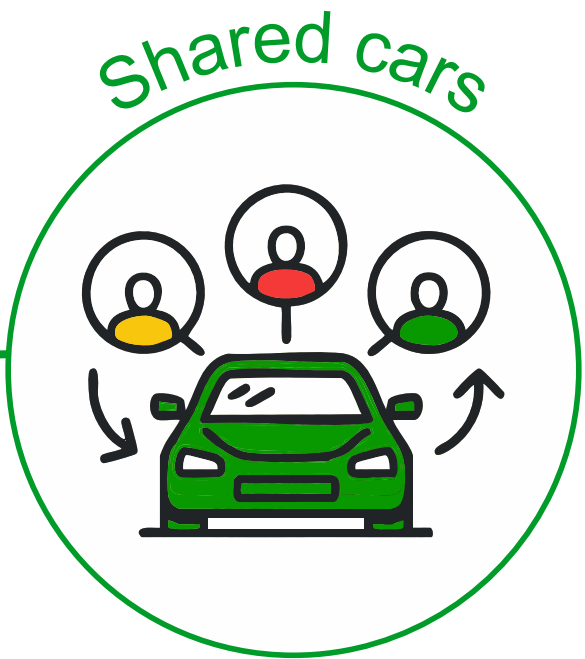
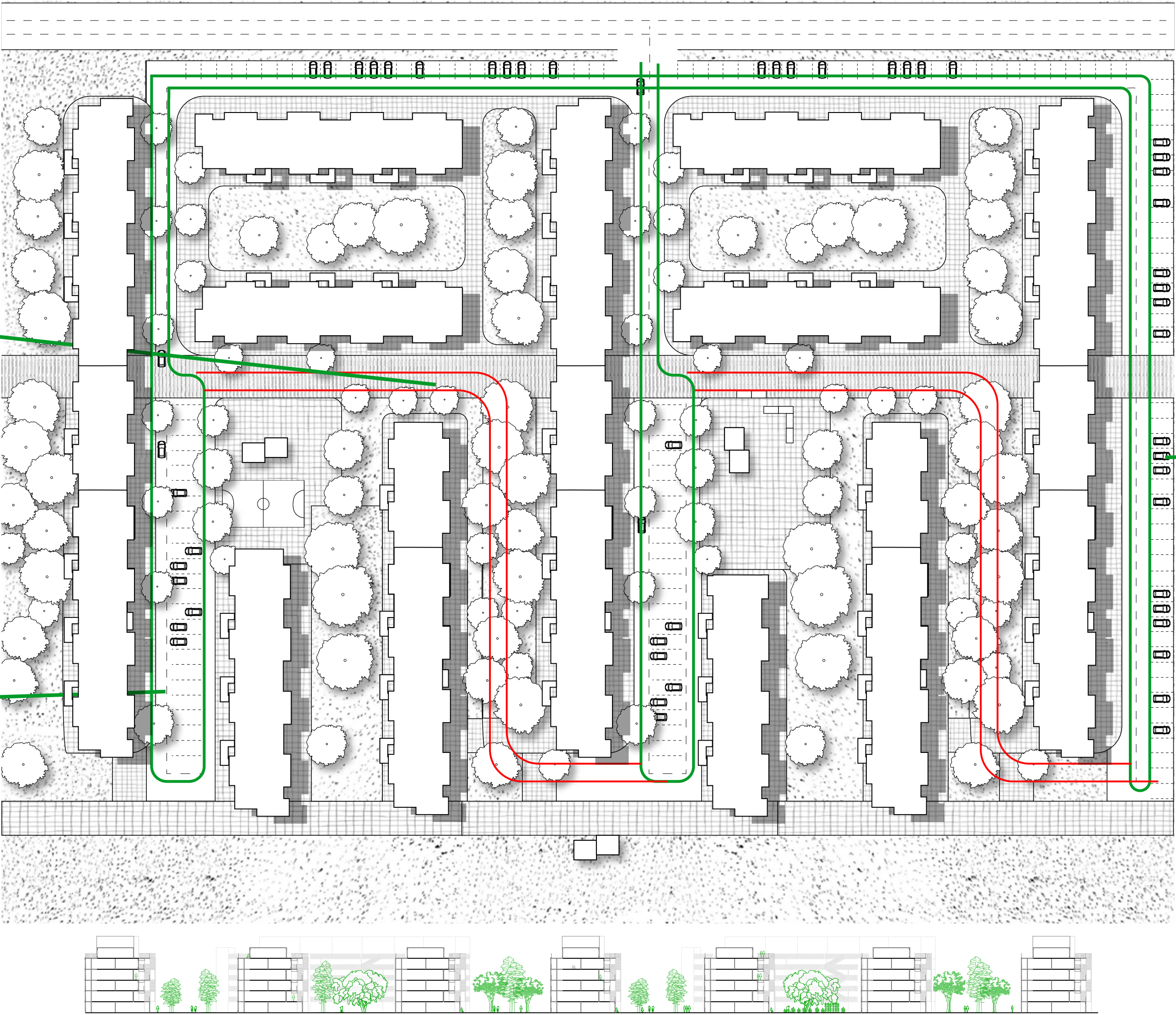
Stedebouwkundig ontwerp

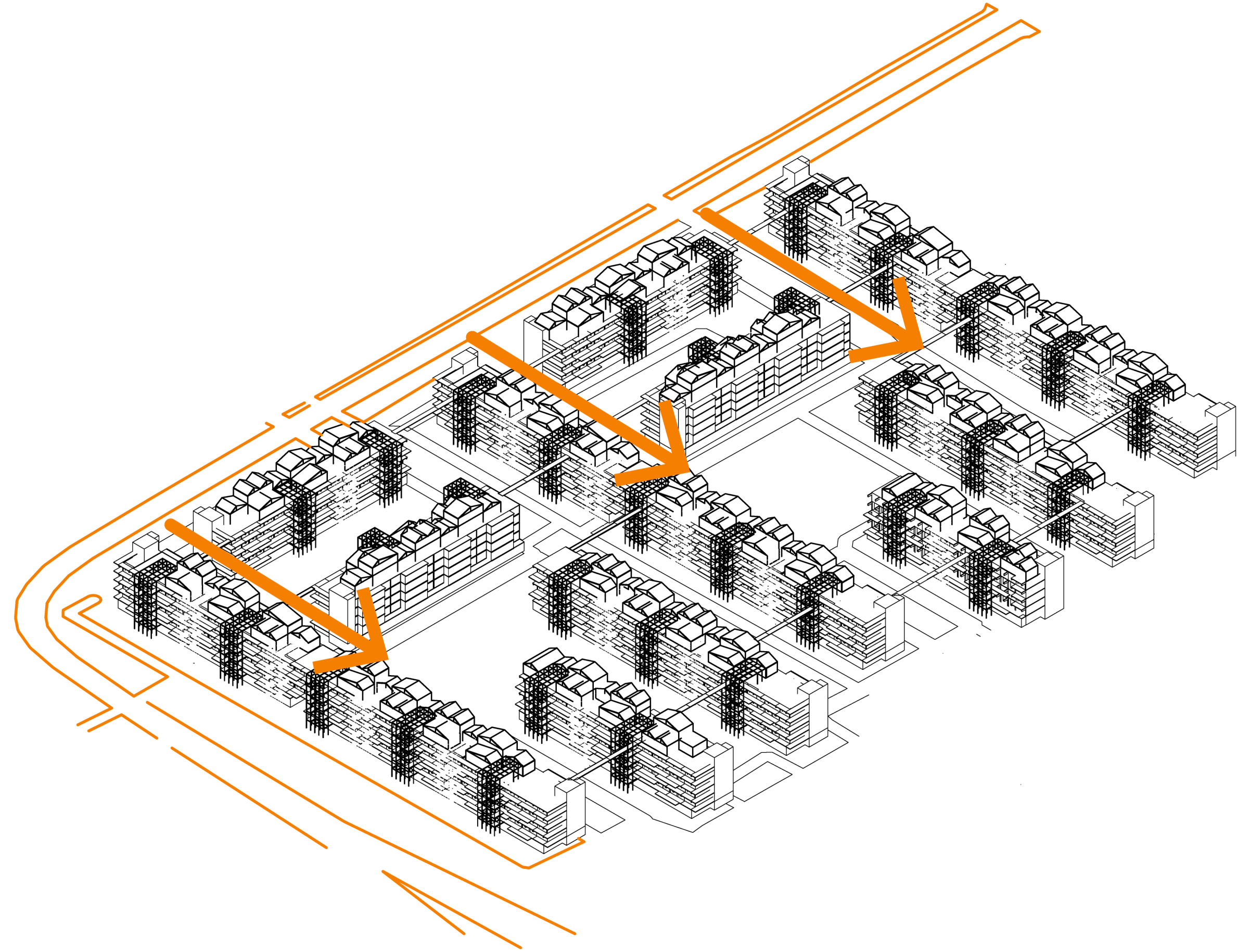
Stedenbouwkundige visie



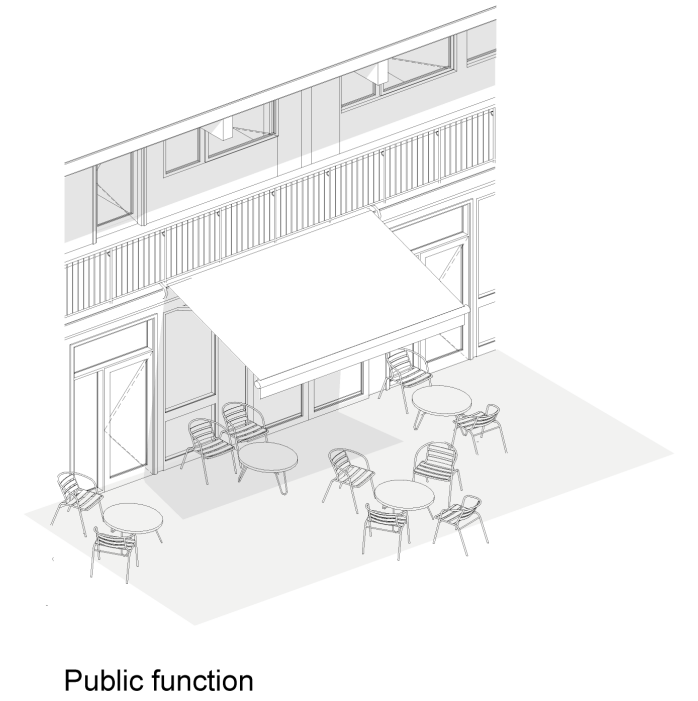
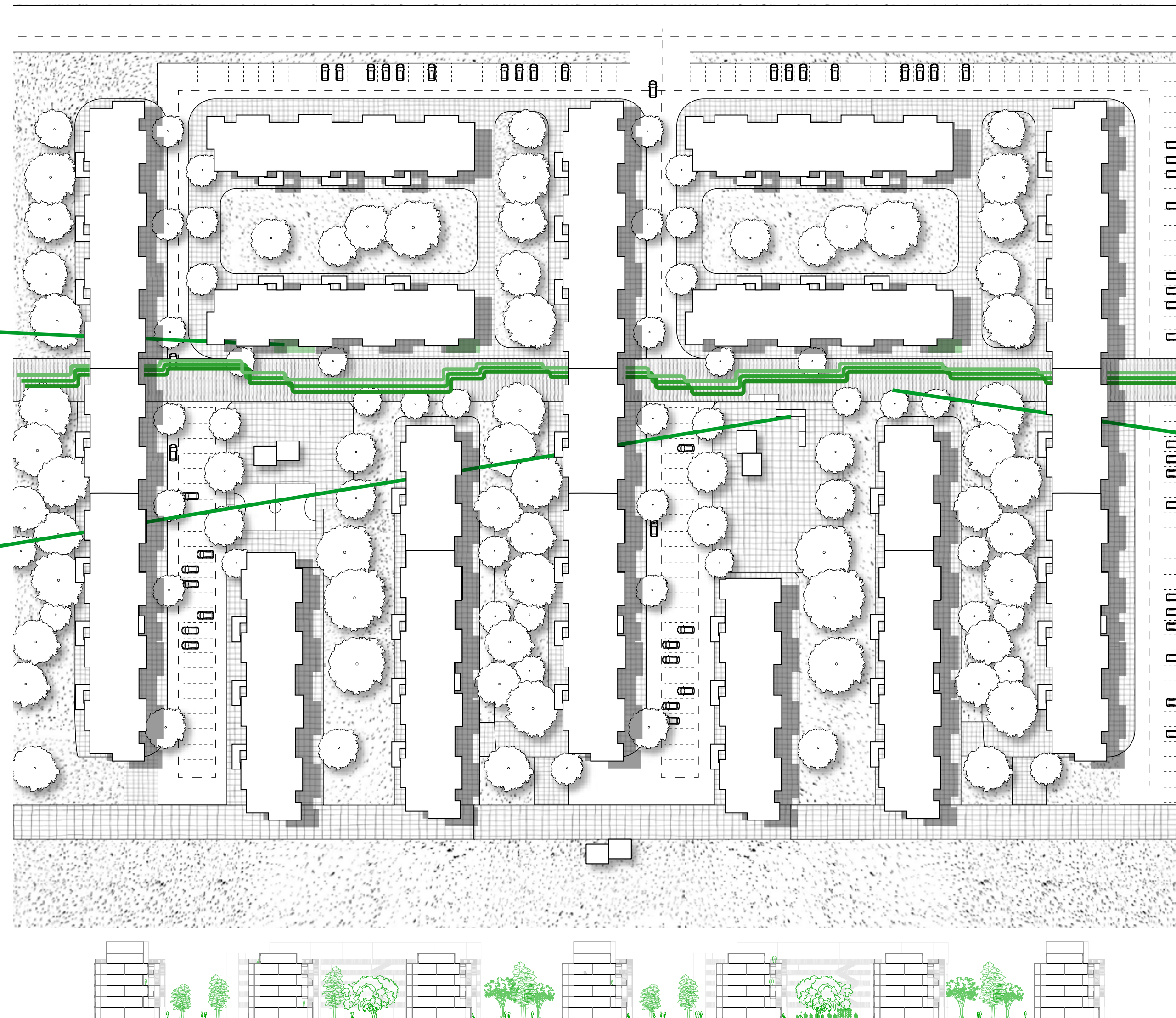
Situation

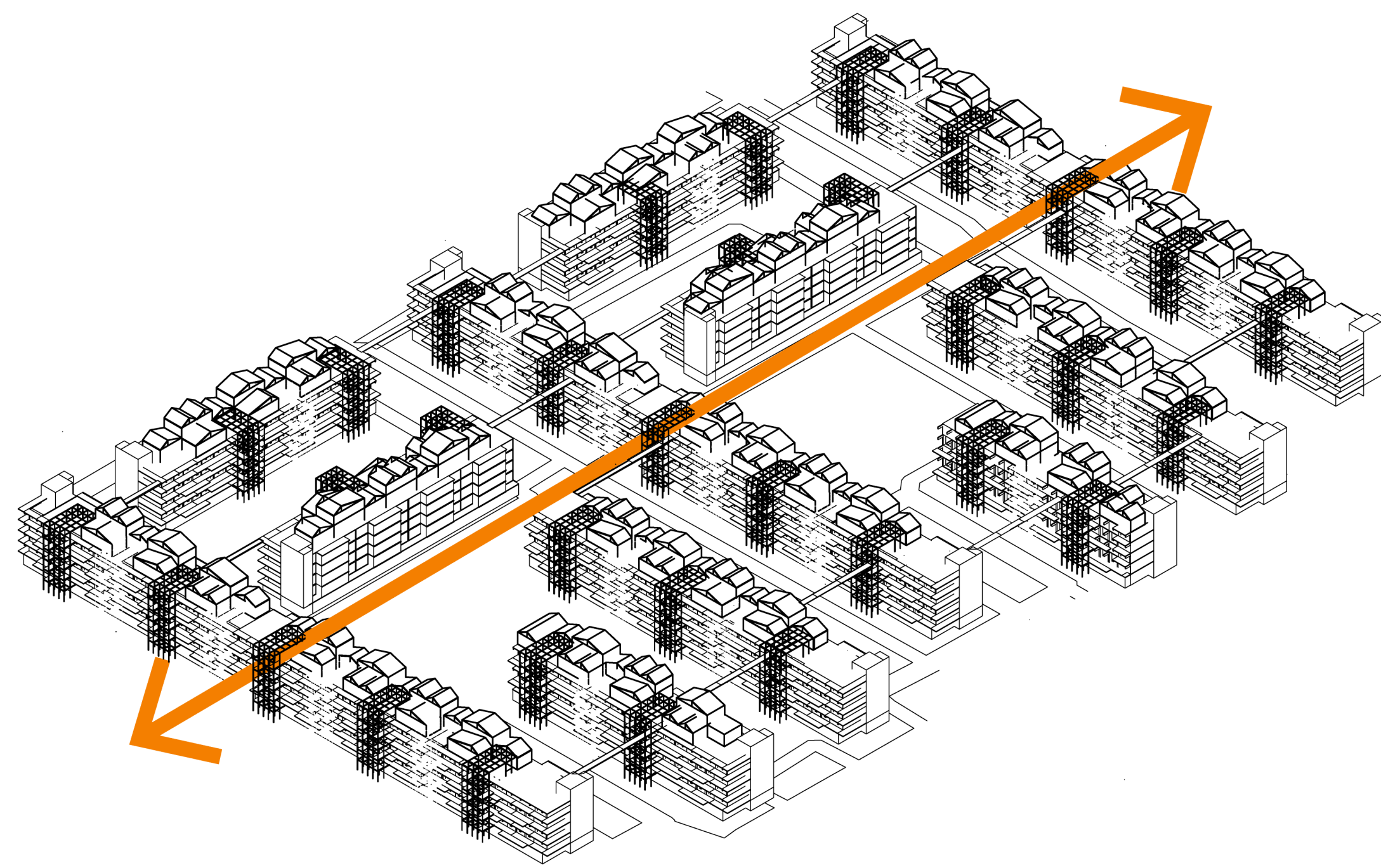
Verkeer



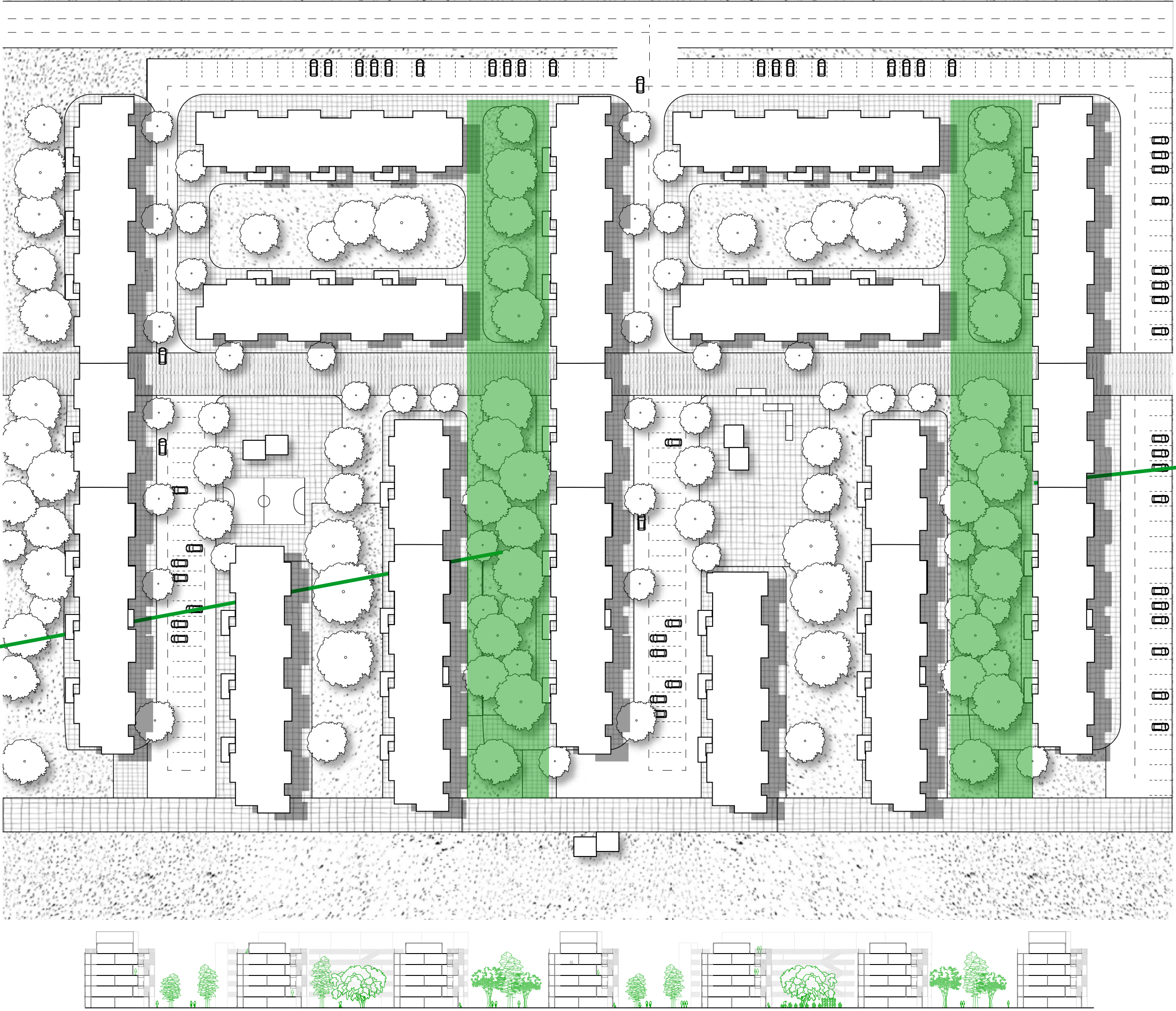


Levendige as





Groene straten



Semi-private garden

Gemeenschappelijke tuinen

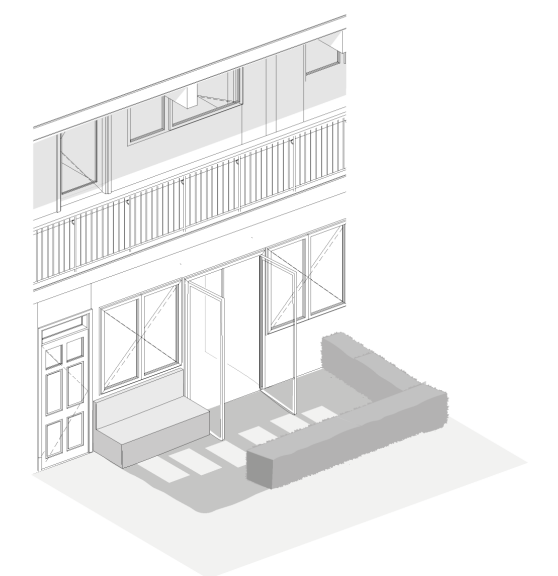
Vegetable garden



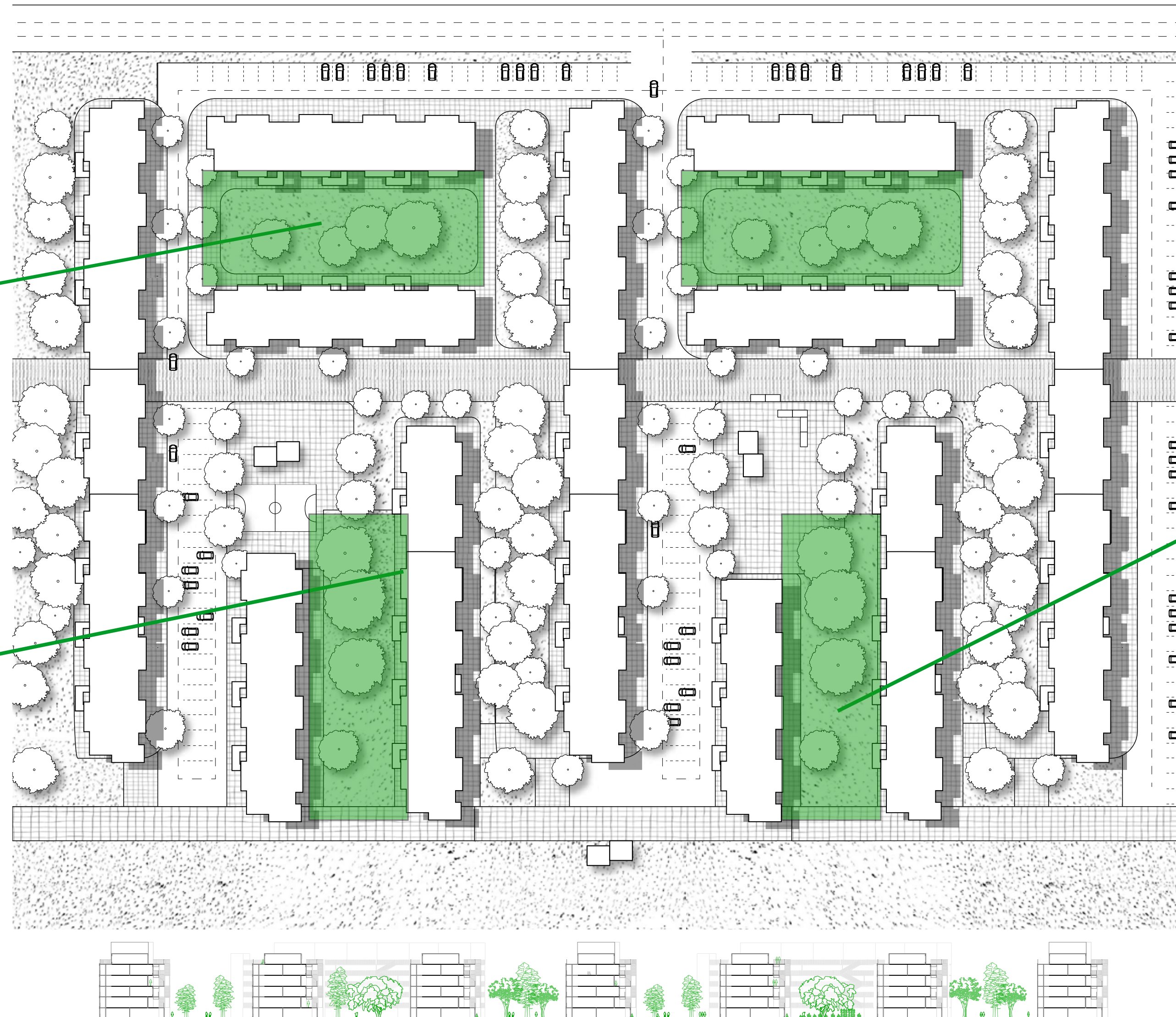
Soft transition private garden

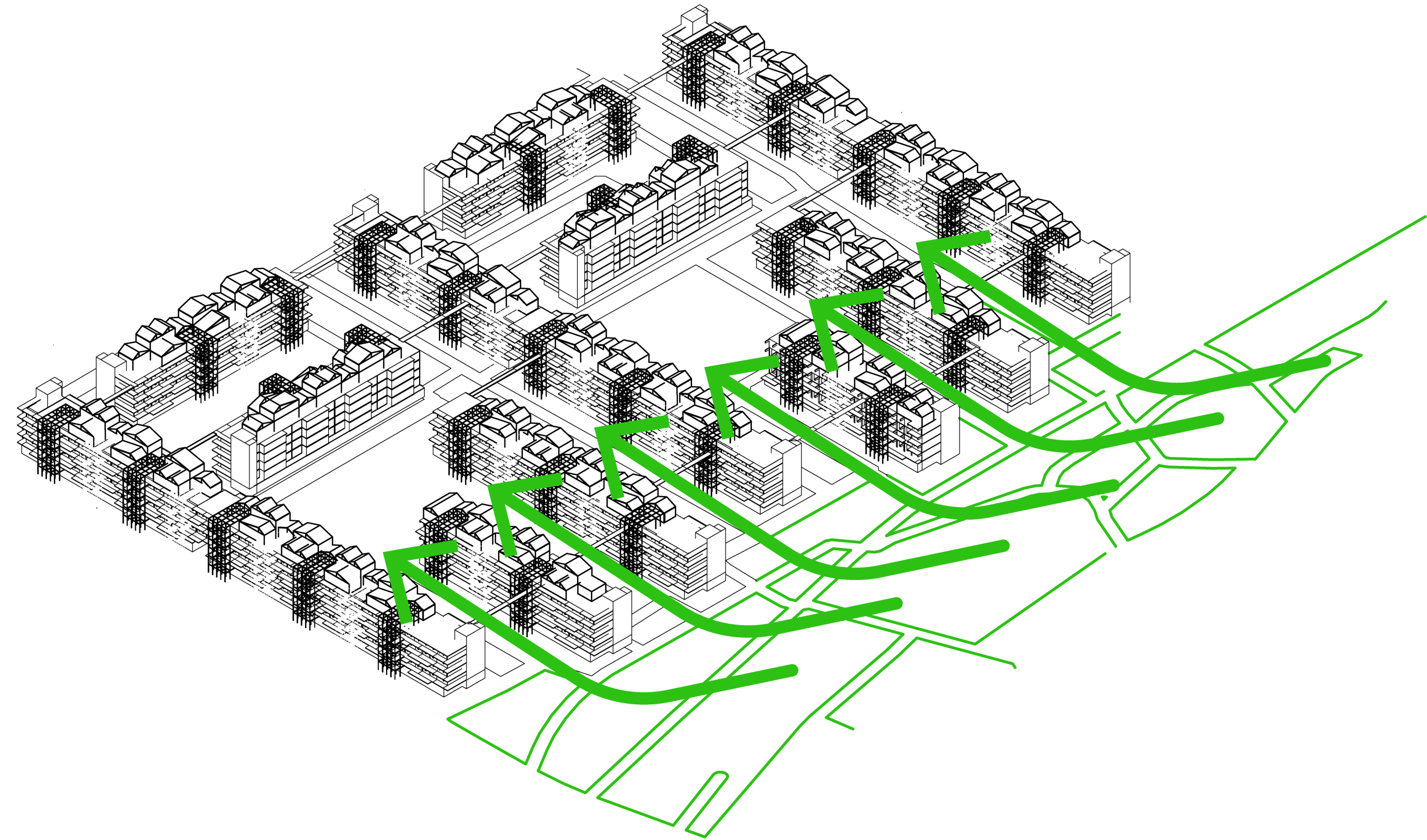


Communal garden



Semi-private garden

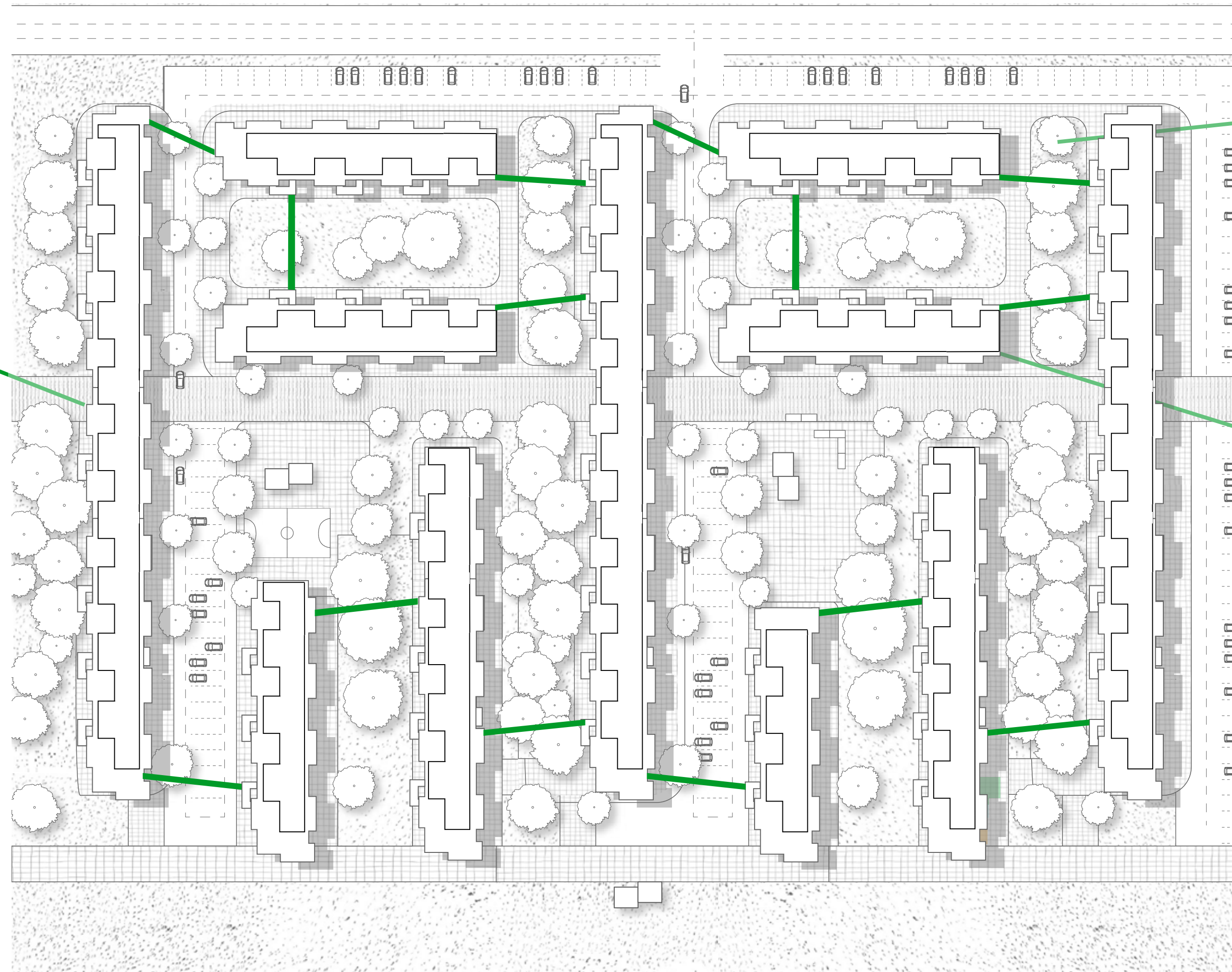


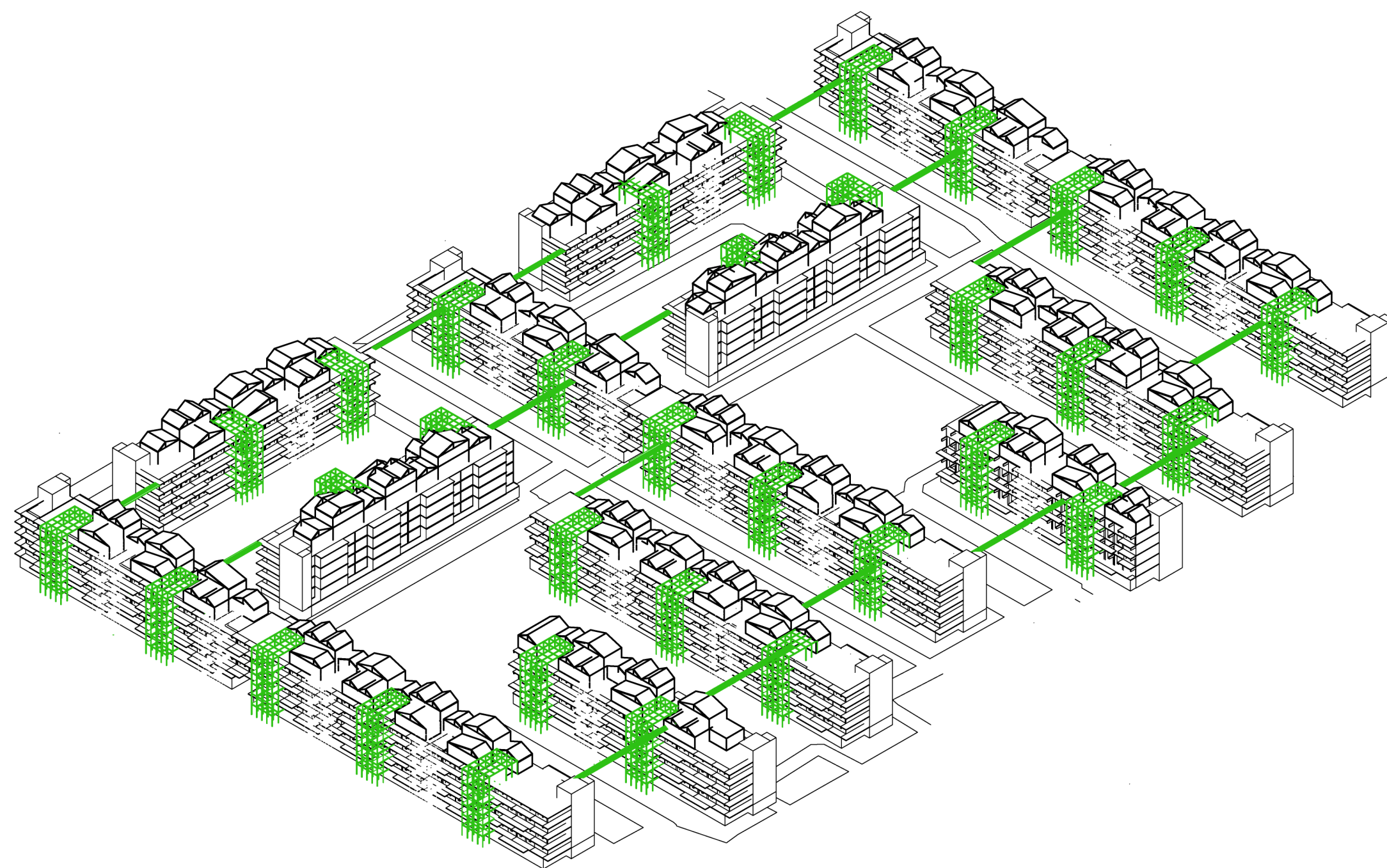


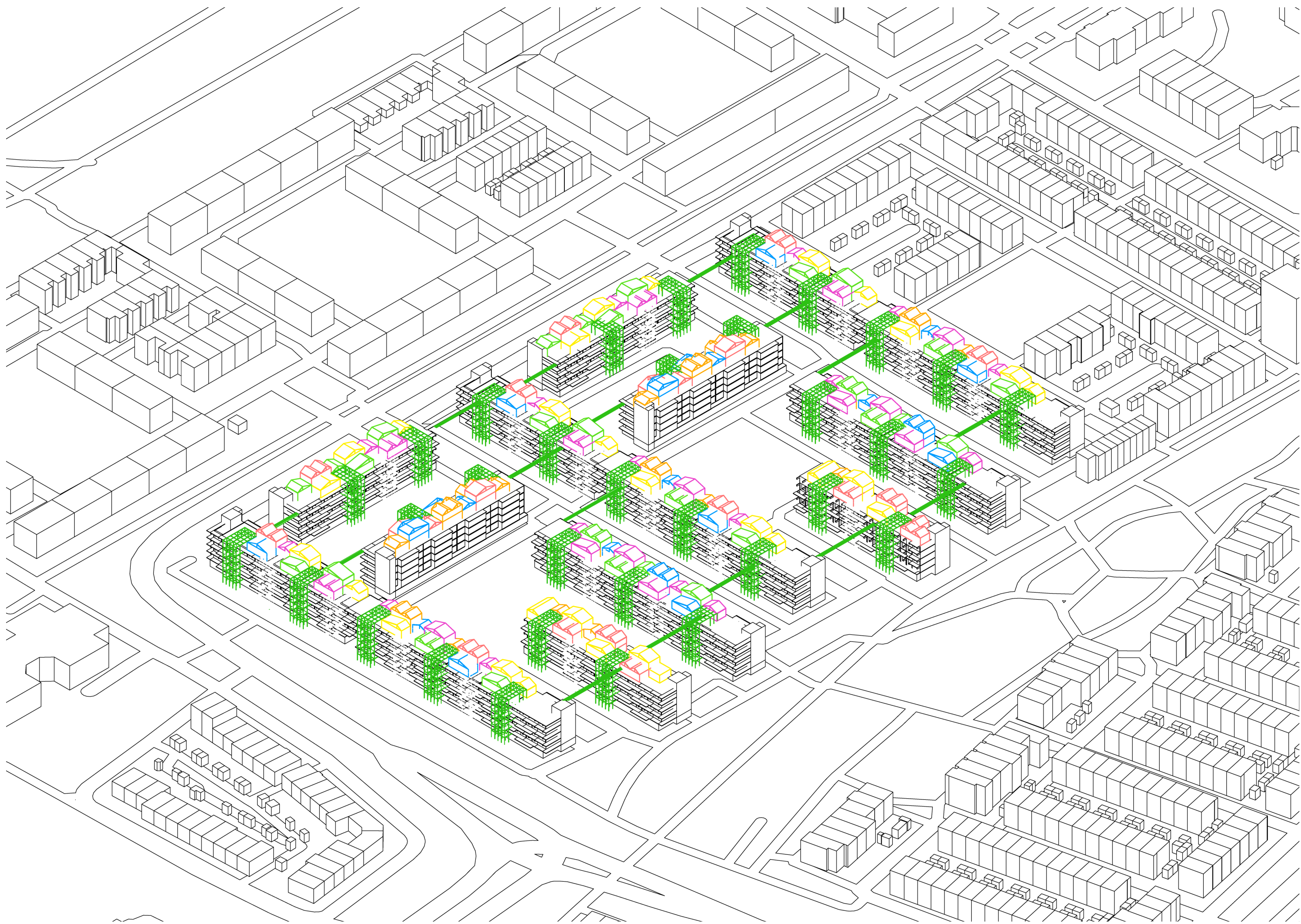
Faciliteiten



Daklandschap



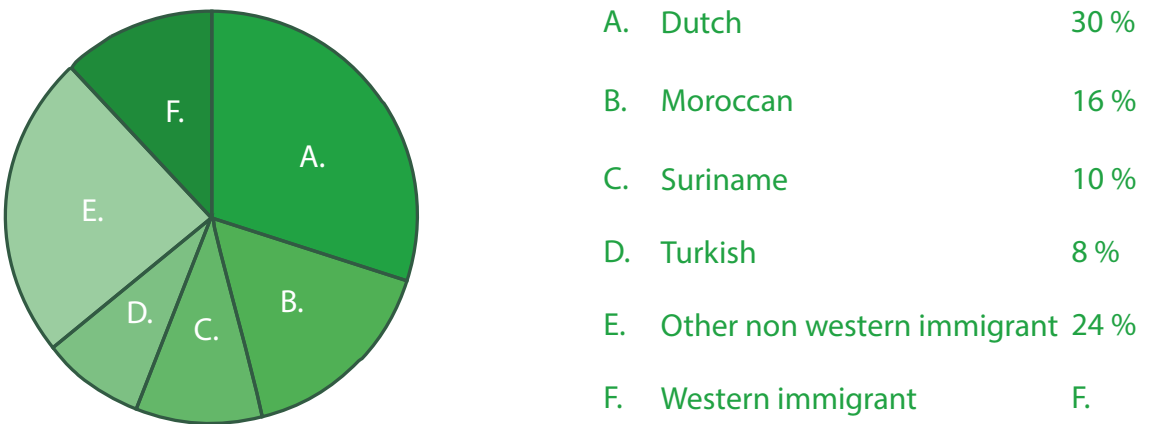
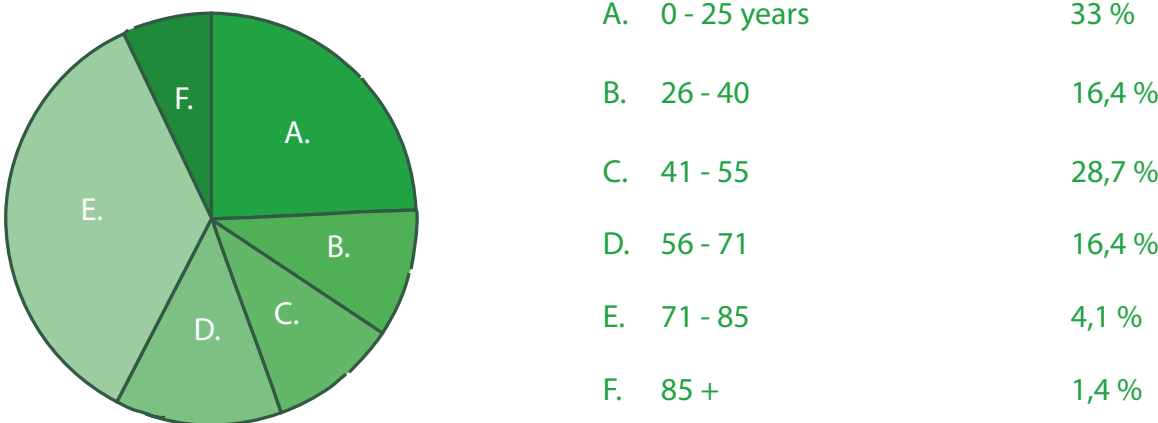
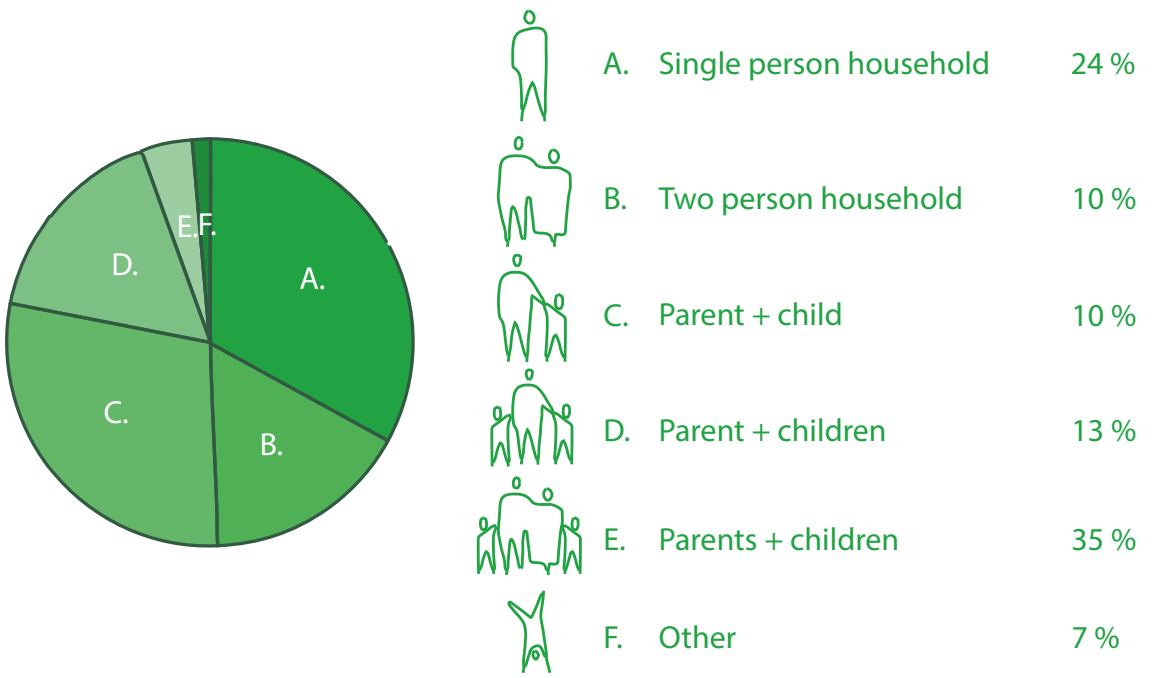




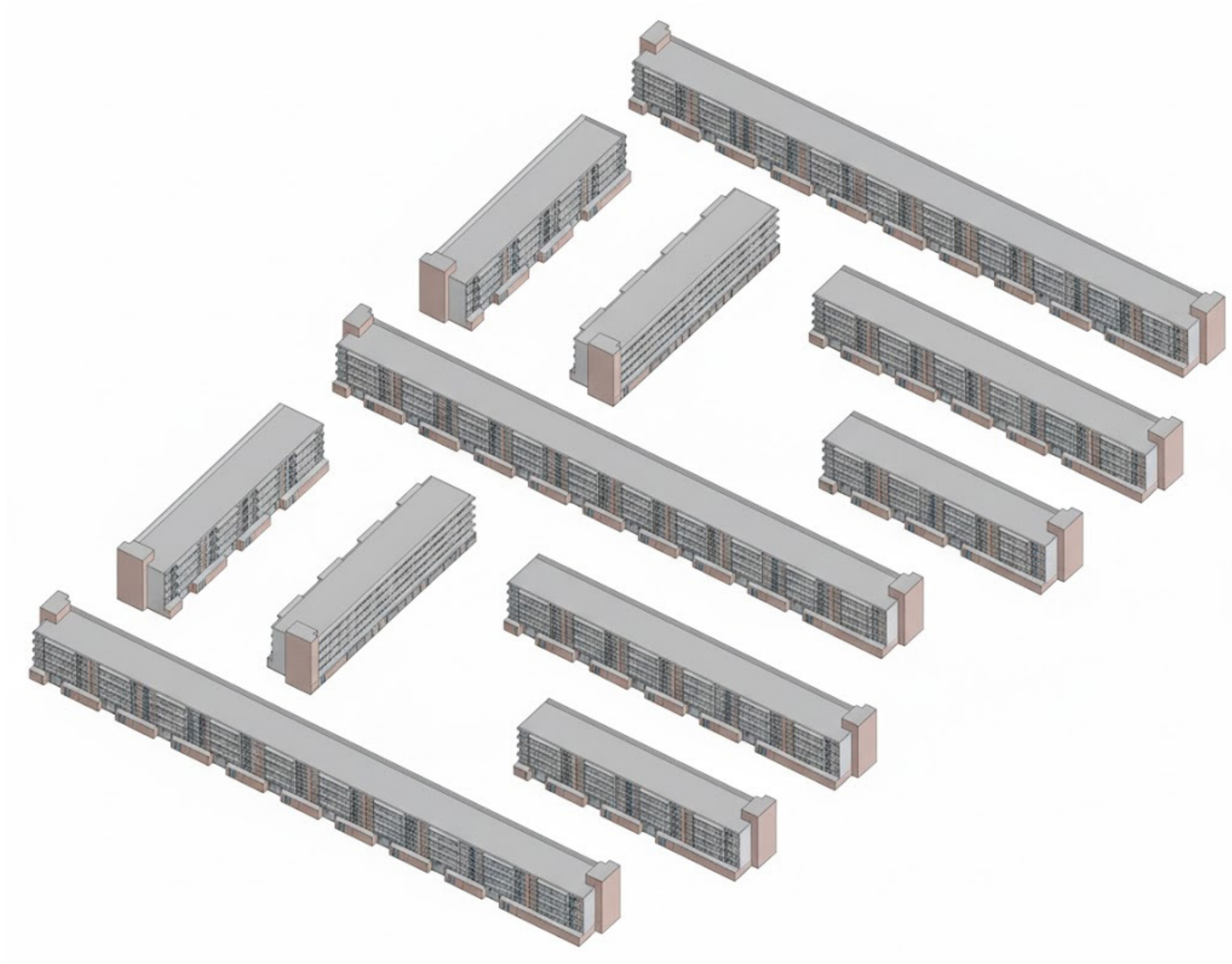


Architectonisch ontwerp

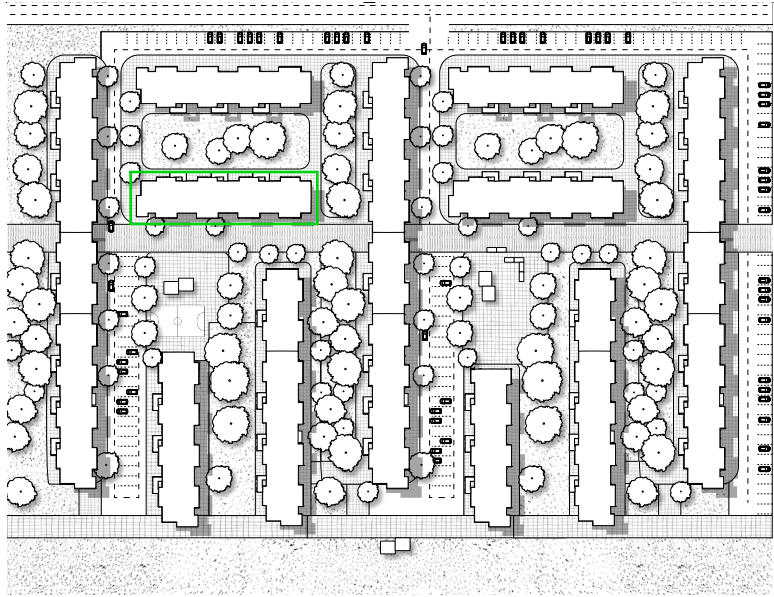
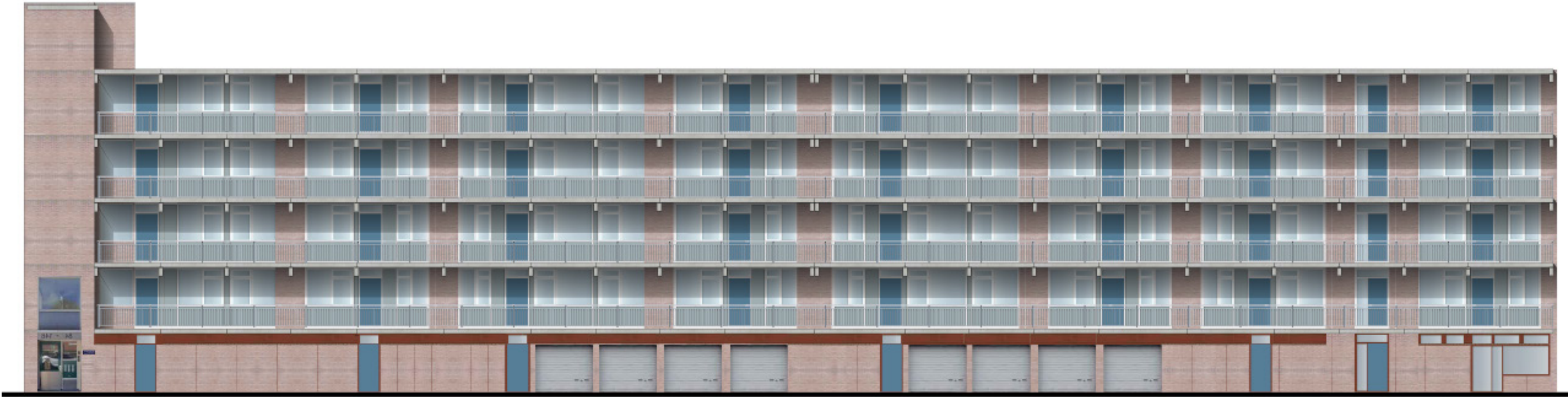
Bewoners



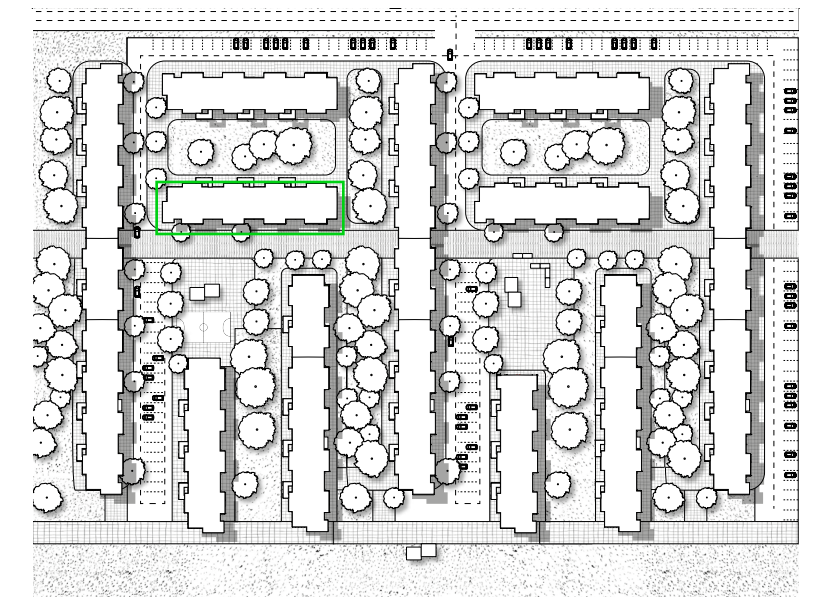
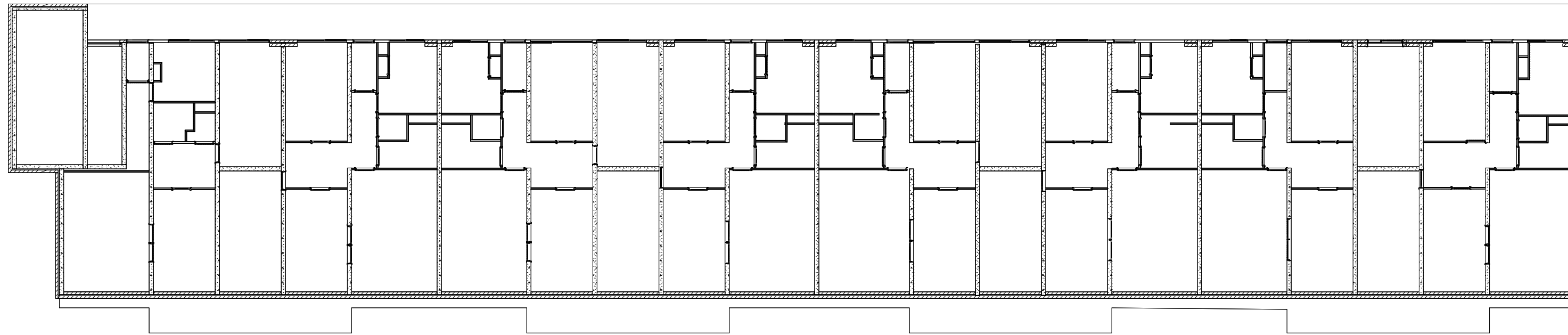
Huidig structuur



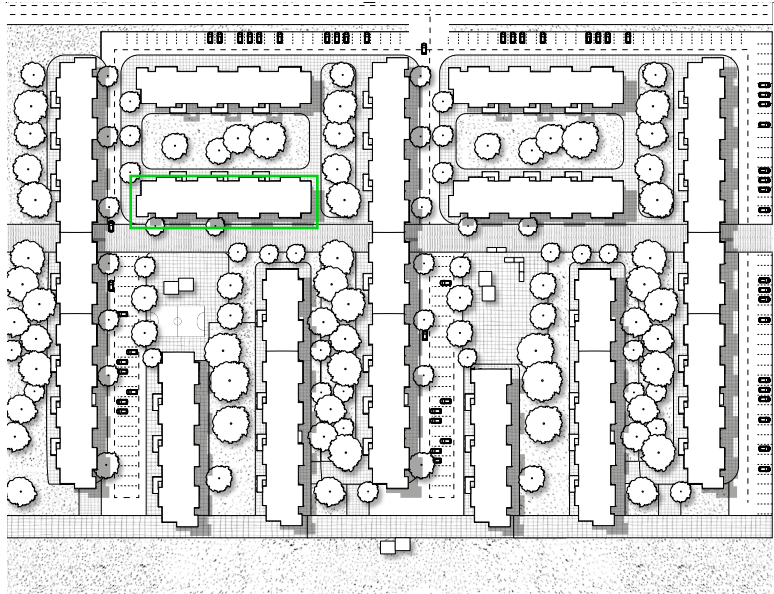
Aanzicht huidig gebouw



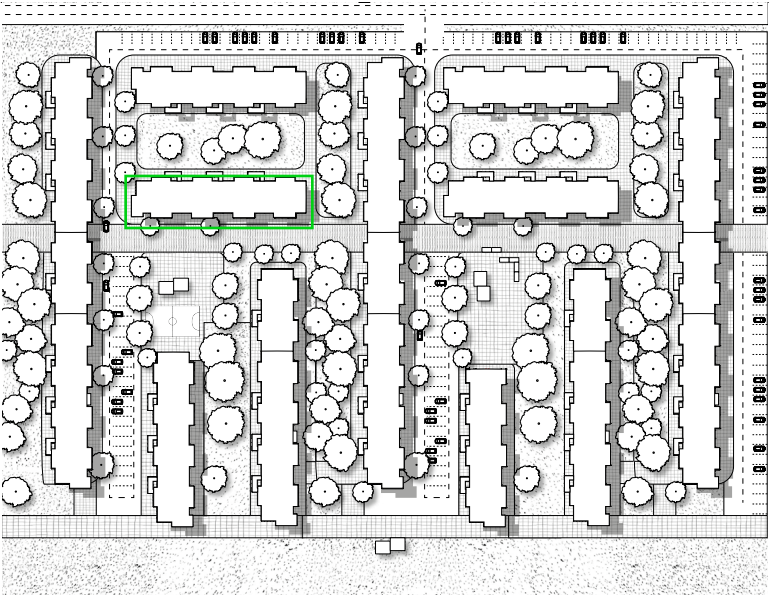
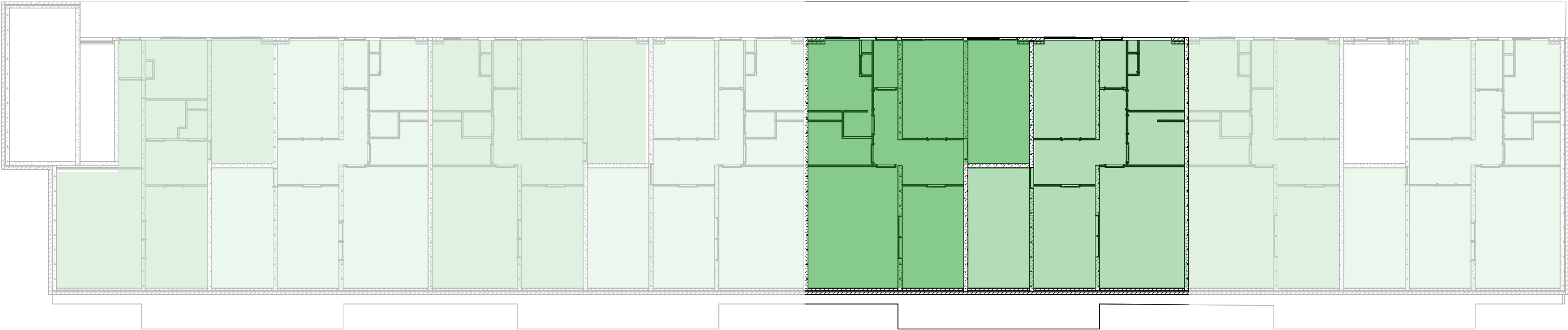
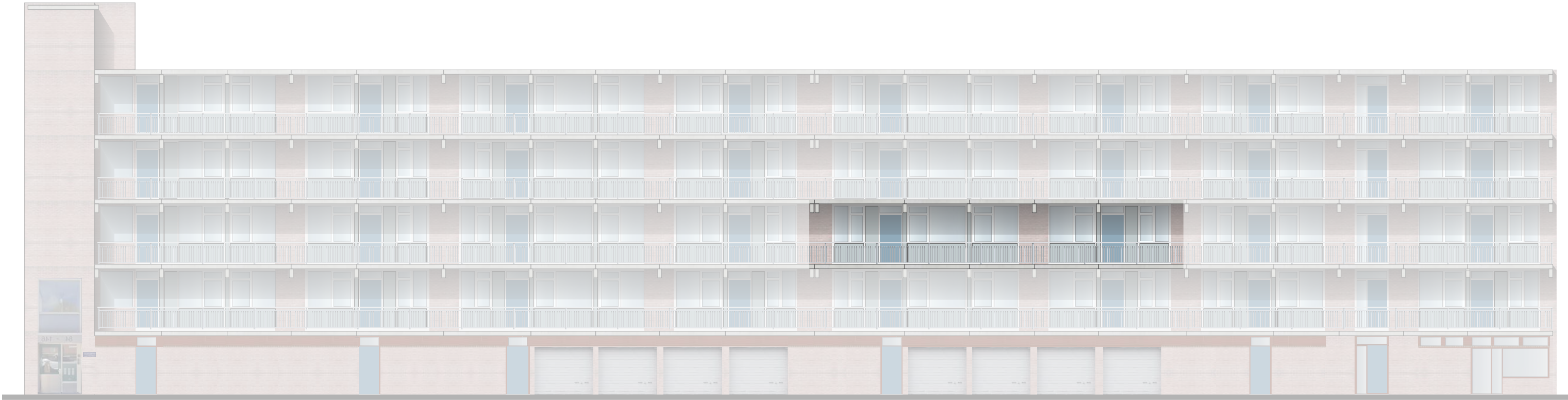
Plattegrond huidig gebouw



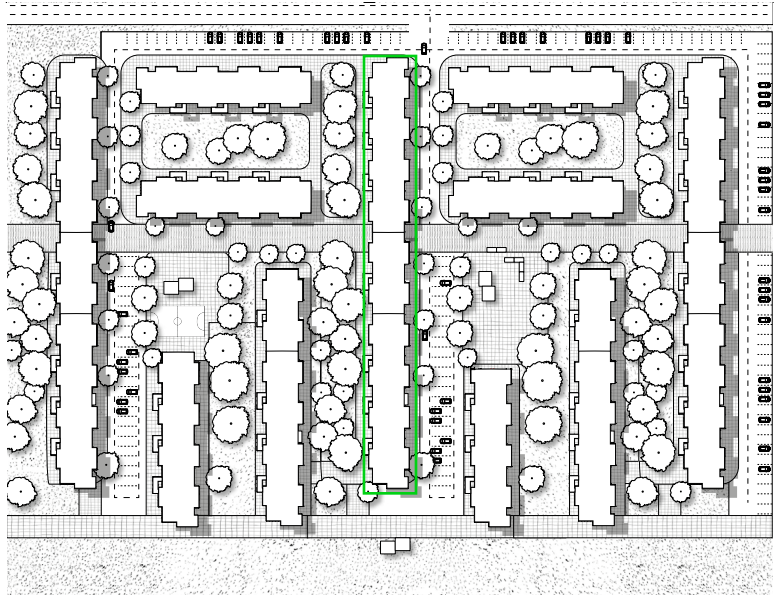
Woningen huidig gebouw



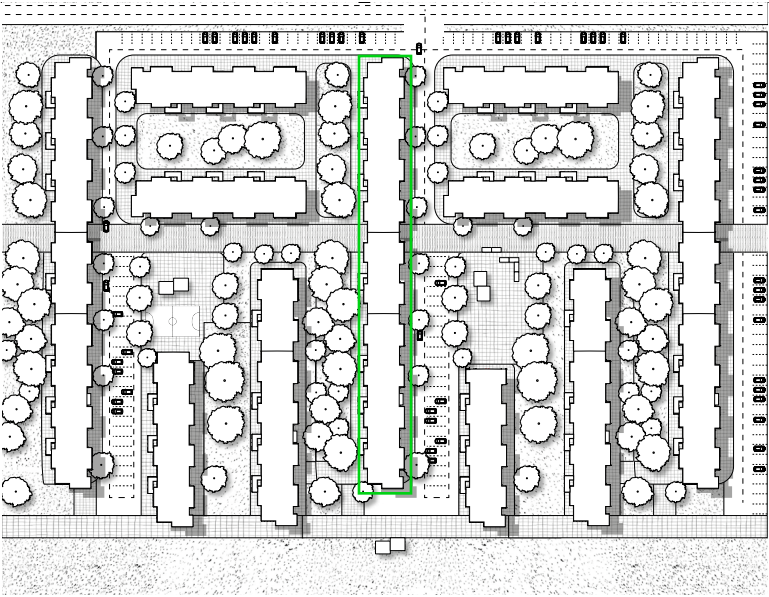
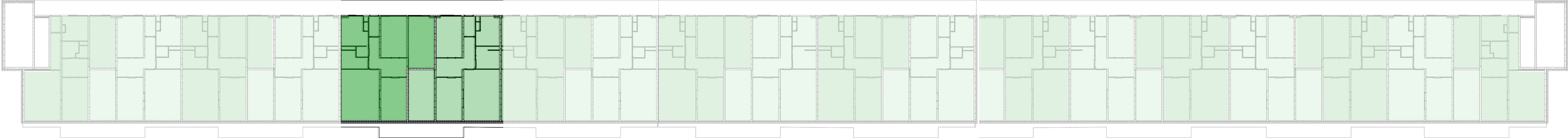
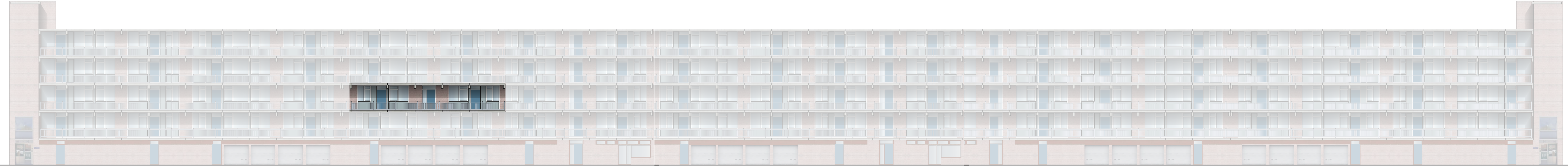
Woningen huidig gebouw



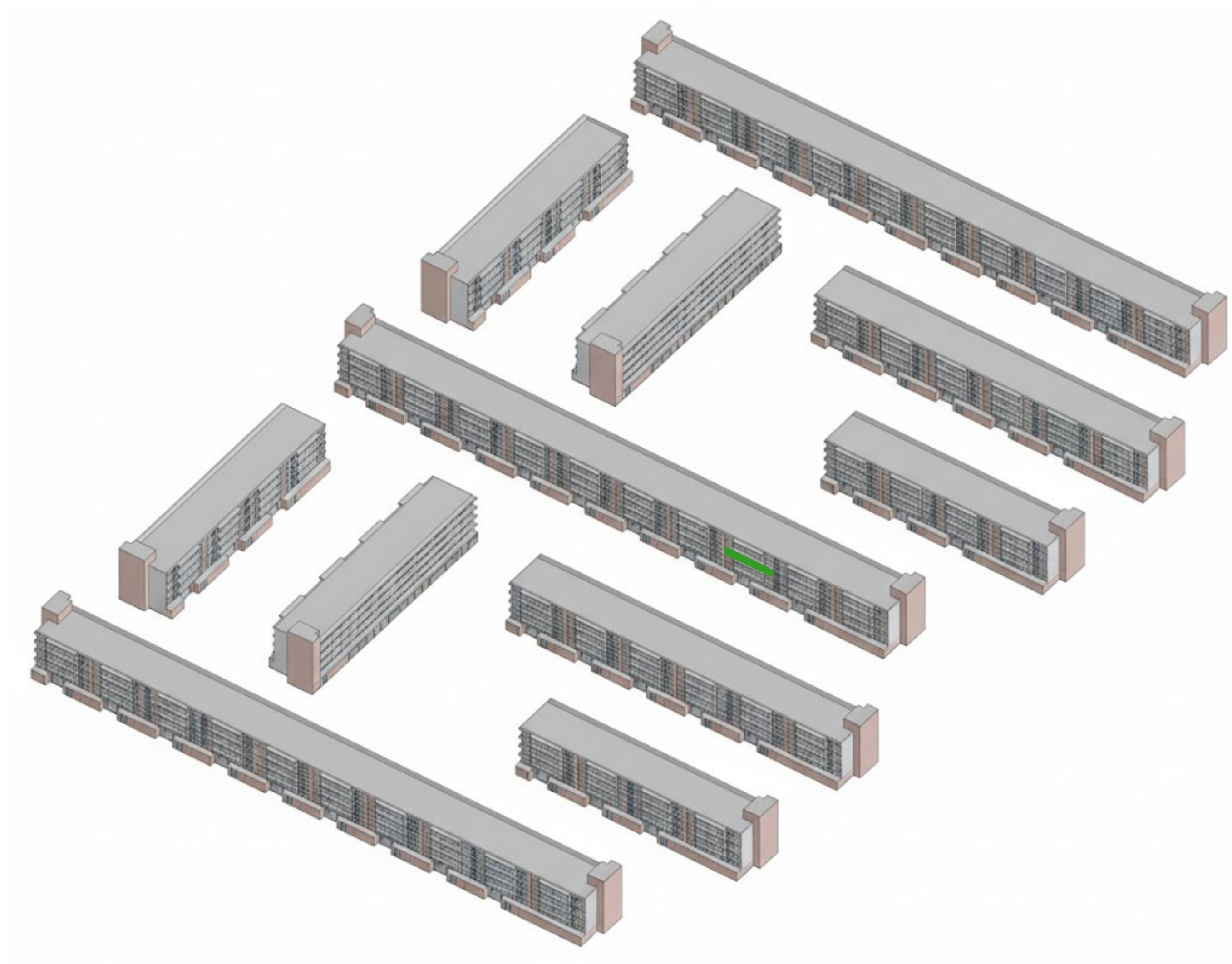
Aanzicht huidig gebouw



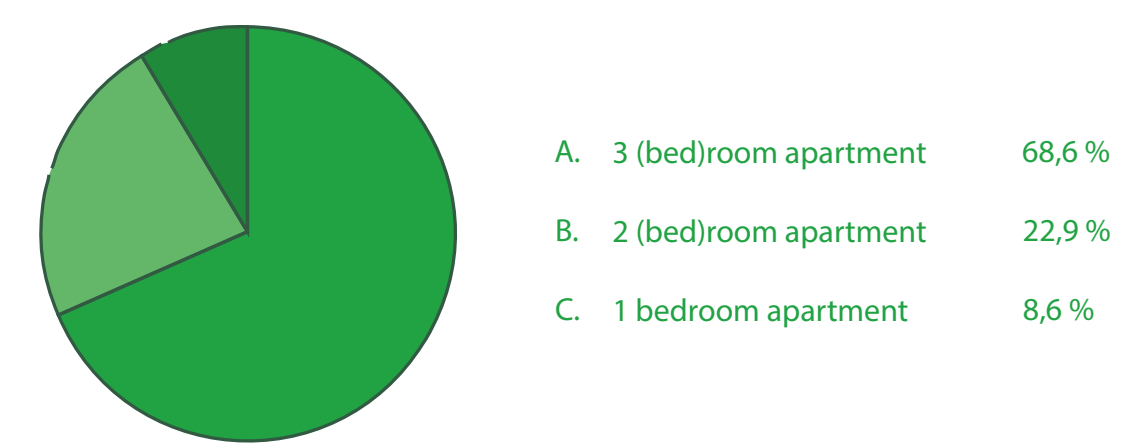
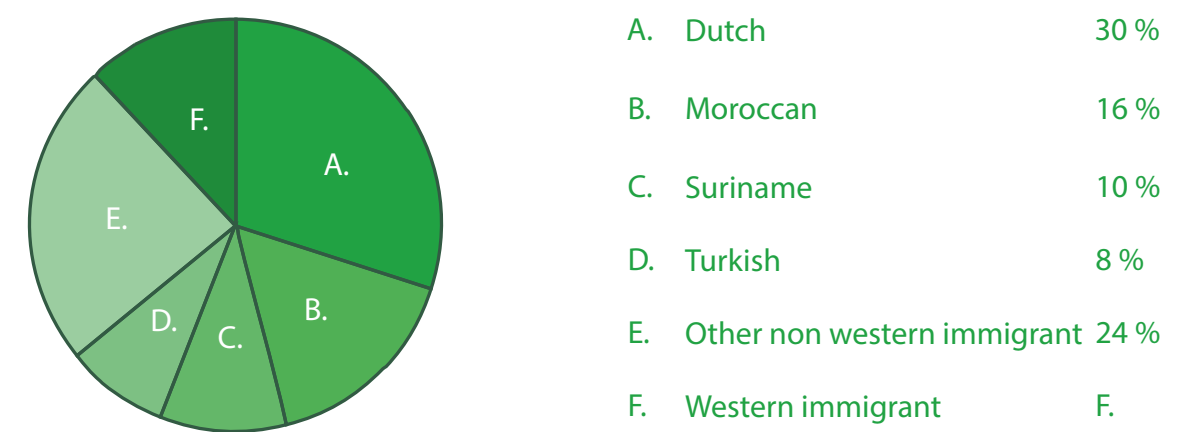
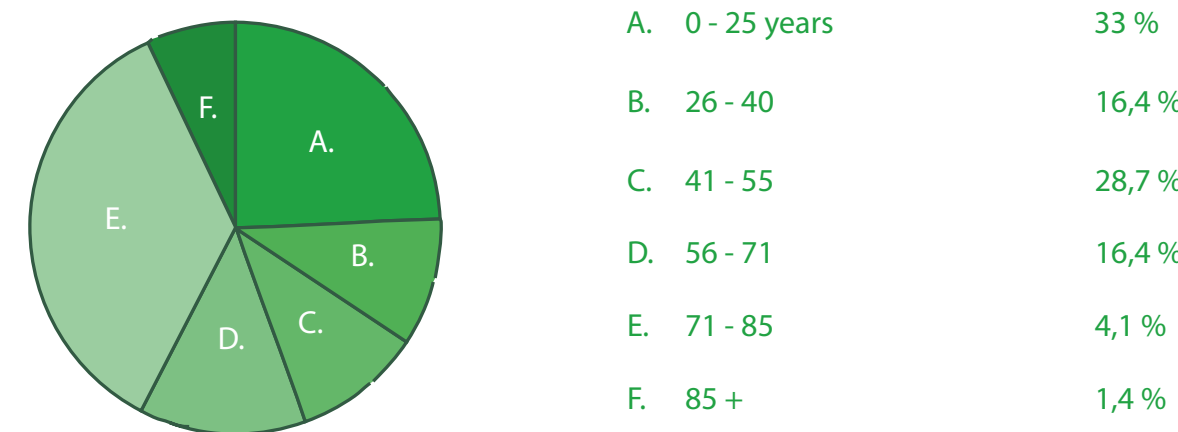
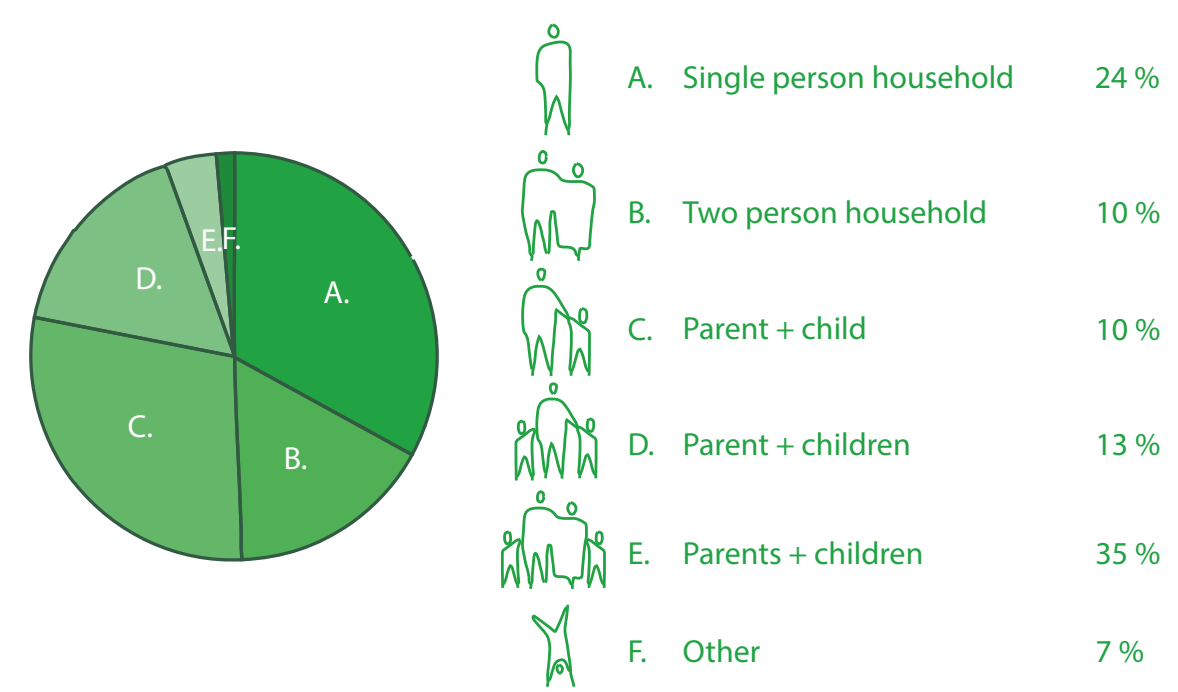
Woningen huidig gebouw



Woningen huidig gebouw



Bewoners & woningvoorraad



3(bed)room apartment: (stock) 68,6% - (need residents) 35% - 13% = +20,57% surplus
2(bed)room apartment: (stock) 22,9% - (need residents) 10% - 10% - 7% = - 4% shortage
1(bed)room apartment: (stock) 8,6% - (need residents) 24% = - 15,4% shortage
Young adults living at home (18+) = 9,9% = - 25,3% shortage

Ambitie

NOODZAAK	De woningvoorraad diversifiëren om aan de werkelijke behoeften te voldoen.
NOODZAAK	Het opwaarderen van gevelmaterialen en verbeteren van de thermische prestaties
POTENTIEEL	Aanpasbaarheid voor toekomstgericht wonen
POTENTIEEL	Gedeelde ruimtes voor een sterkere gemeenschap
POTENTIEEL	Hergebruik van materialen voor een circulaire ontwerp

Ambitie

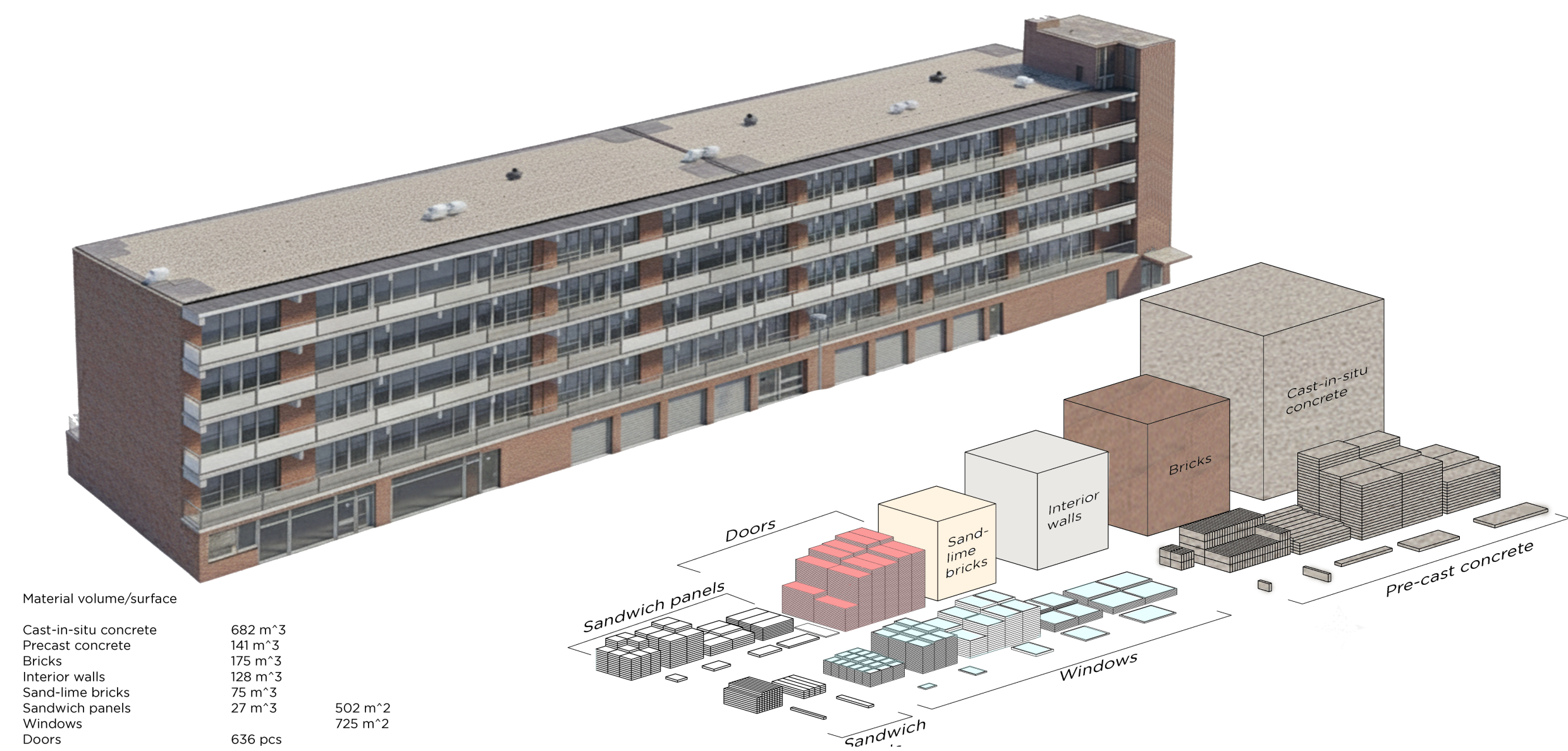
NOODZAAK	De woningvoorraad diversifiëren om aan de werkelijke behoeften te voldoen.	Sociaal & ruimtelijk
NOODZAAK	Het opwaarderen van gevelmaterialen en verbeteren van de thermische prestaties	Duurzaamheid & circulariteit
POTENTIEEL	Aanpasbaarheid voor toekomstgericht wonen	Sociaal & ruimtelijk
POTENTIEEL	Gedeelde ruimtes voor een sterkere gemeenschap	Sociaal & ruimtelijk
POTENTIEEL	Hergebruik van materialen voor een circulaire ontwerp	Duurzaamheid & circulariteit

Circulair & technisch ontwerp

Thesis

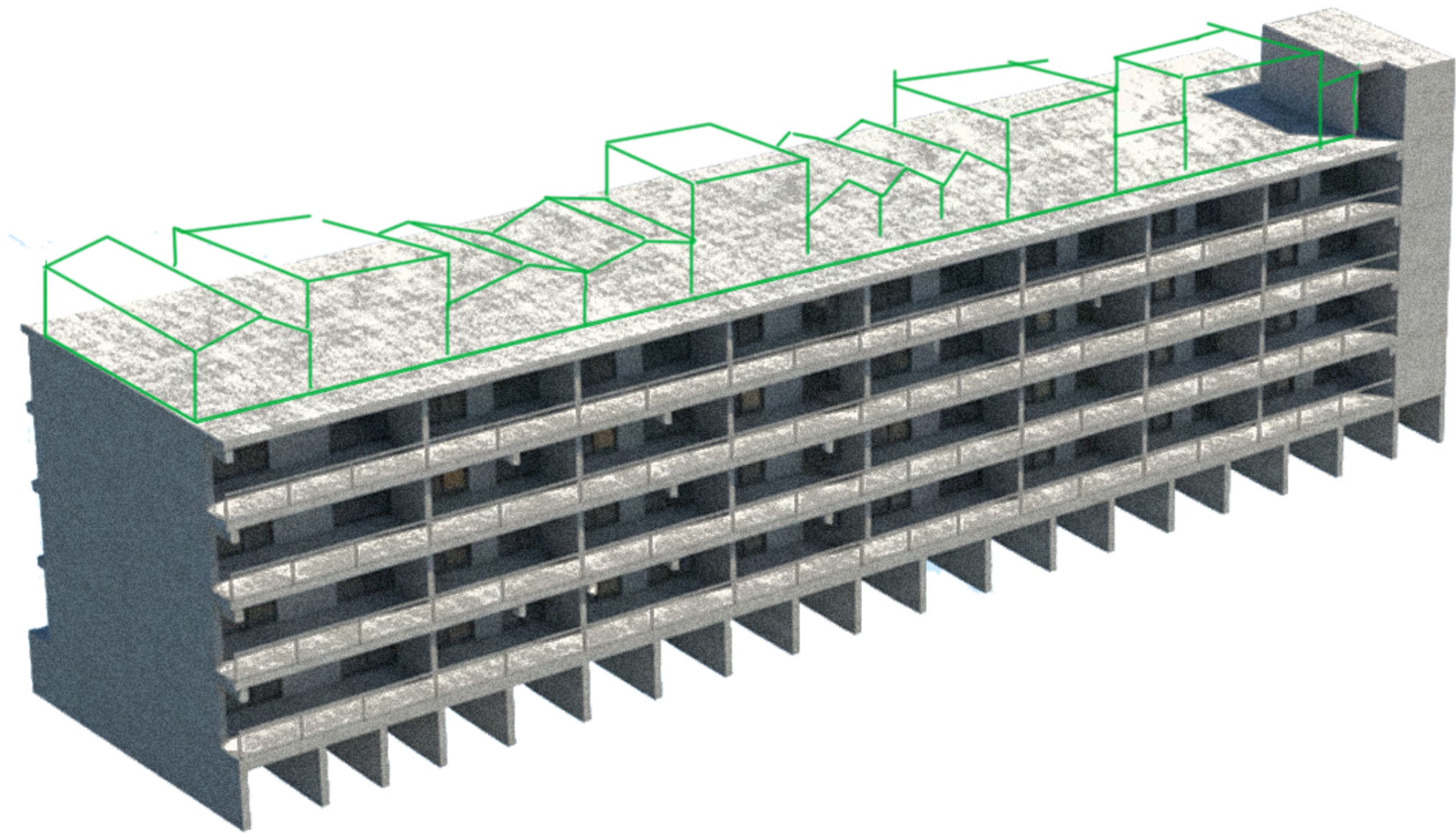
Duurzaamheid & circulariteit

Circulaire transformatie van jaren '60 galerijflat



- Inventariseren van materialen en kwaliteiten
- Oogsten van materialen
- Hergebruik van materialen

Inventaris: beton



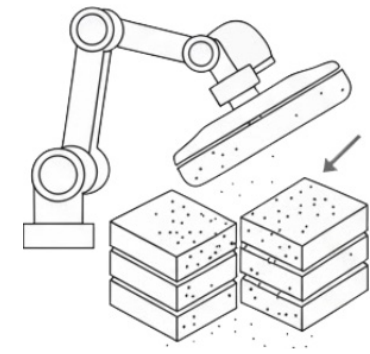
In werk gestort beton	682 m ³
Prefab beton	141 m ³

Inventaris: baksteen



Baksteen

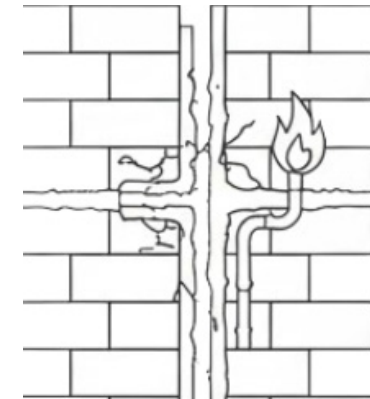
175 m^3



Reuse

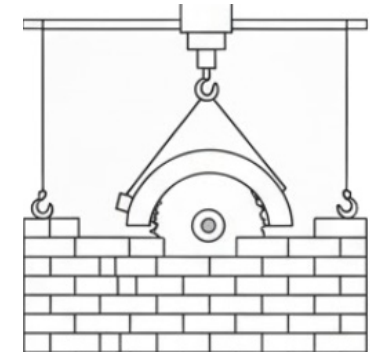
50%

Vibrational rasping



50%

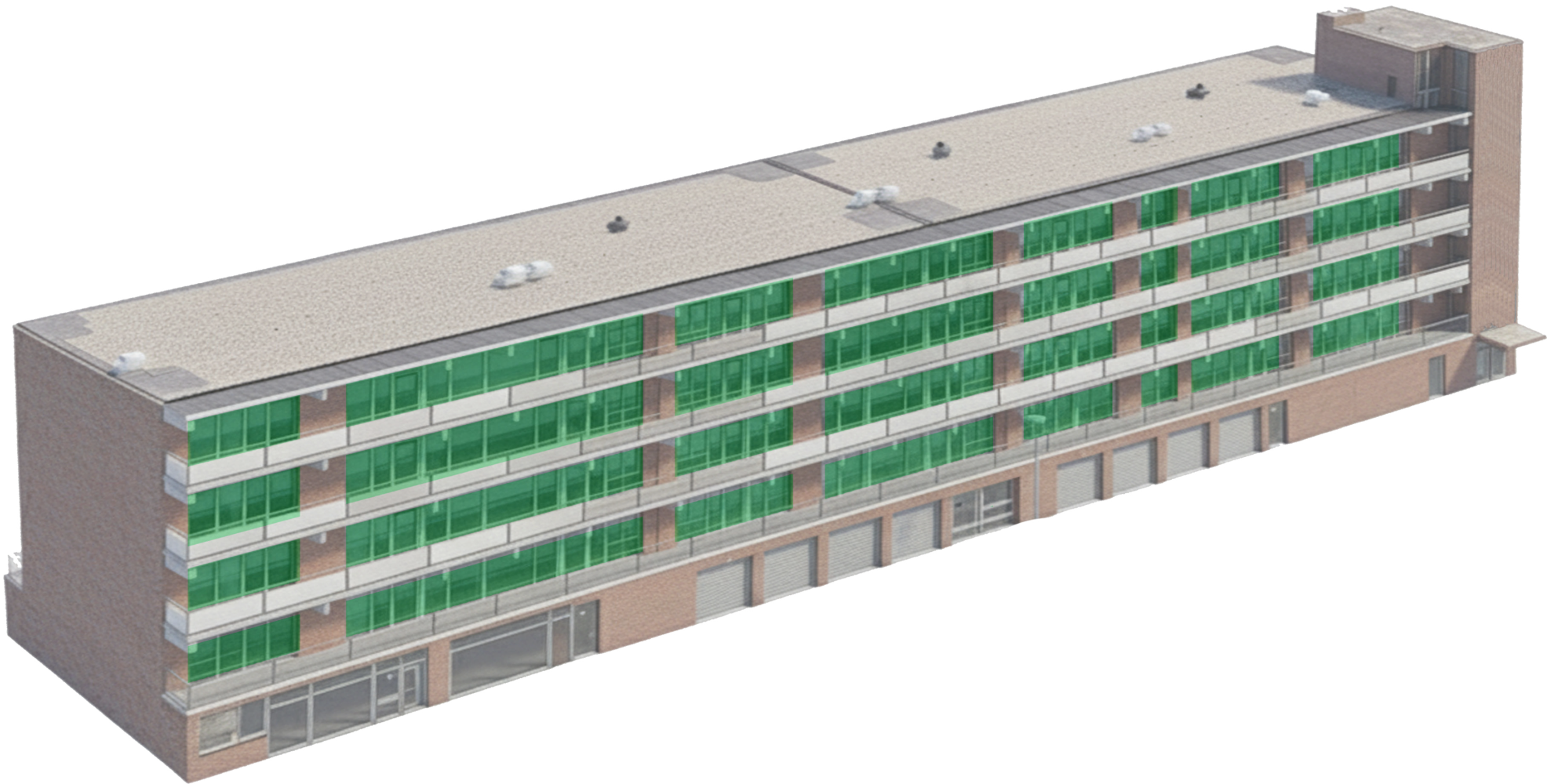
Thermal seperation



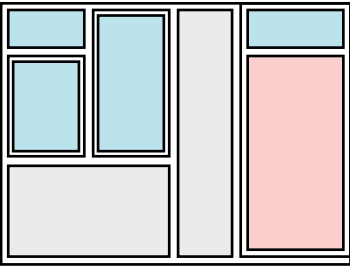
90%

Cutting panels

Inventaris: gevel-element

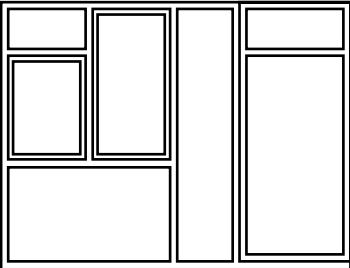


Glas 500 m^2
Kozijn 225 m^2
Panelen 502 m^2



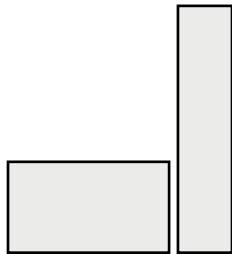
Niet geïsoleerde ruimtes

1:1 hergebruik



Kozijn voor hoogwaardig glas

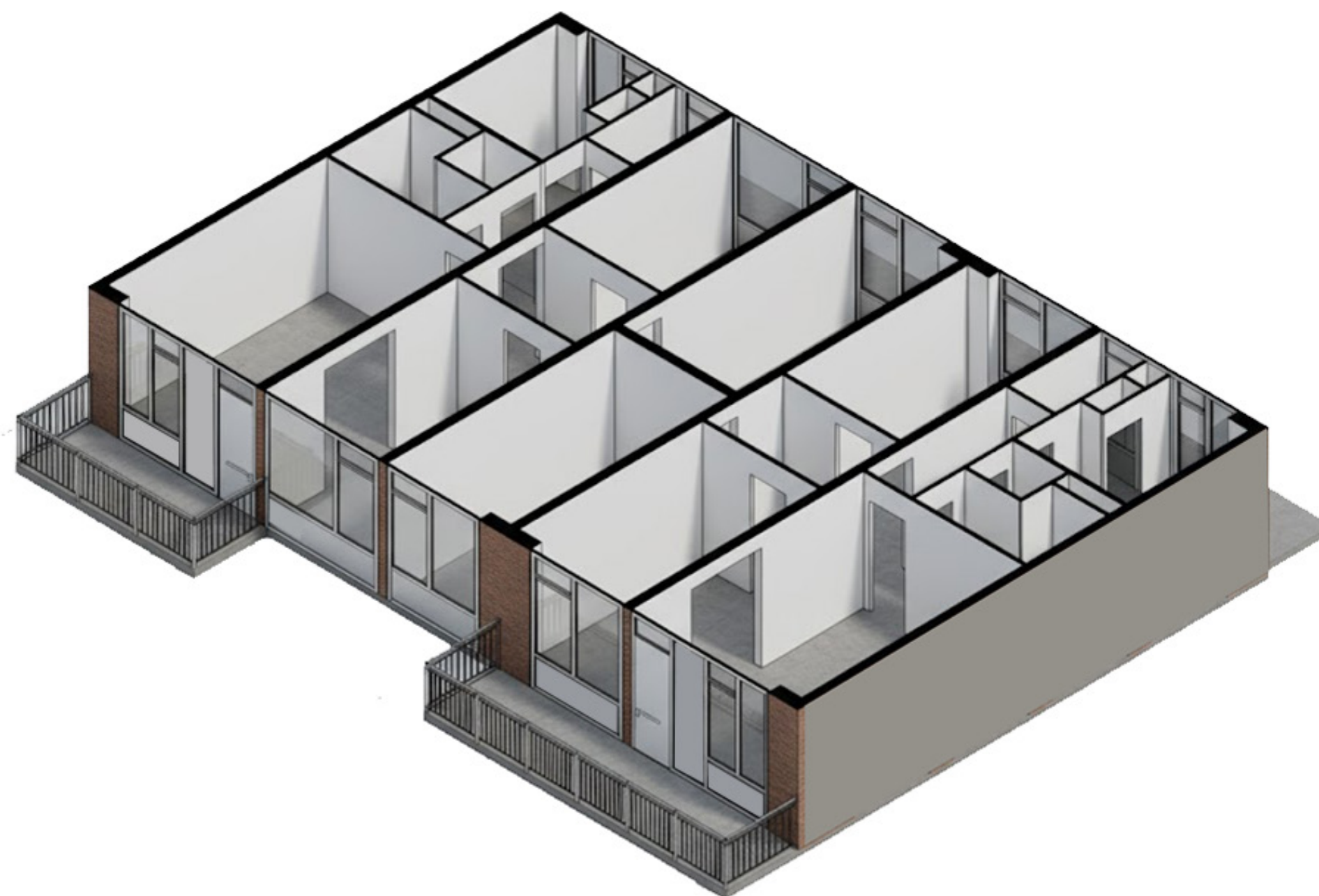
Hergebruik kozijn



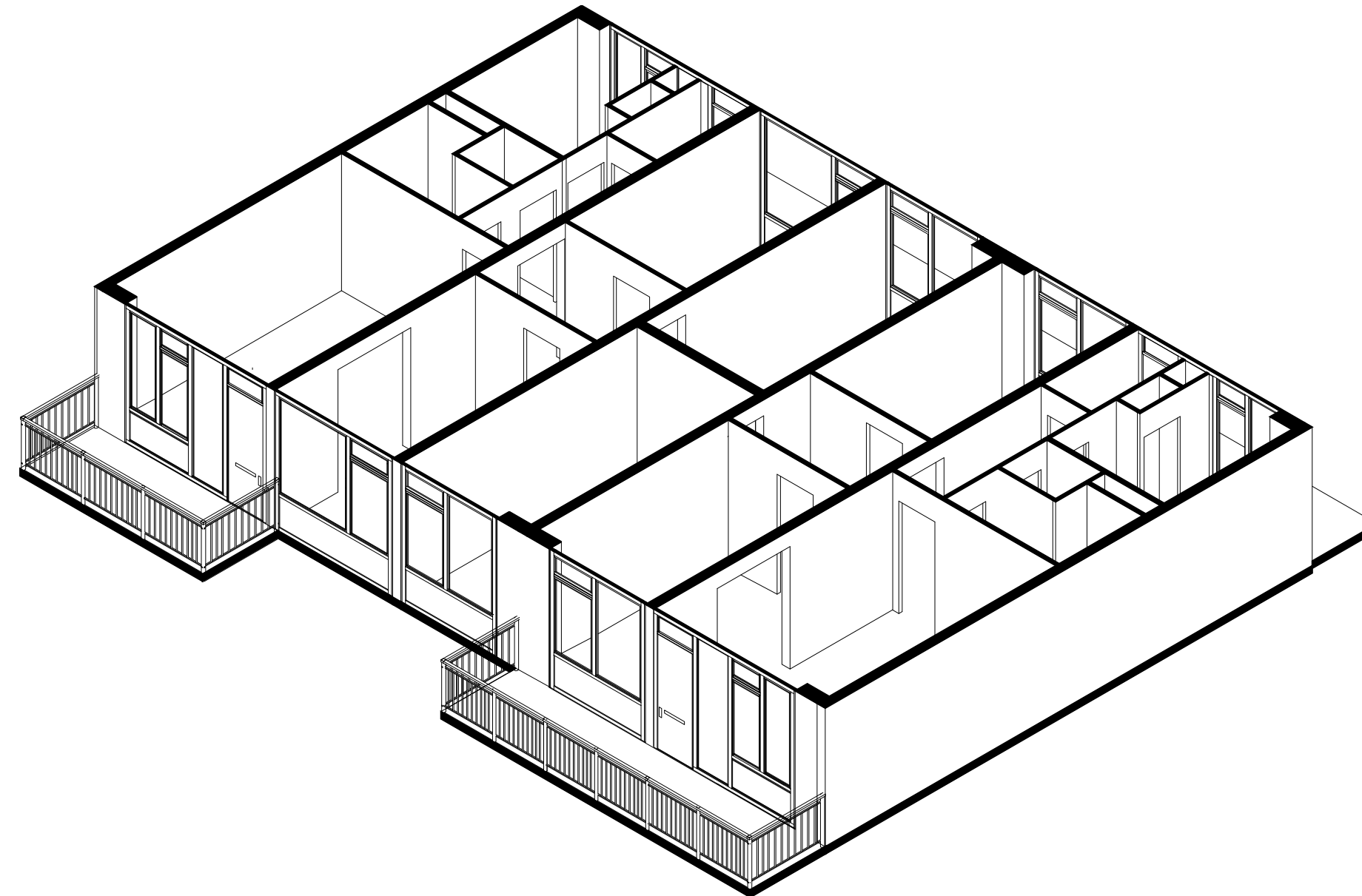
Gevelpanelen optop

Hergebruik panelen

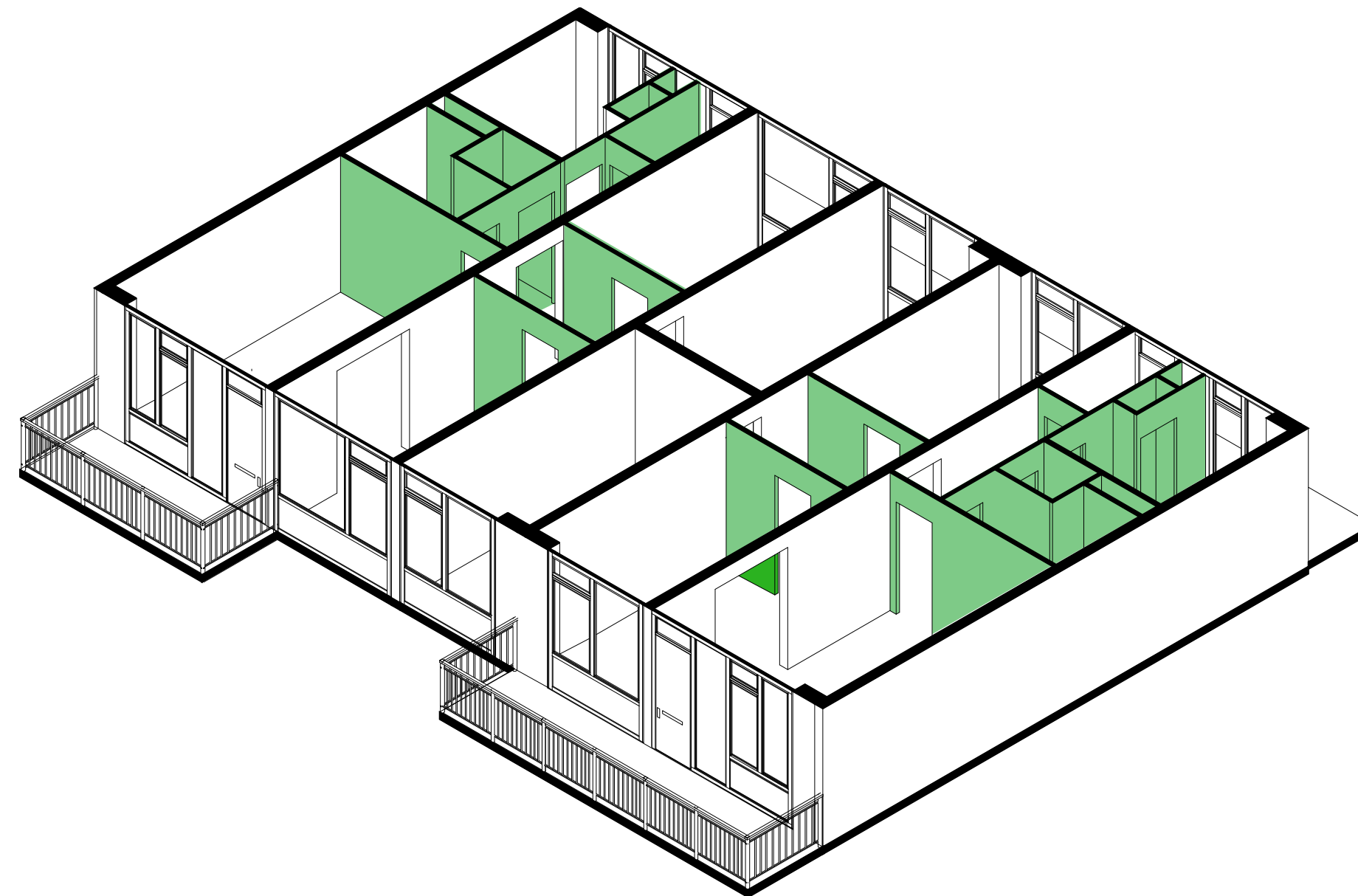
Huidige situatie



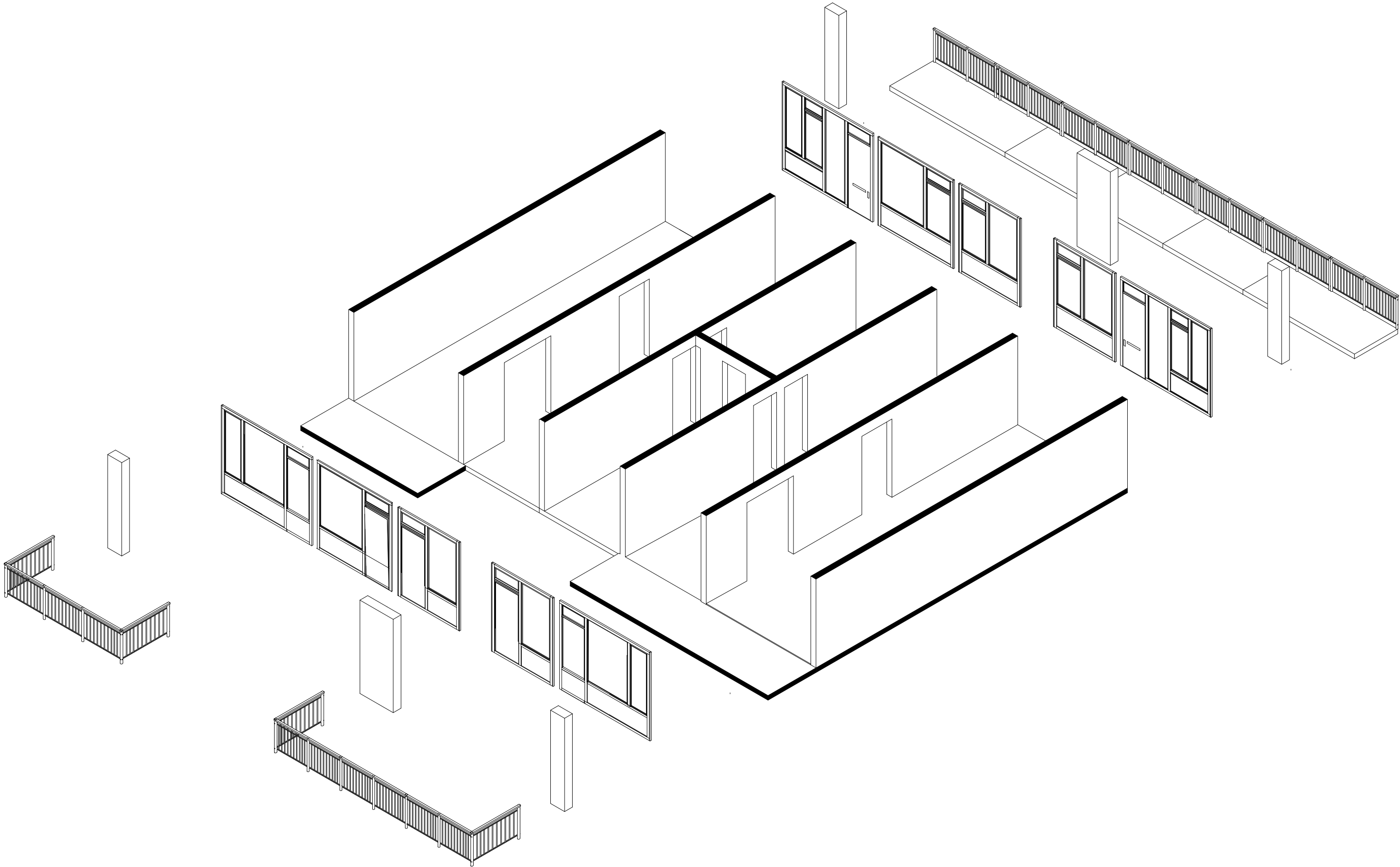
Huidige situatie



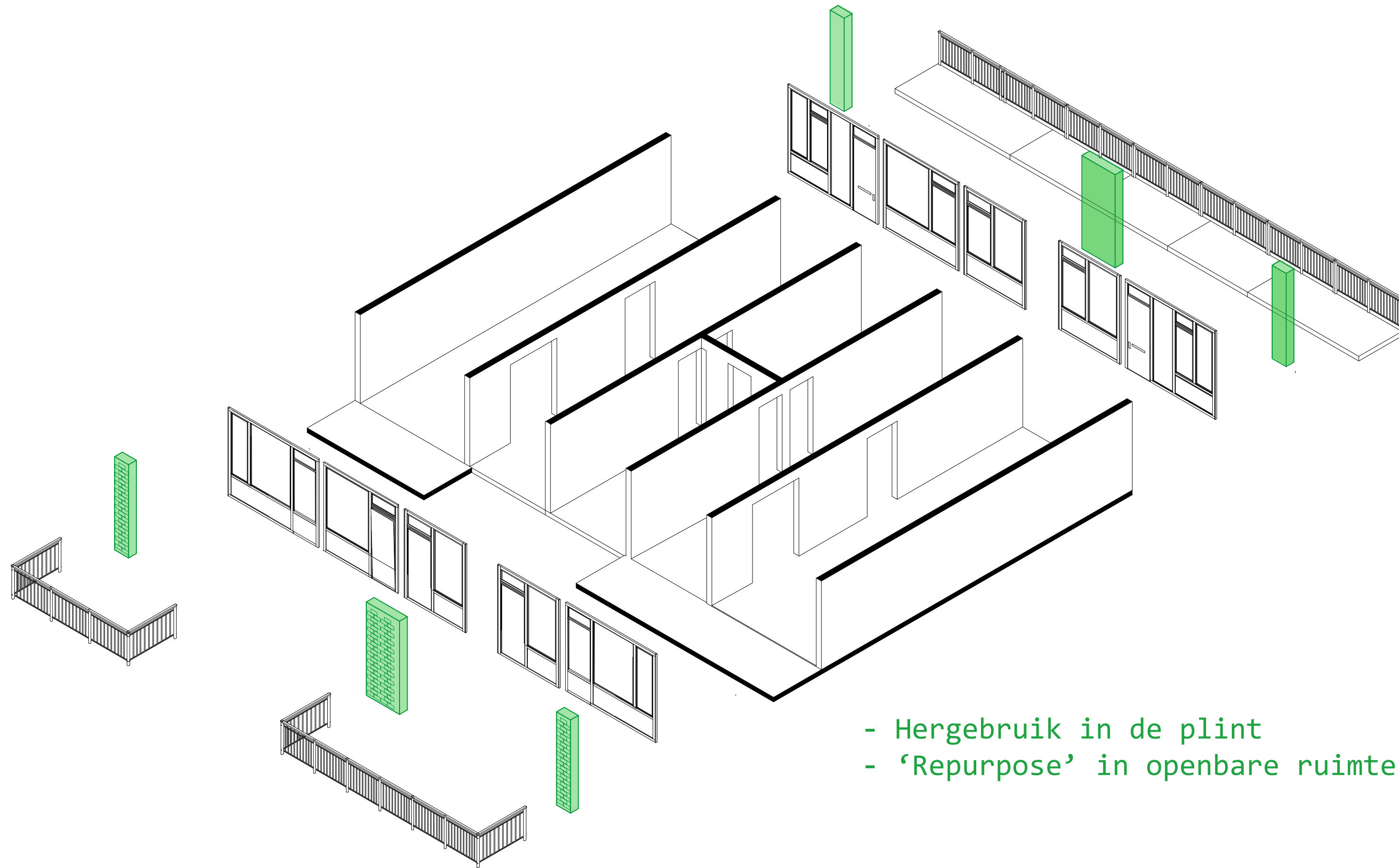
Binnenwänden: Recycle



Hergebruik: Facade

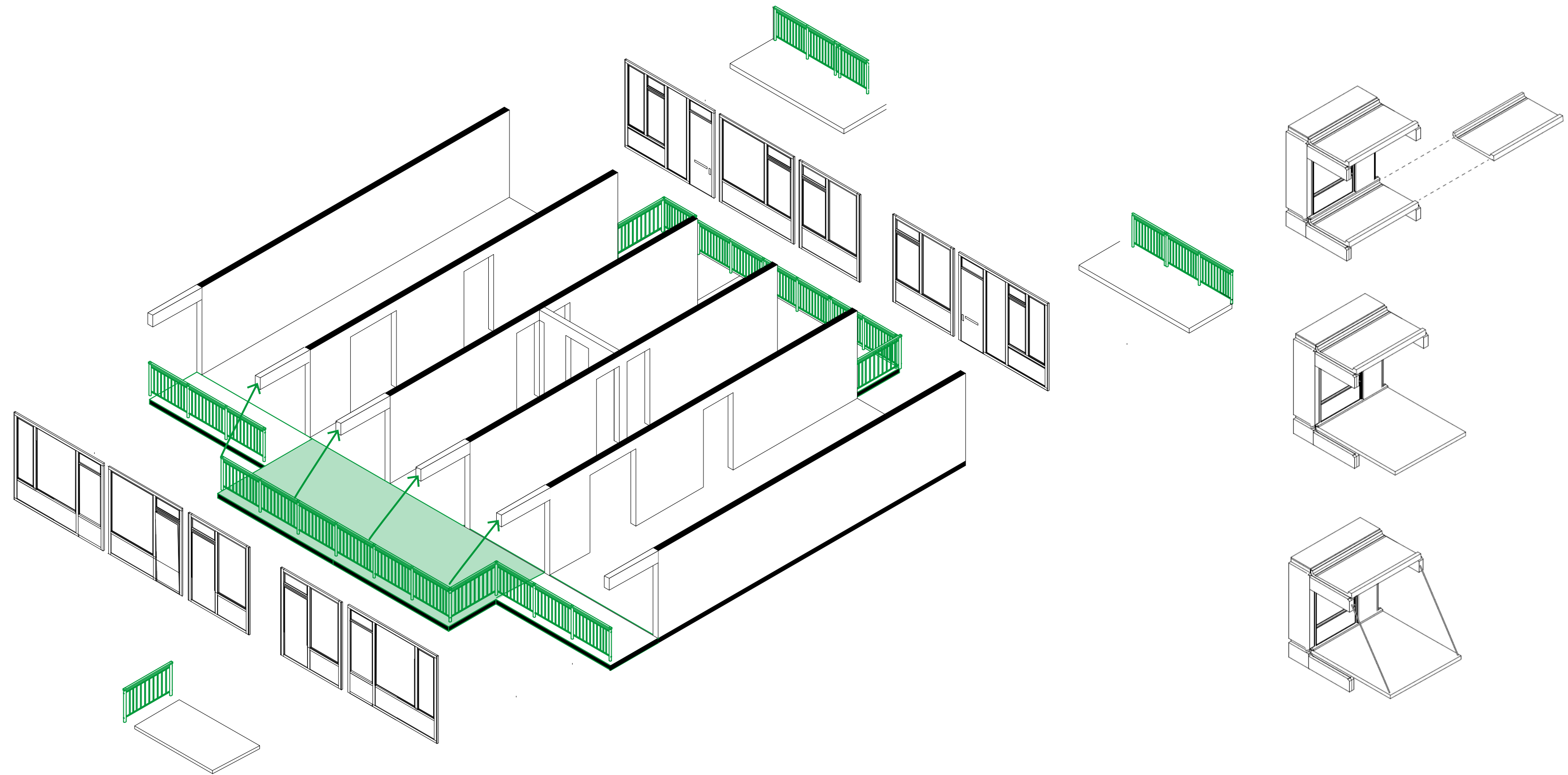


Hergebruik: Bakstenen

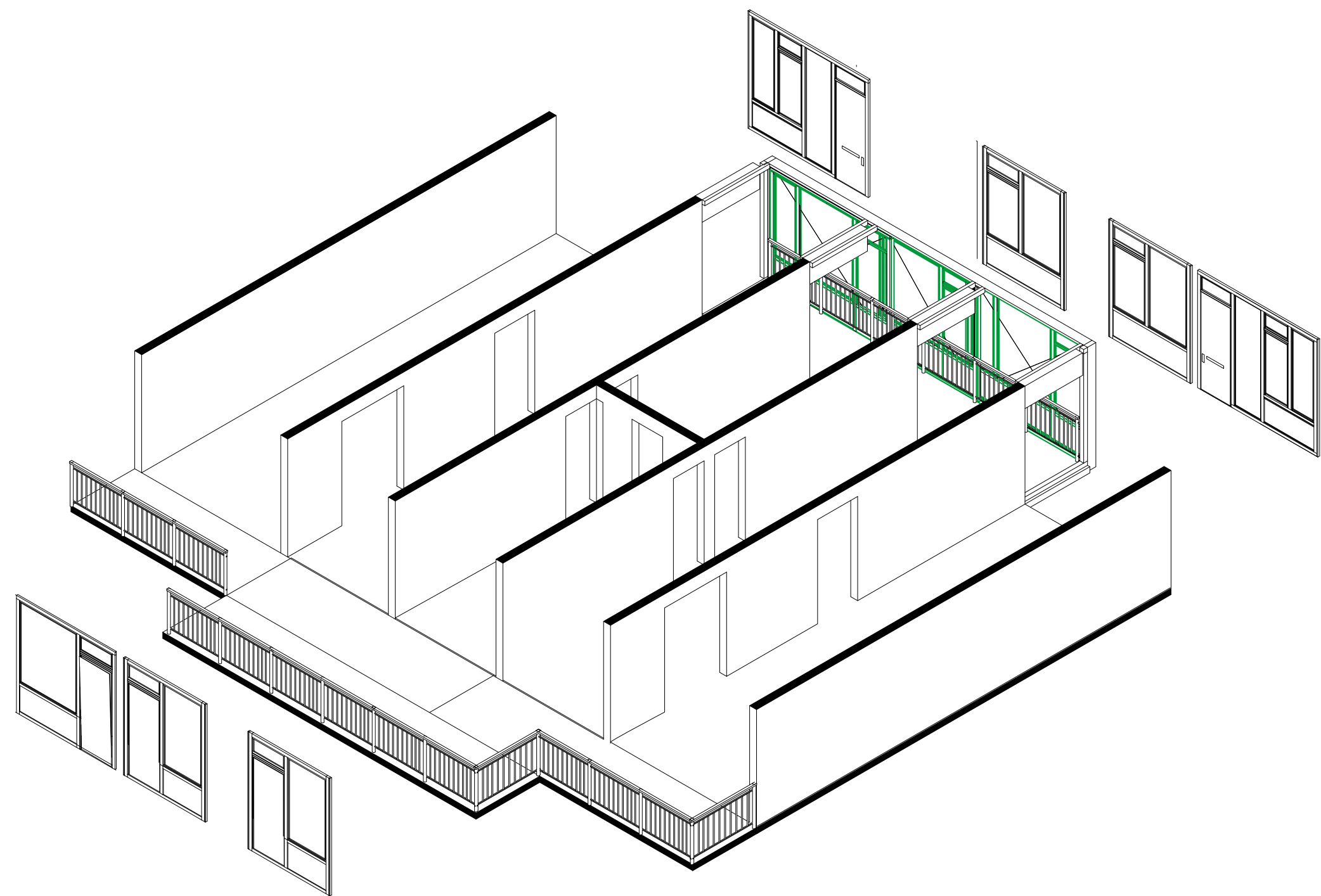


- Hergebruik in de plint
- 'Repurpose' in openbare ruimte

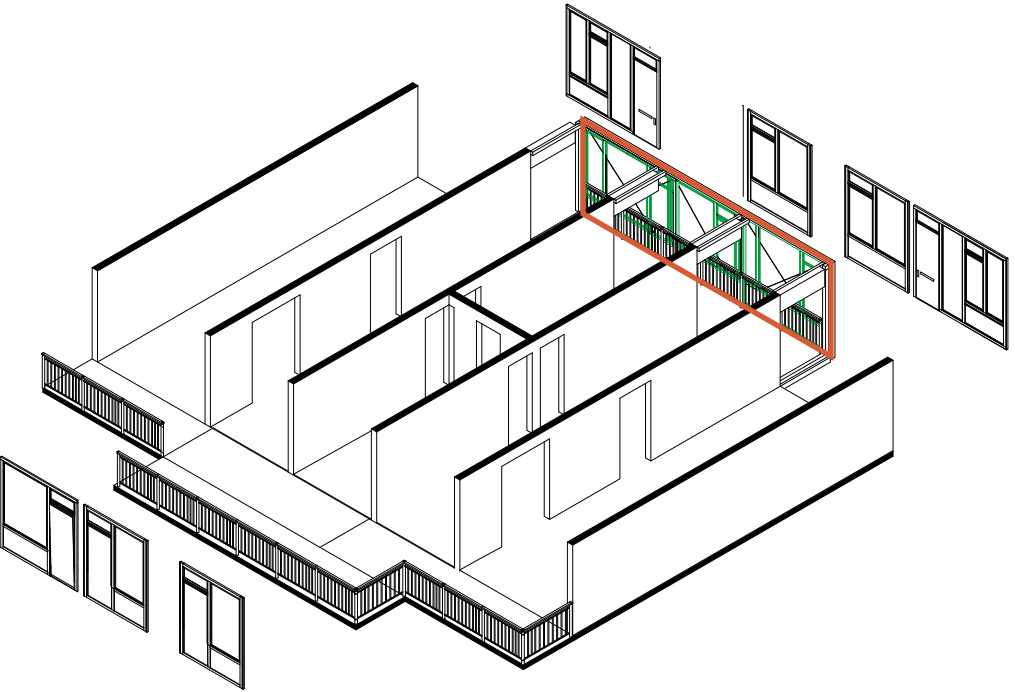
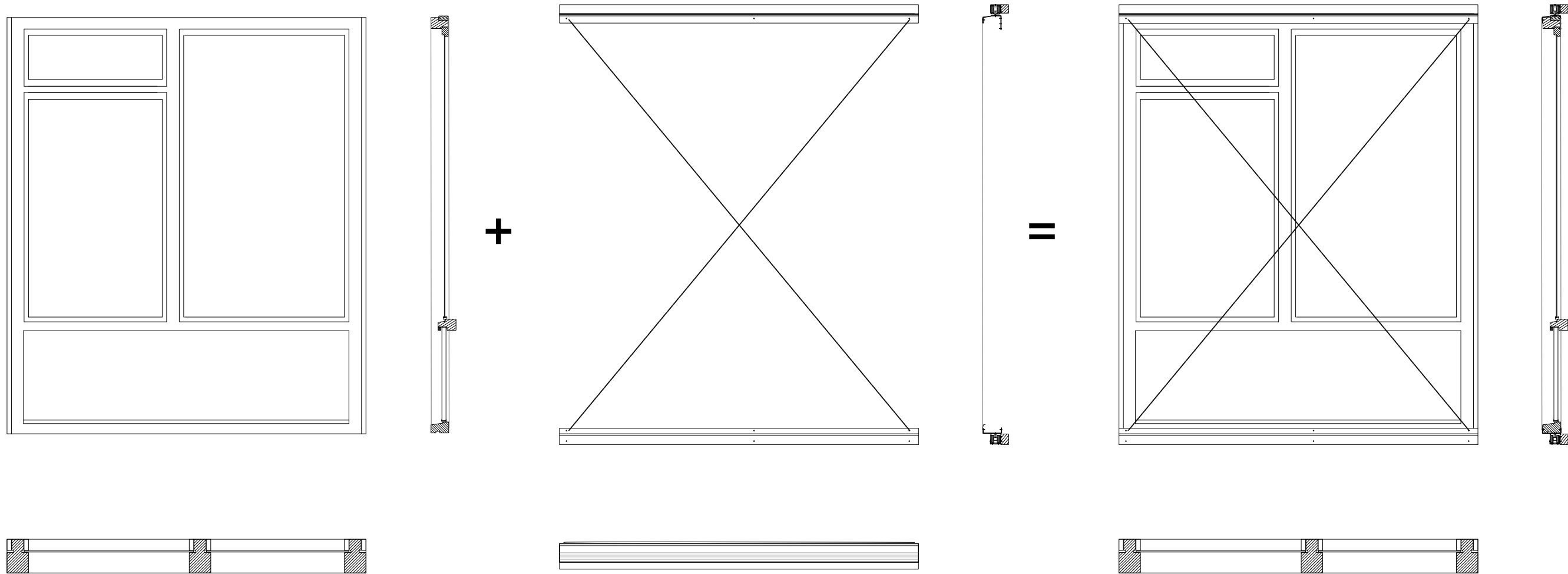
Hergebruik: Galerij



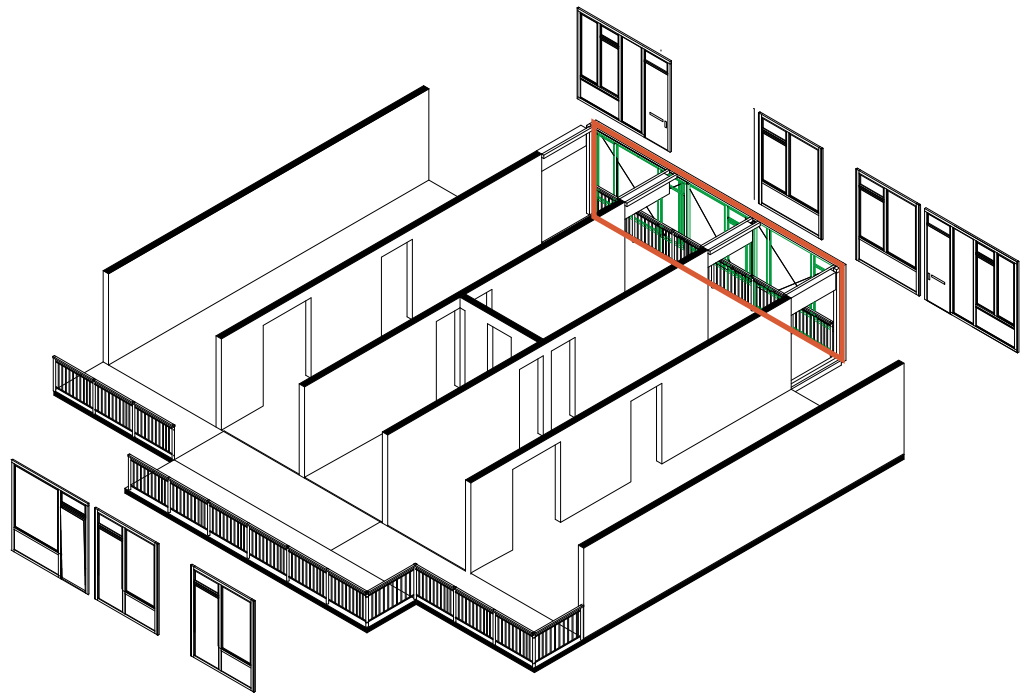
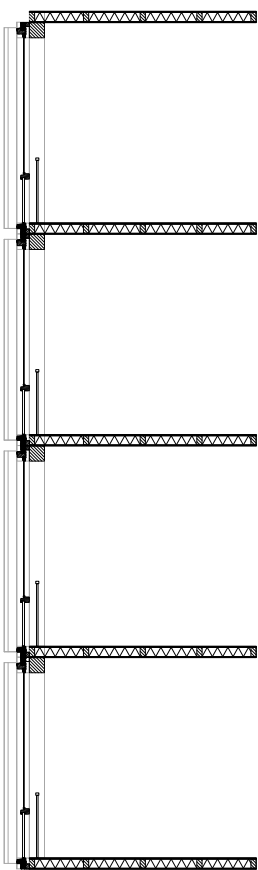
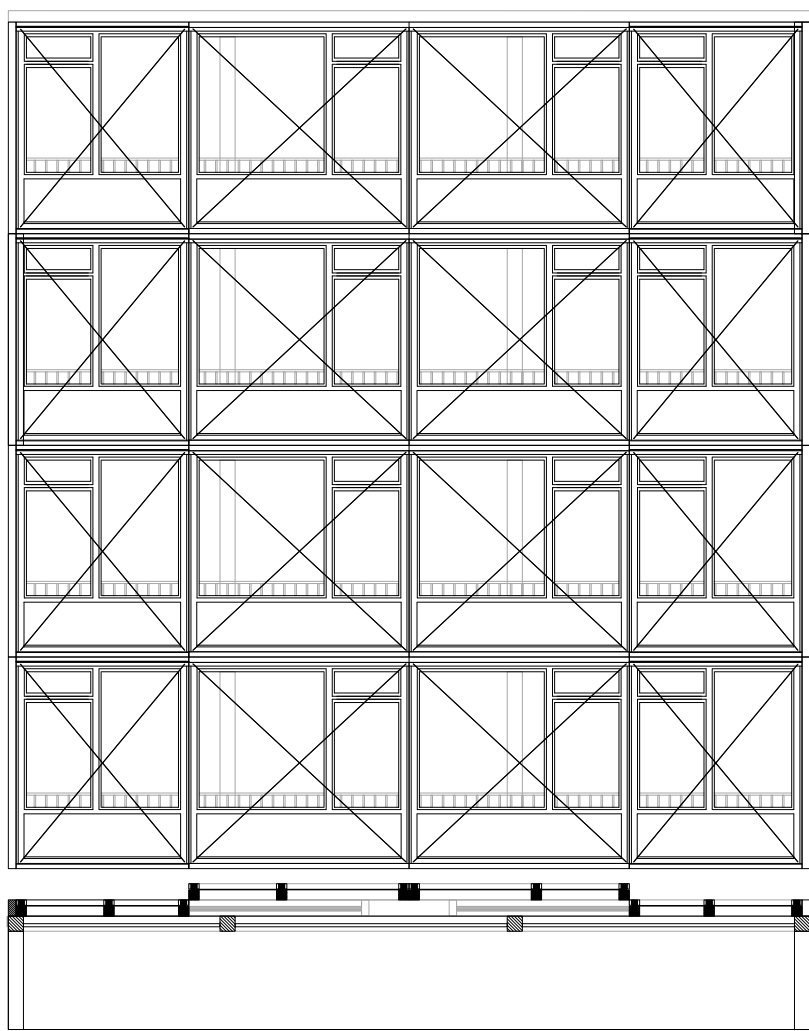
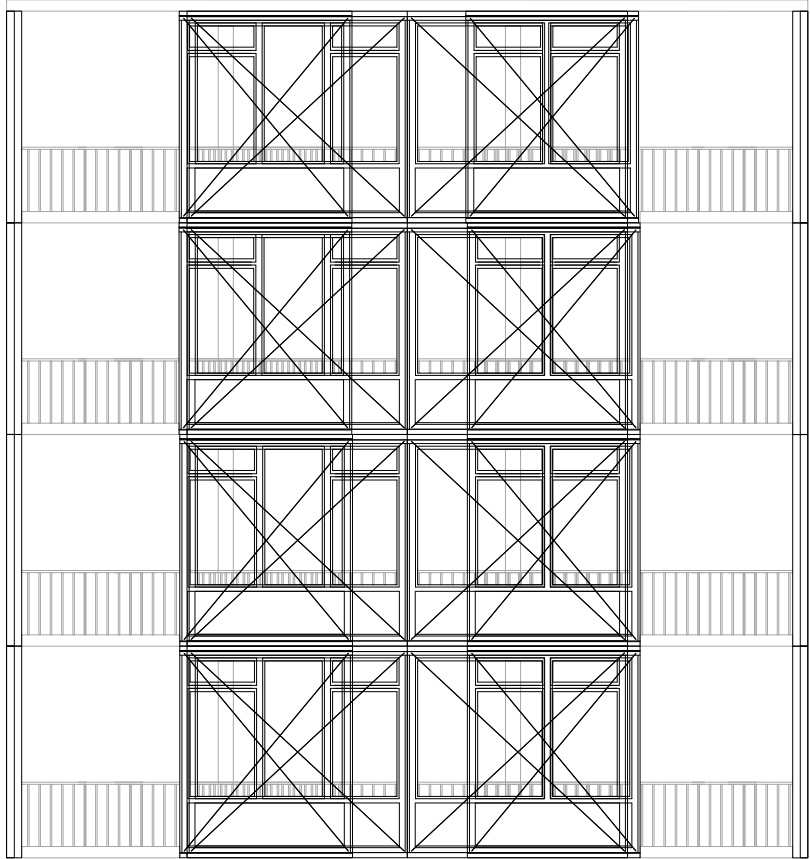
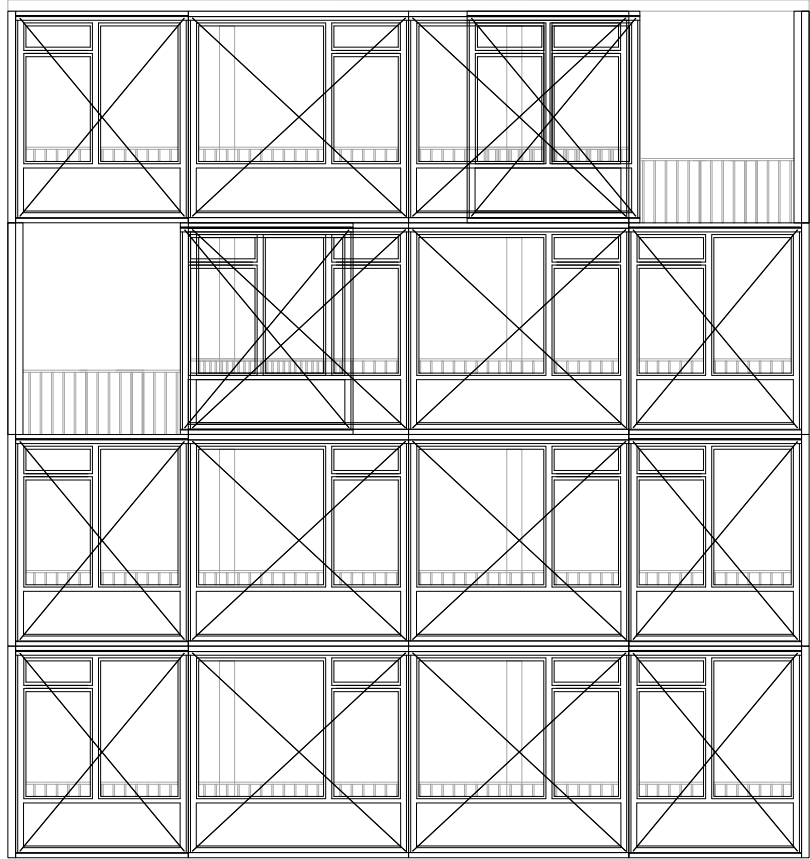
Hergebruik: Facade Element



Hergebruik: Facade Element

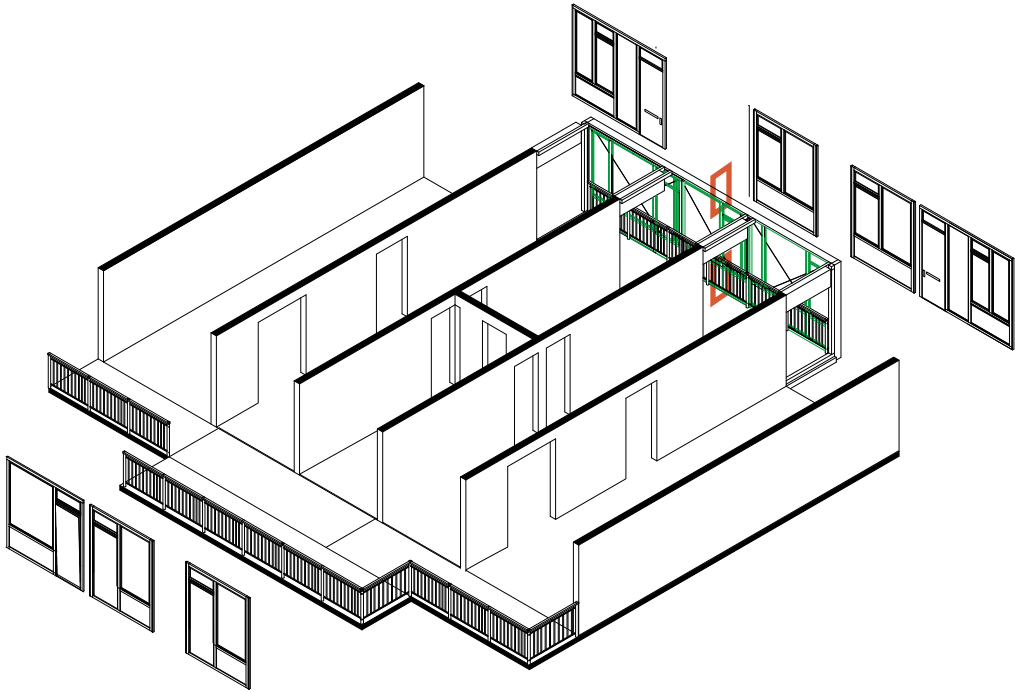
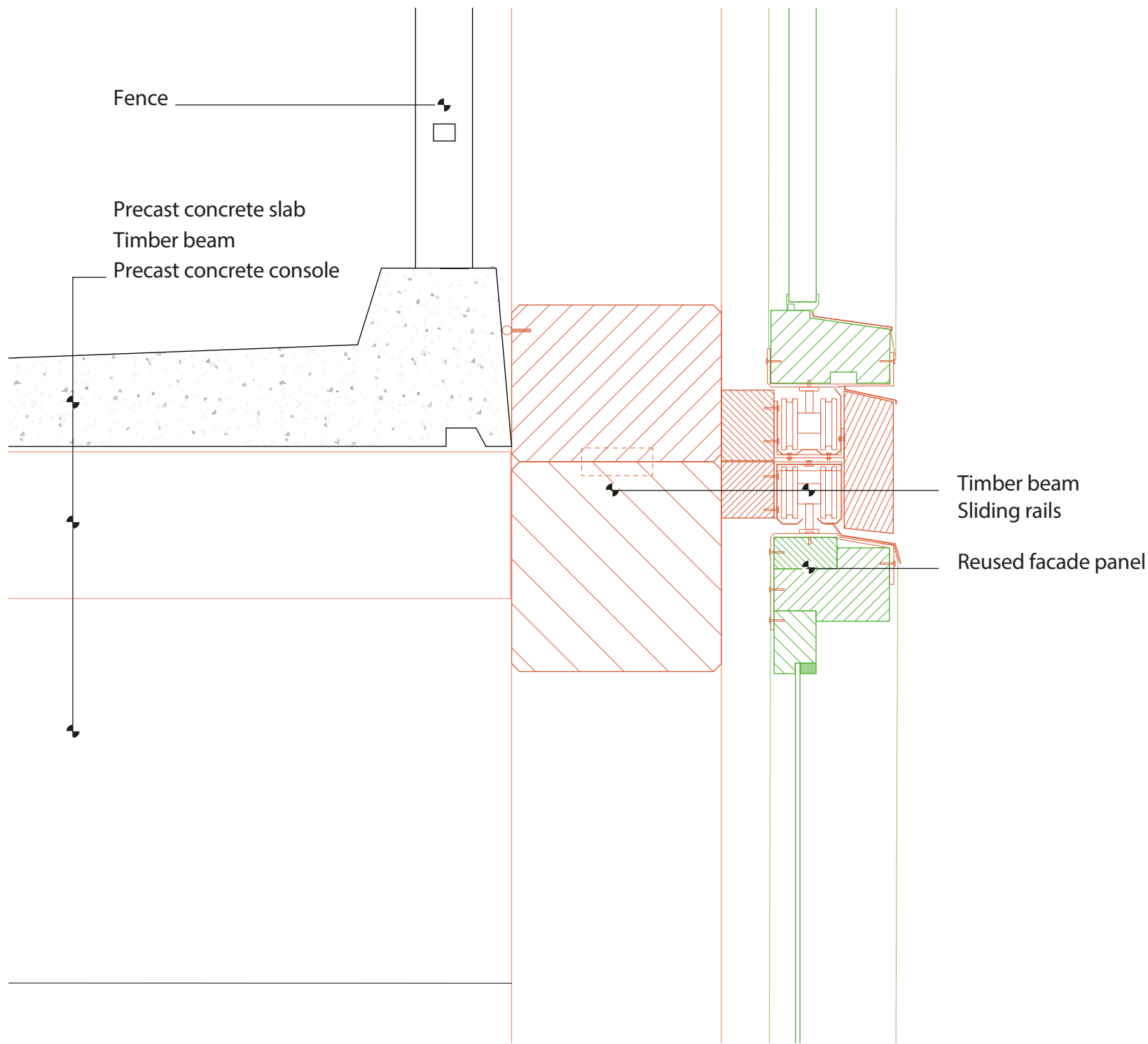


Hergebruik: Facade Element



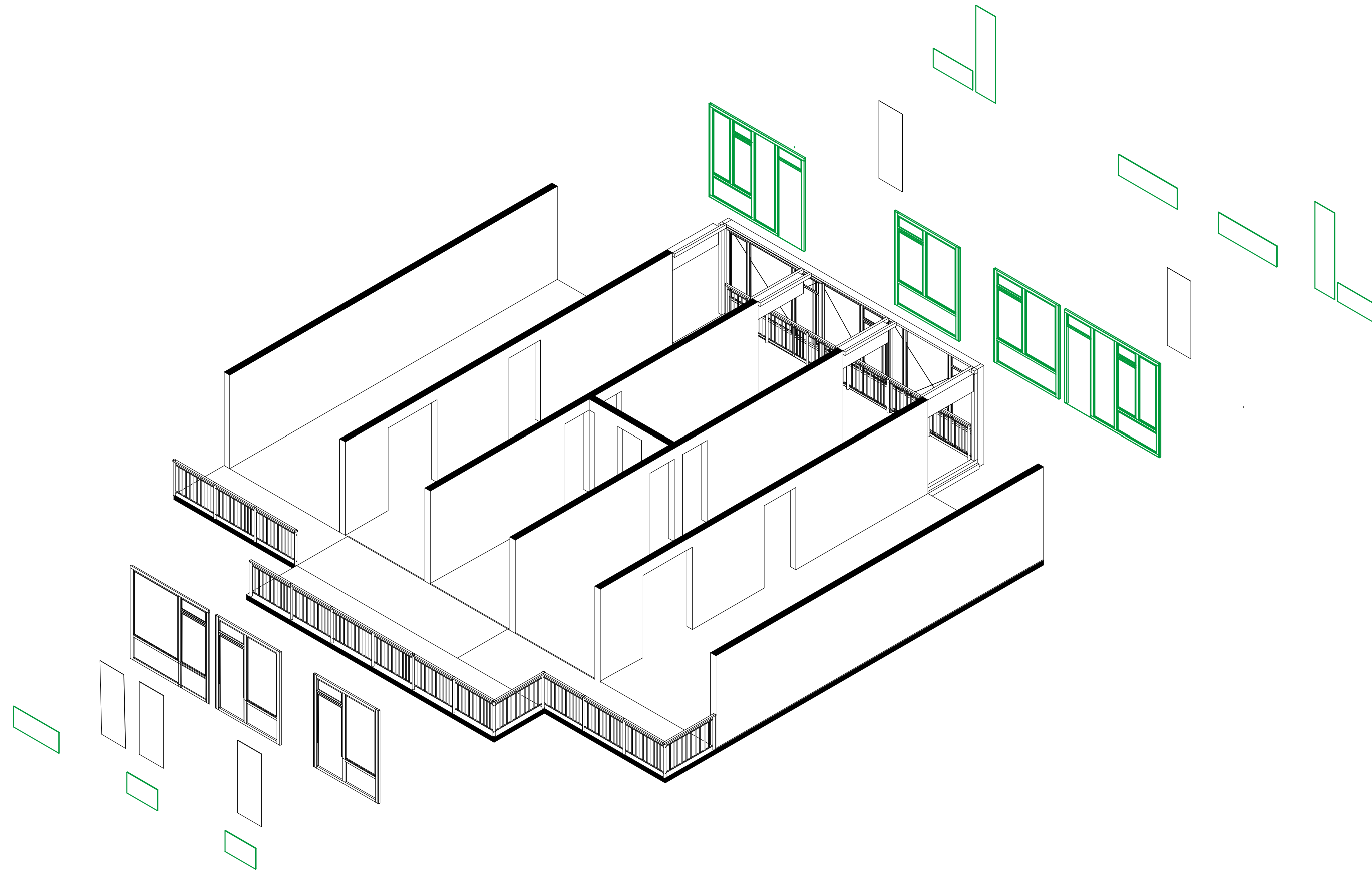
Hergebruik: Facade Element

Bestaand
Hergebruikt
Nieuw

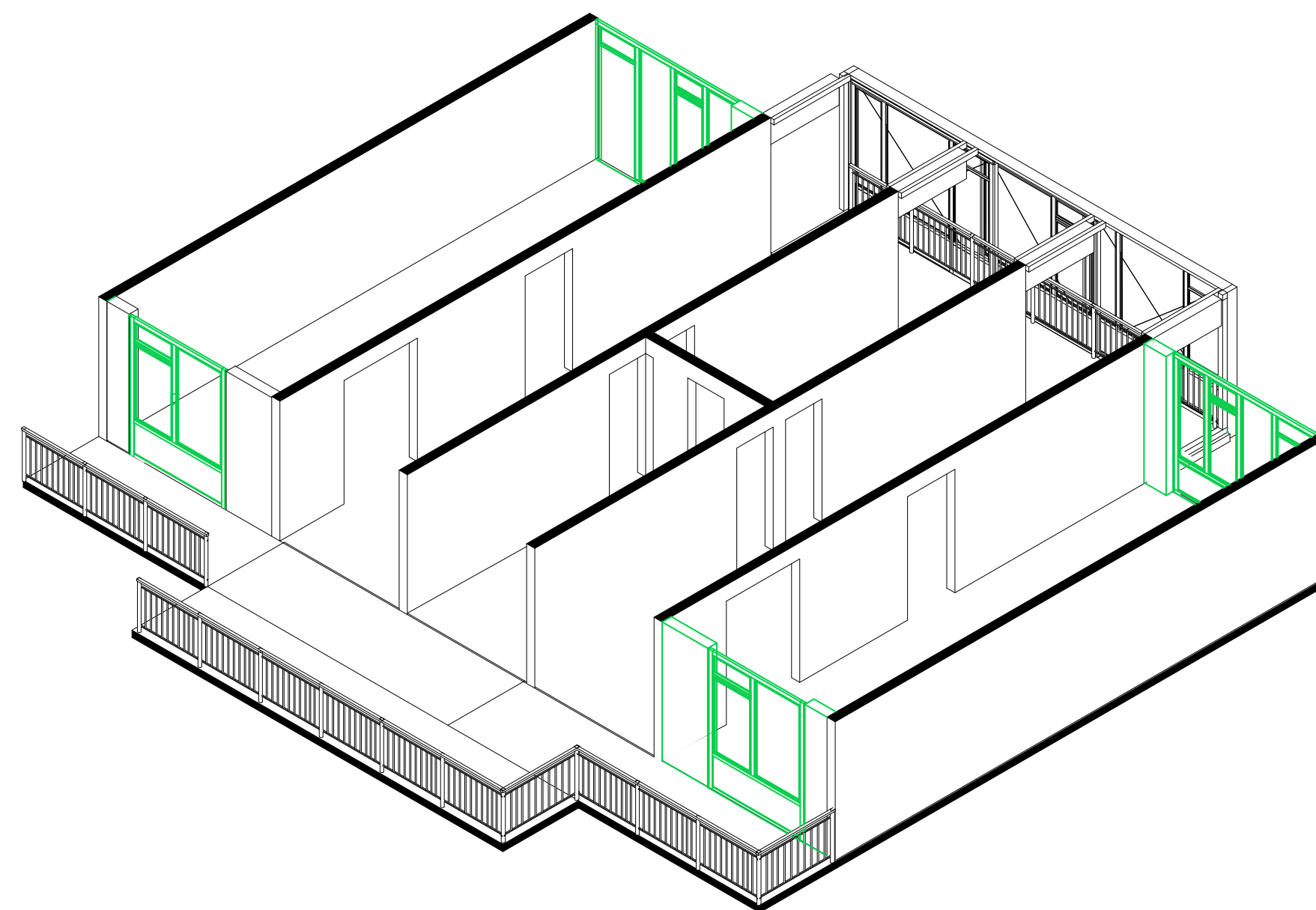




Hergebruik: Kozijnen & Sandwichpaneel

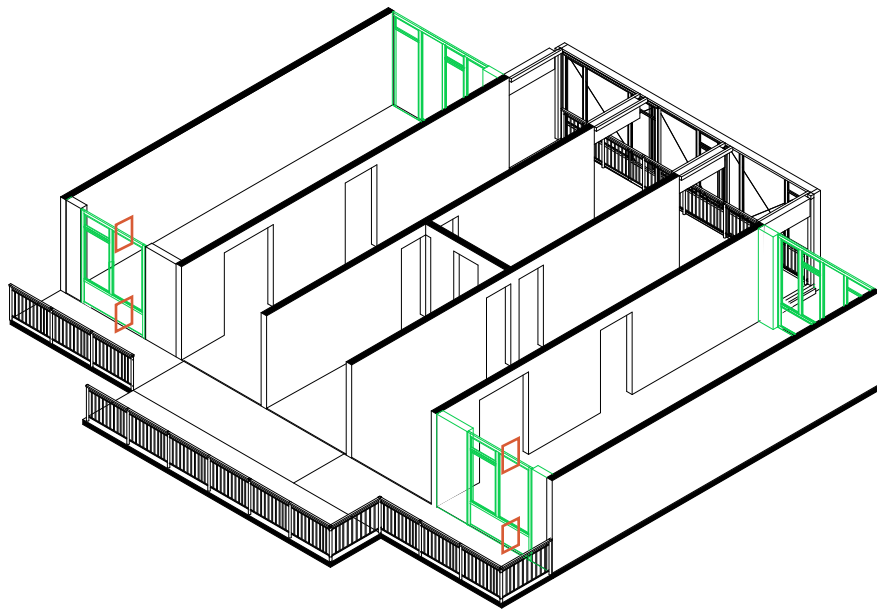
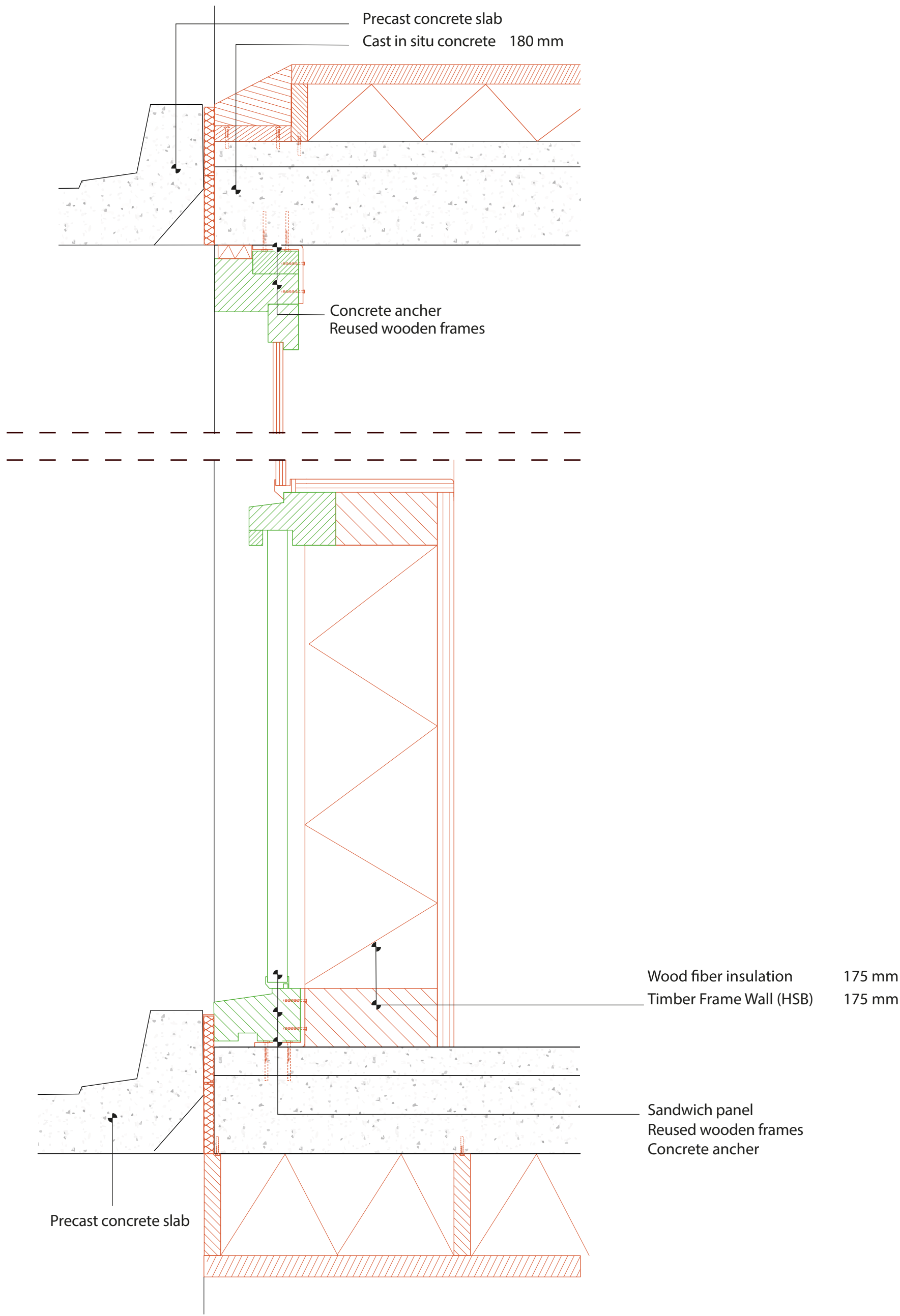


Hergebruik: Kozijnen



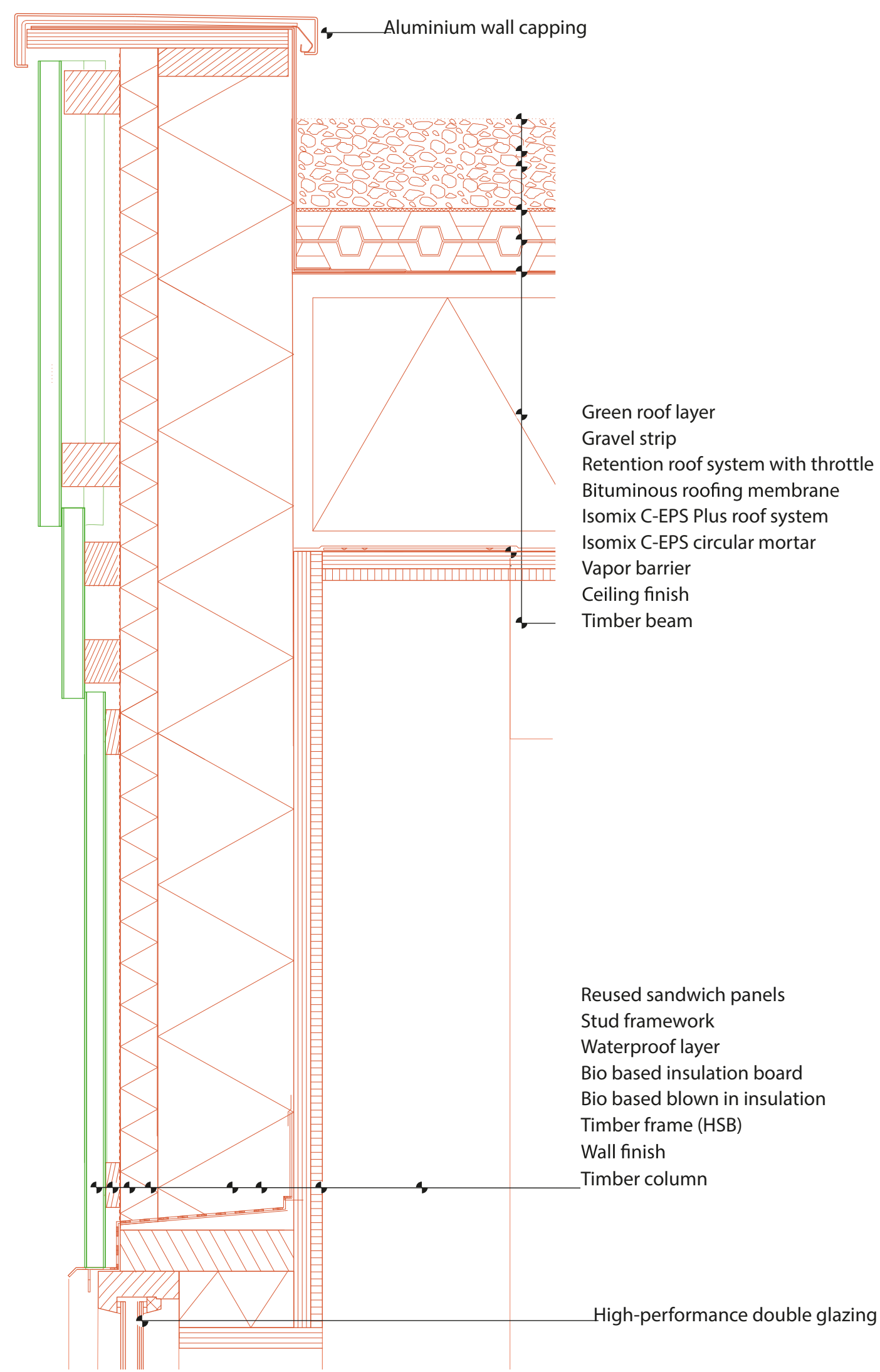
Hergebruik: Kozijnen

Bestaand
Hergebruikt
Nieuw

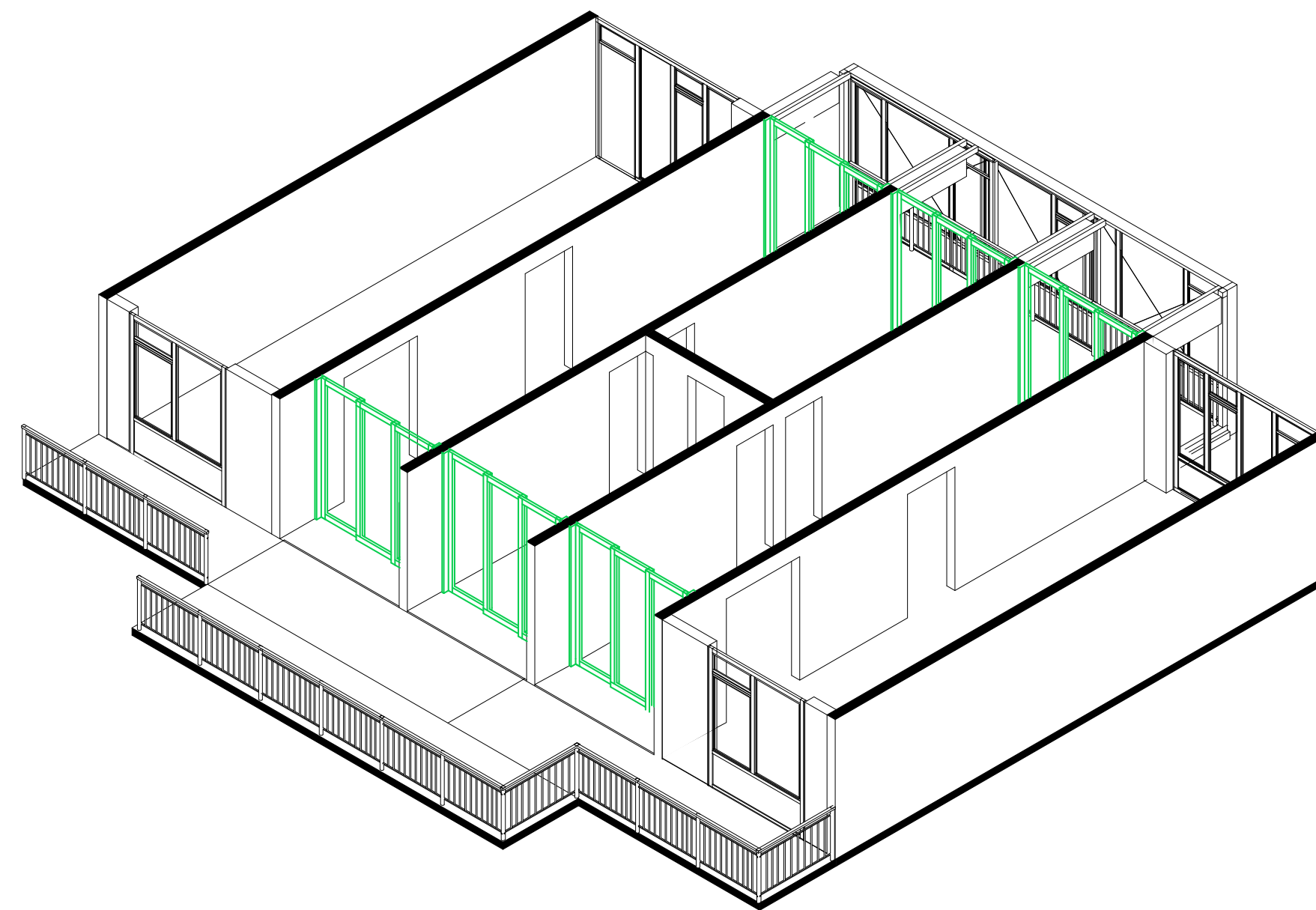


Hergebruik: Sandwichpaneel

Bestaand
Hergebruikt
Nieuw

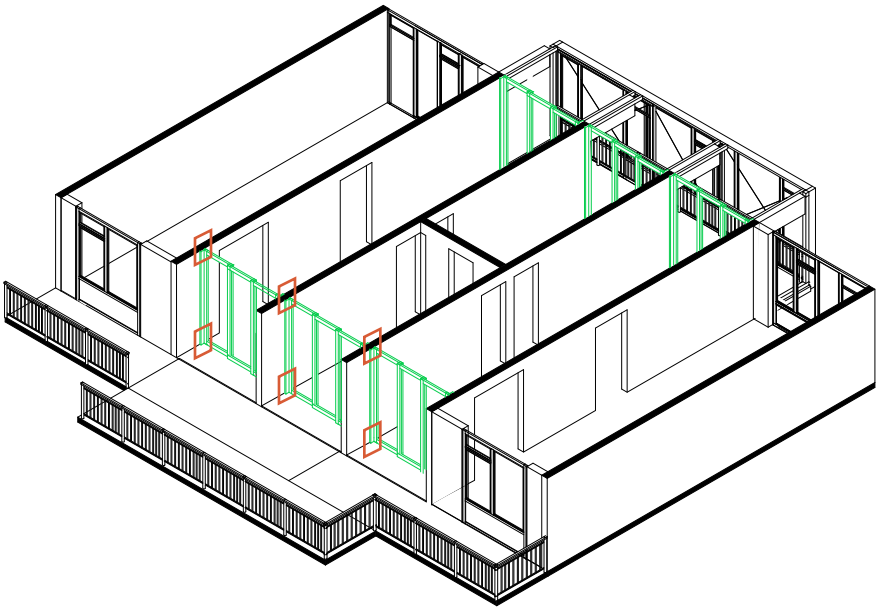
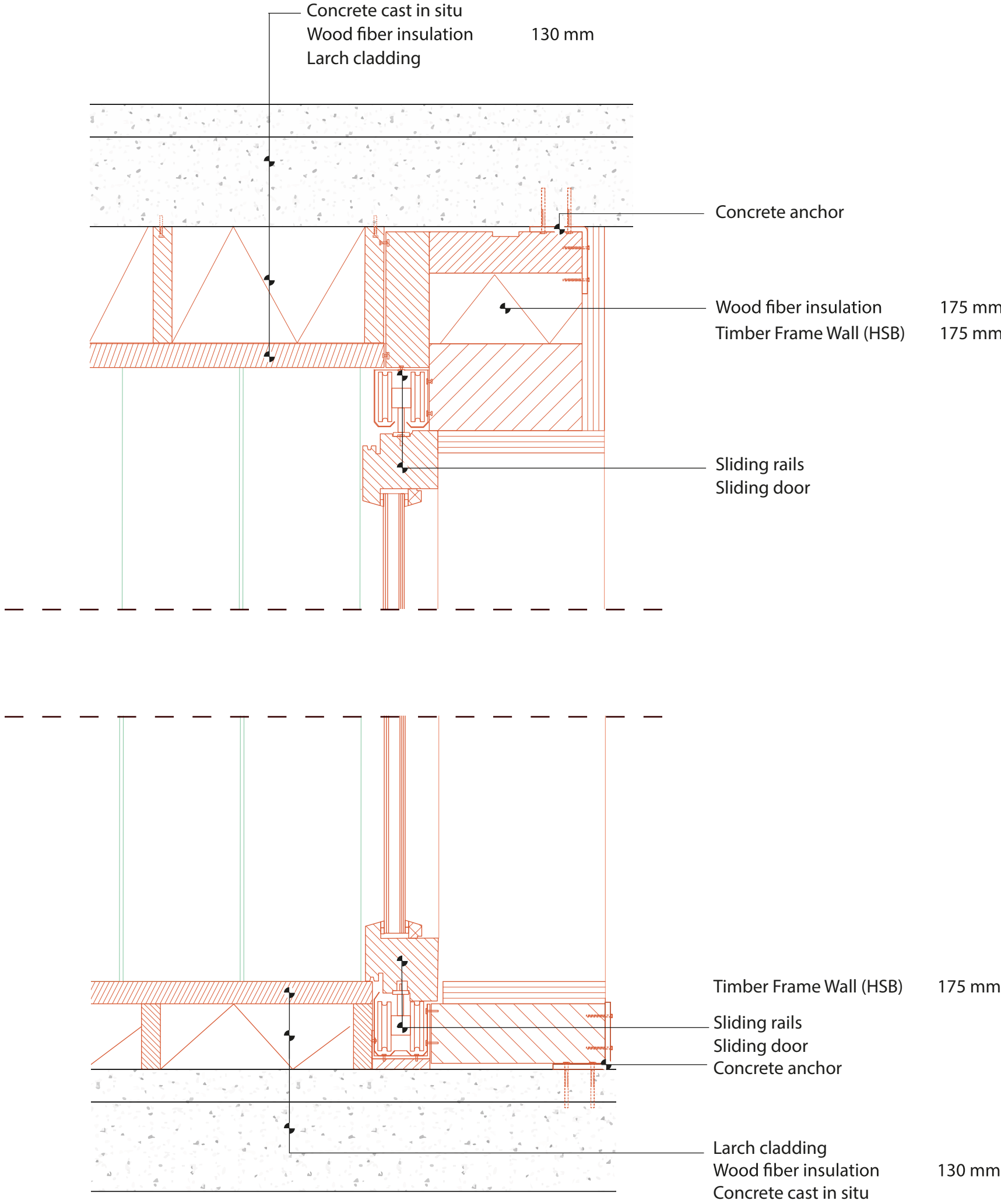


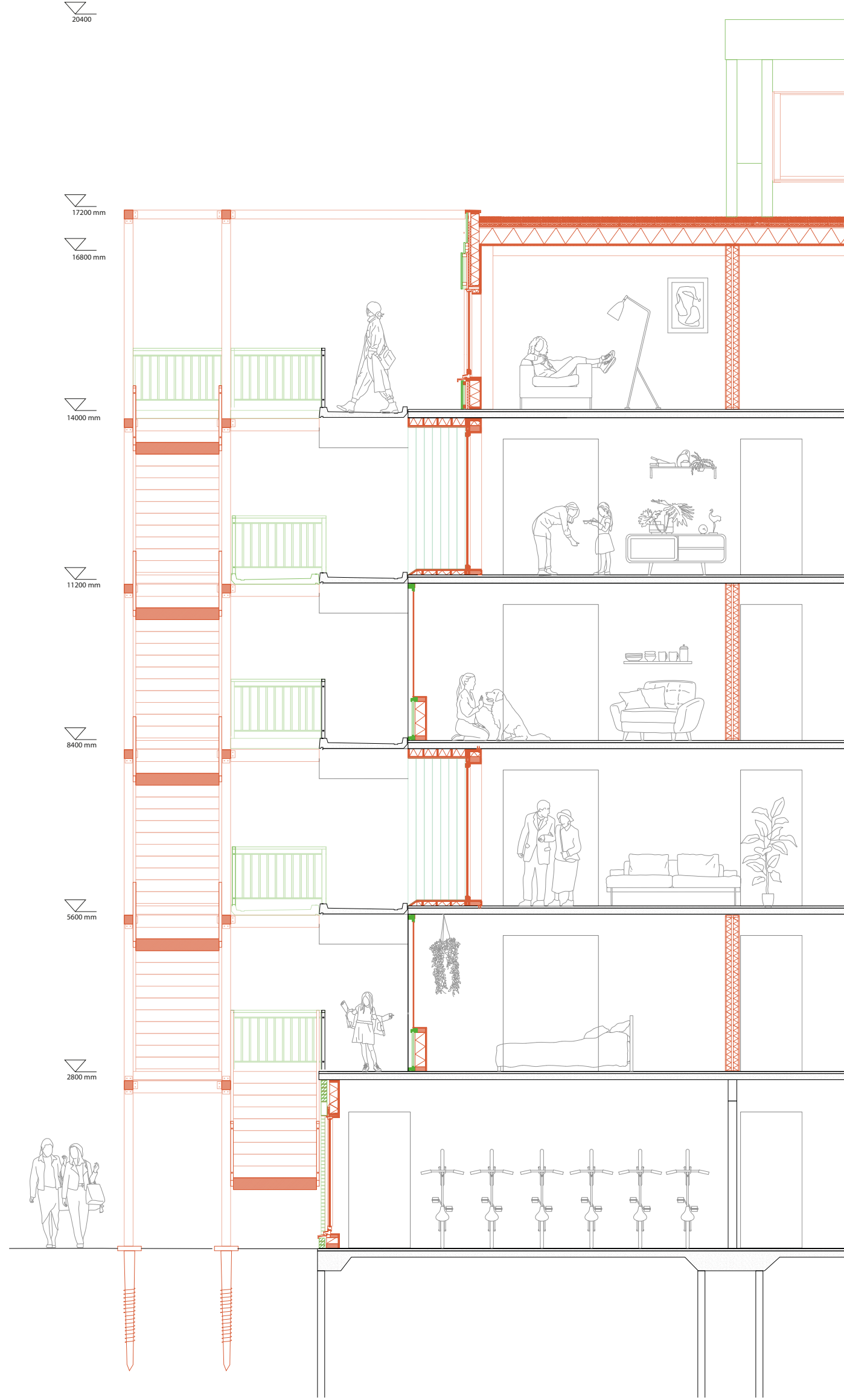
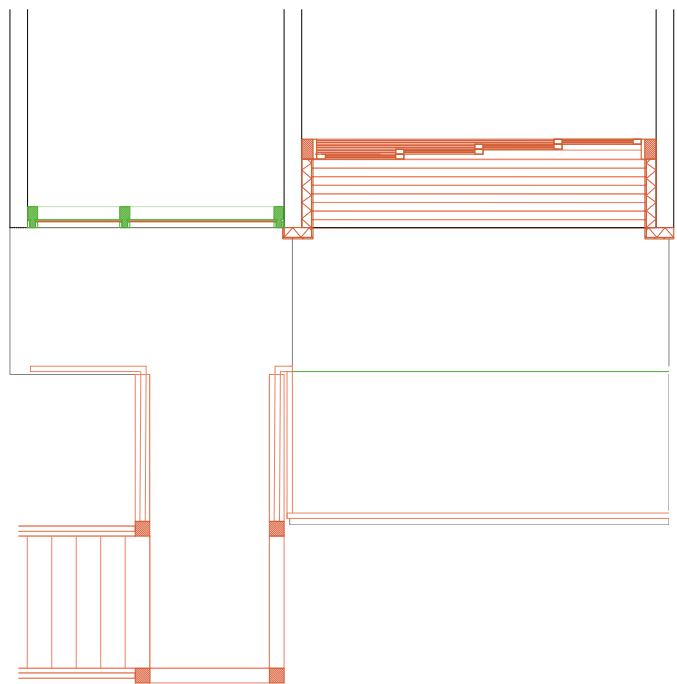
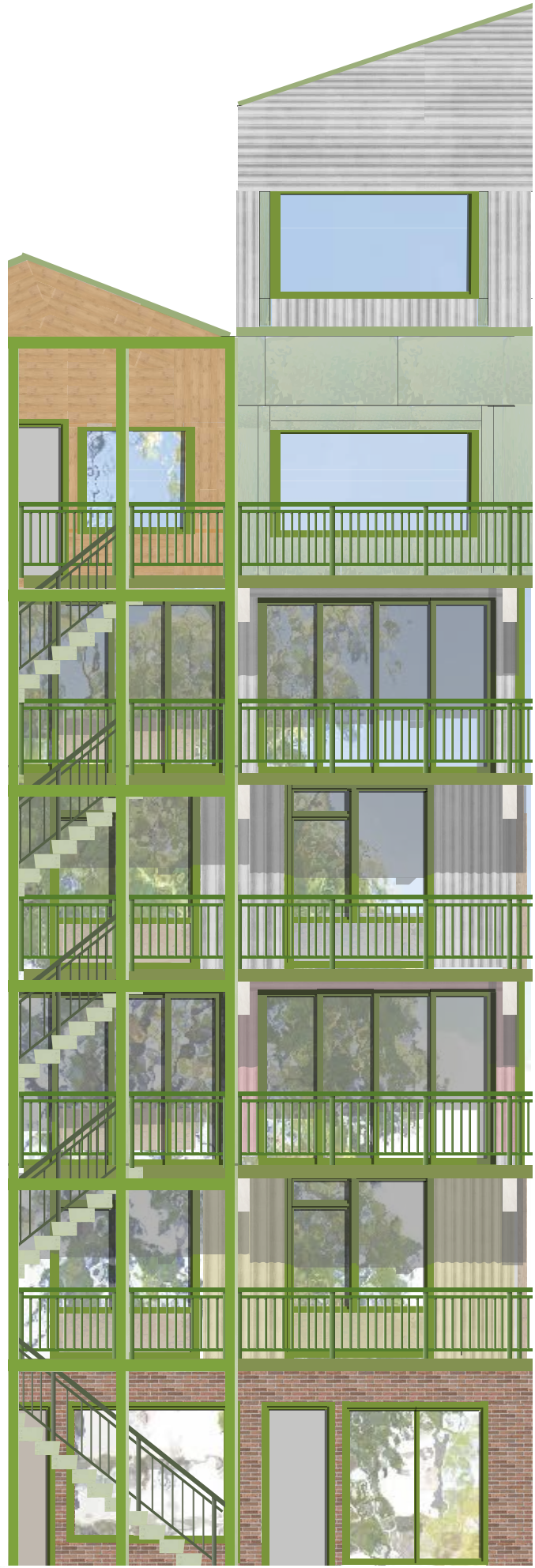
New: sliding doors & Reuse: cladding



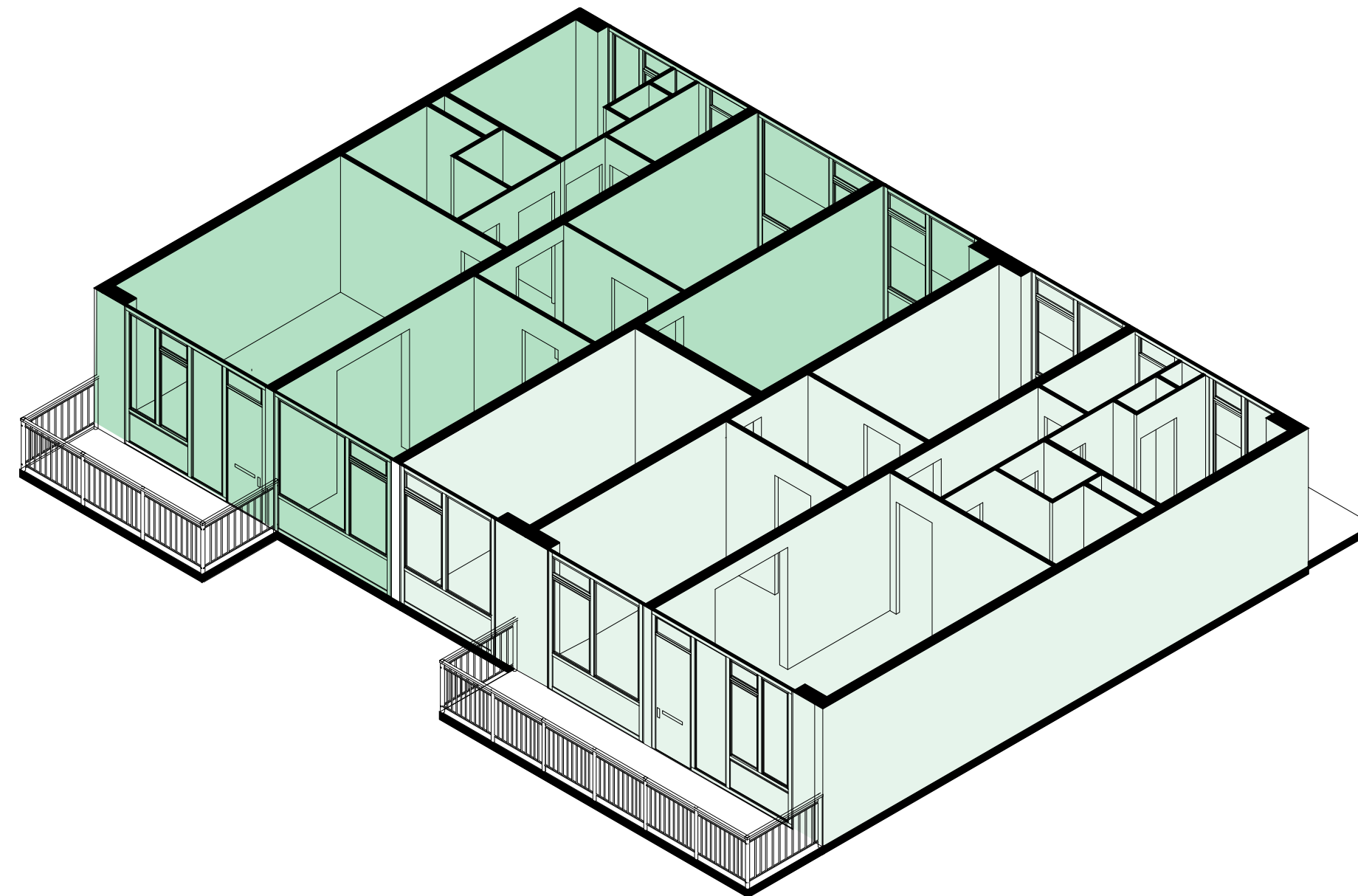
Nieuwe gevel

Bestaand
Hergebruikt
Nieuw



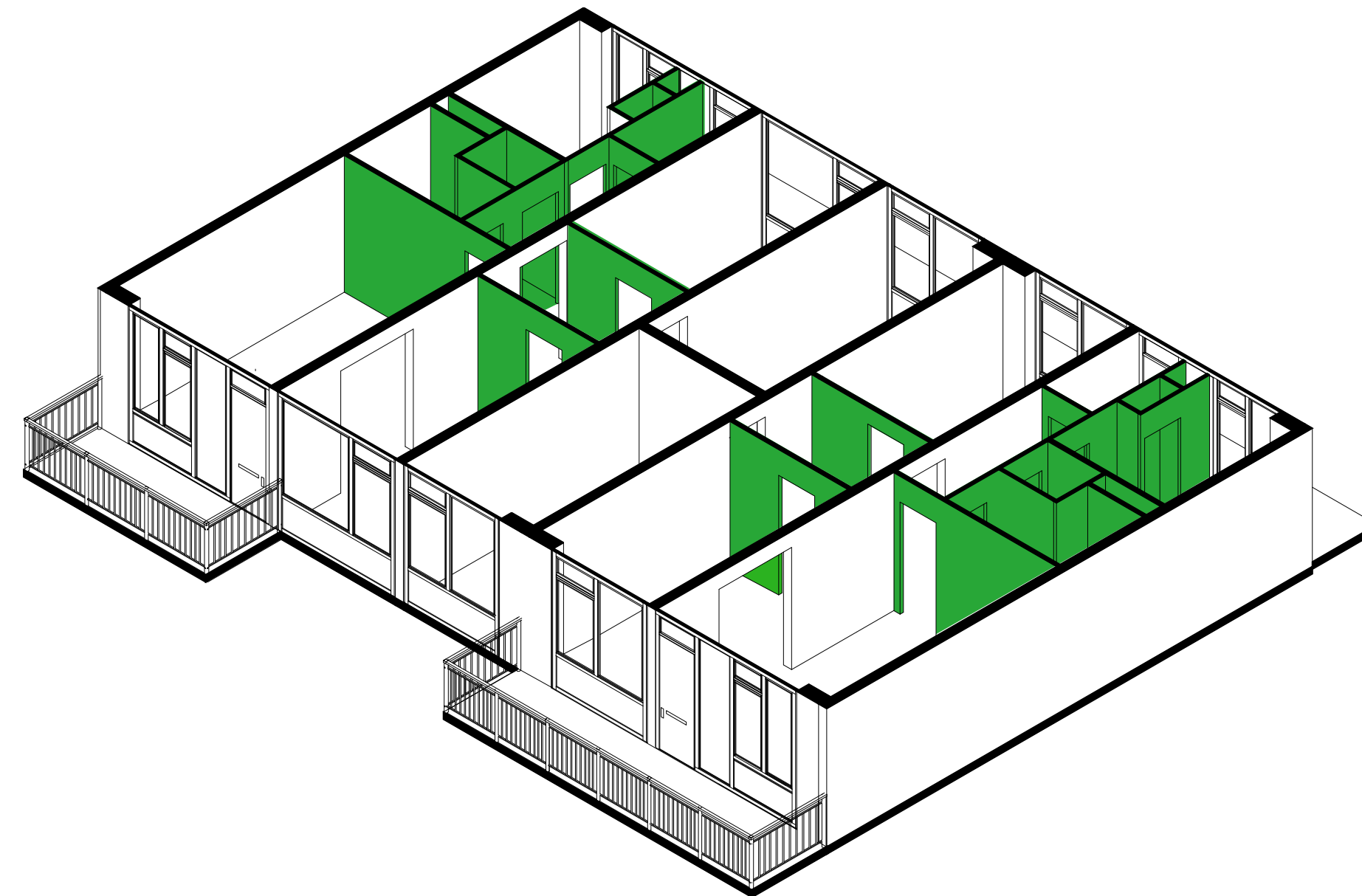


Huidige woningen

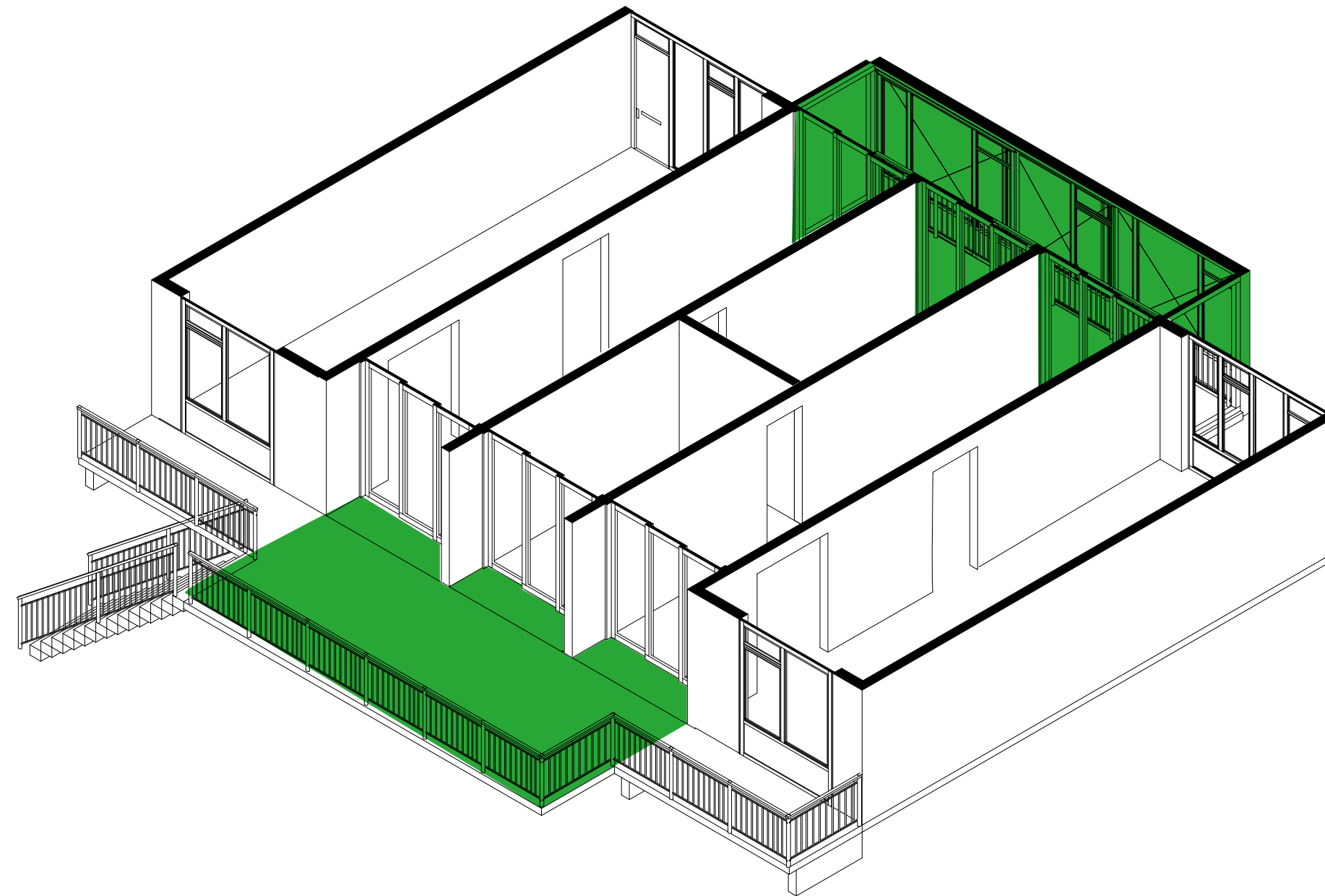


Sociaal & Ruimtelijk ontwerp

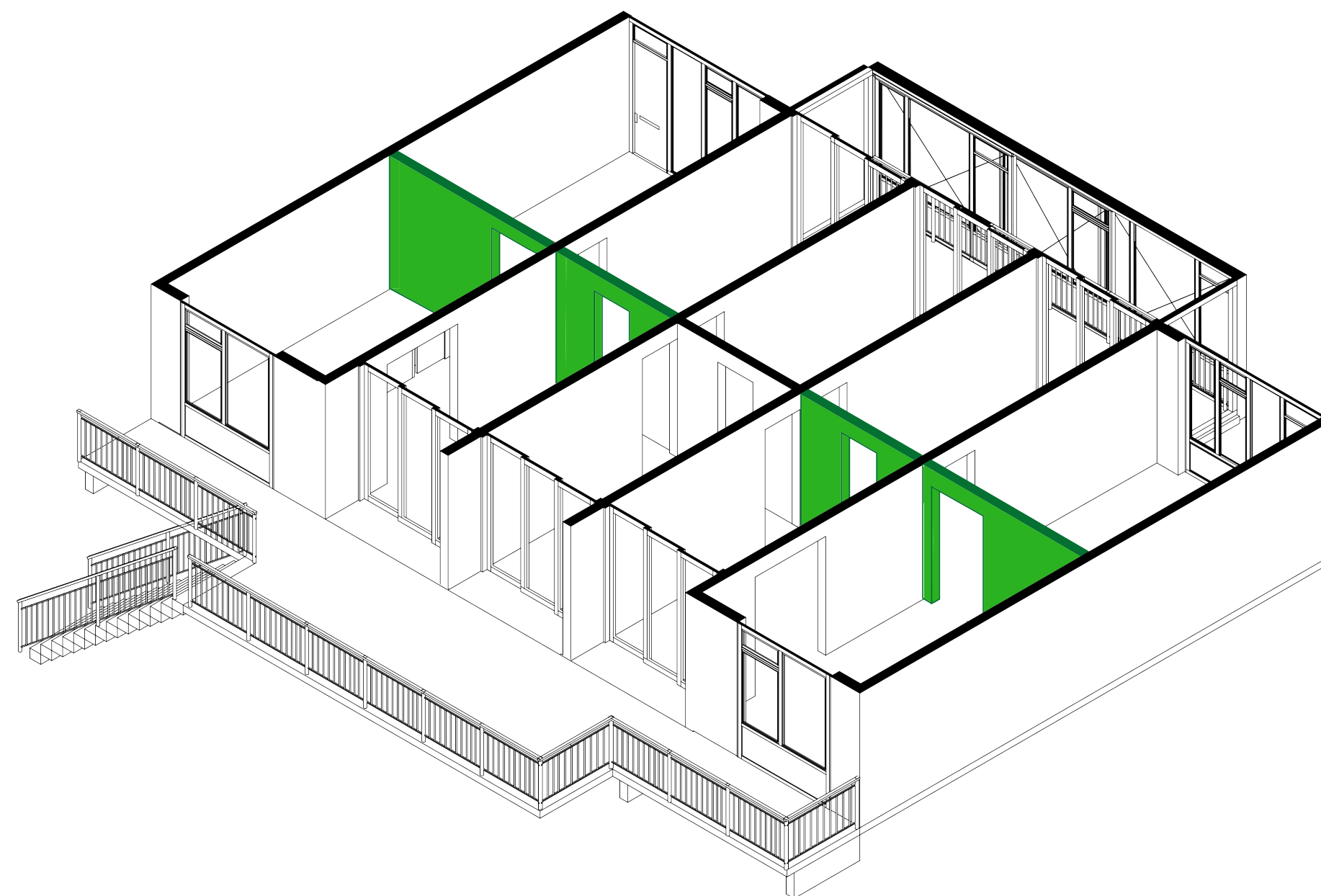
Binnenwänden



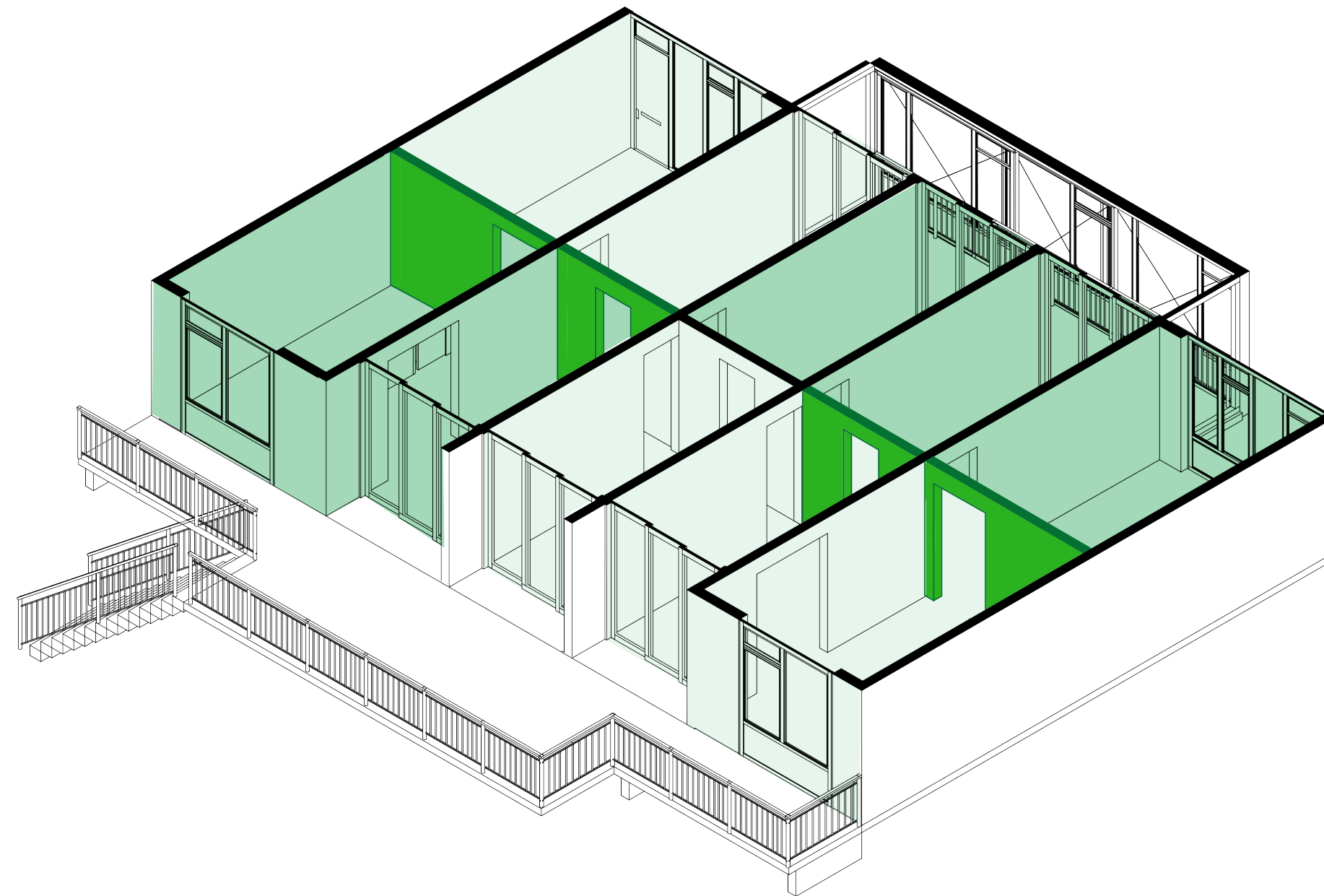
Binnen/buitenruimte



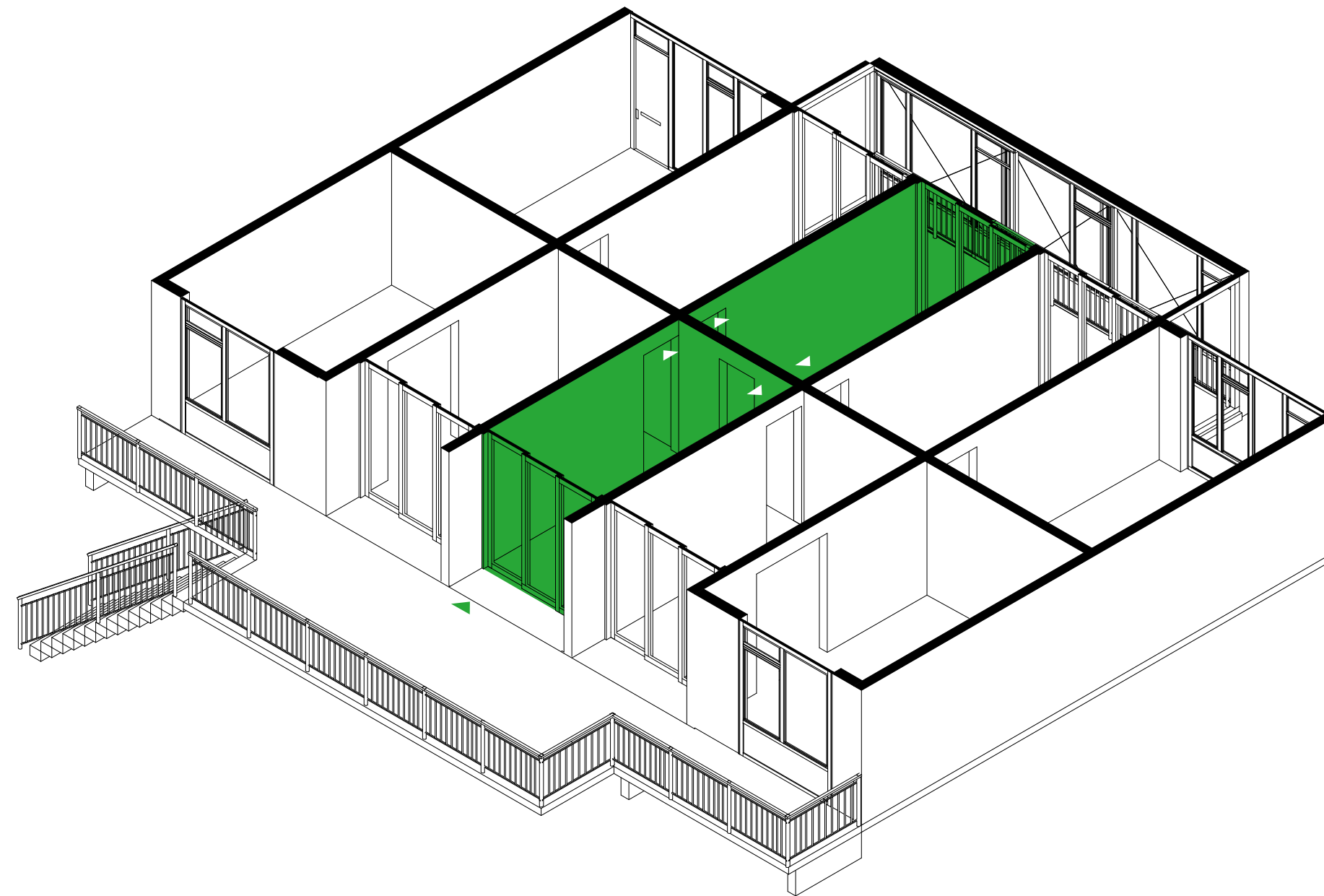
Woningscheidende wand



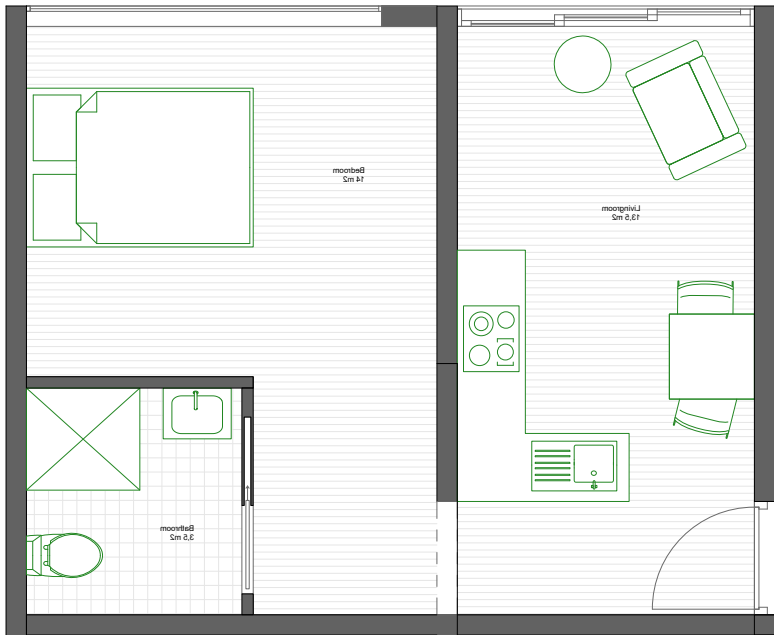
Herindelen woningen



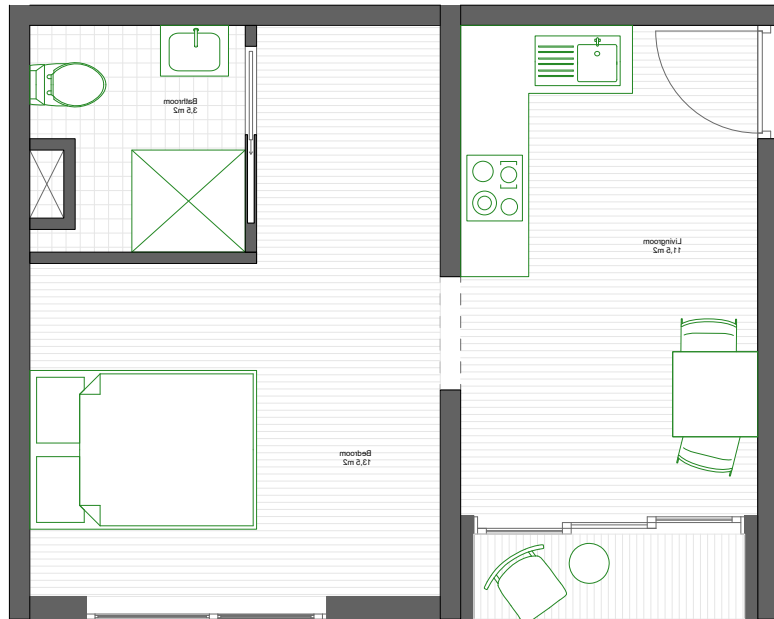
Gedeelde ruimte



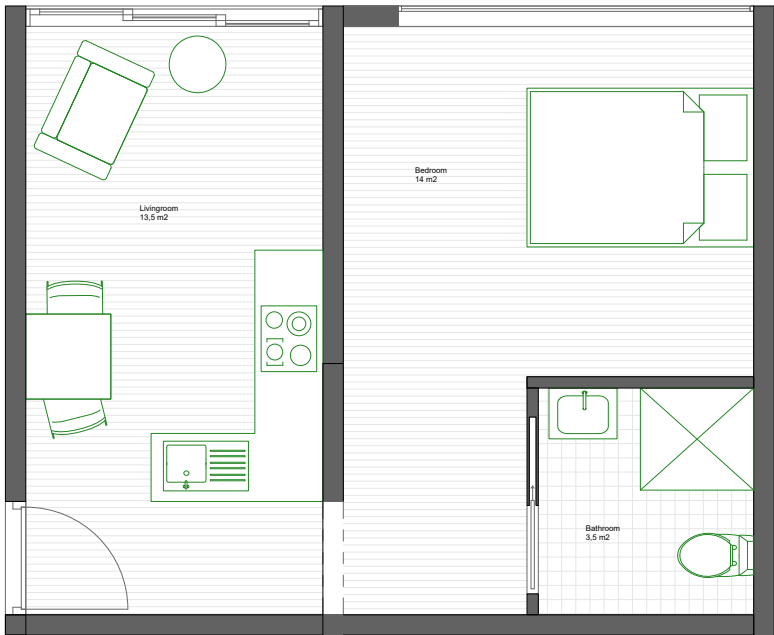
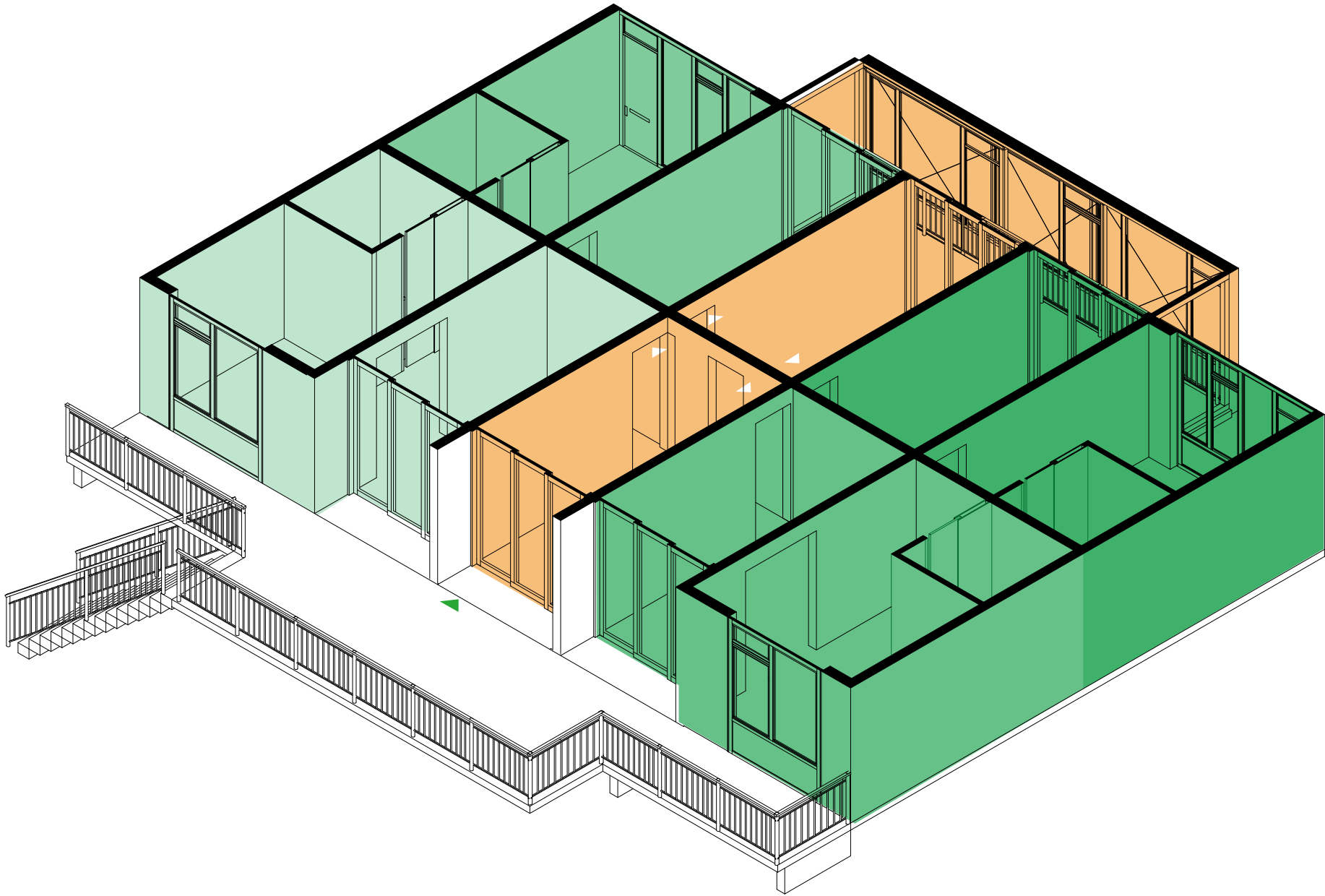
4 woningen



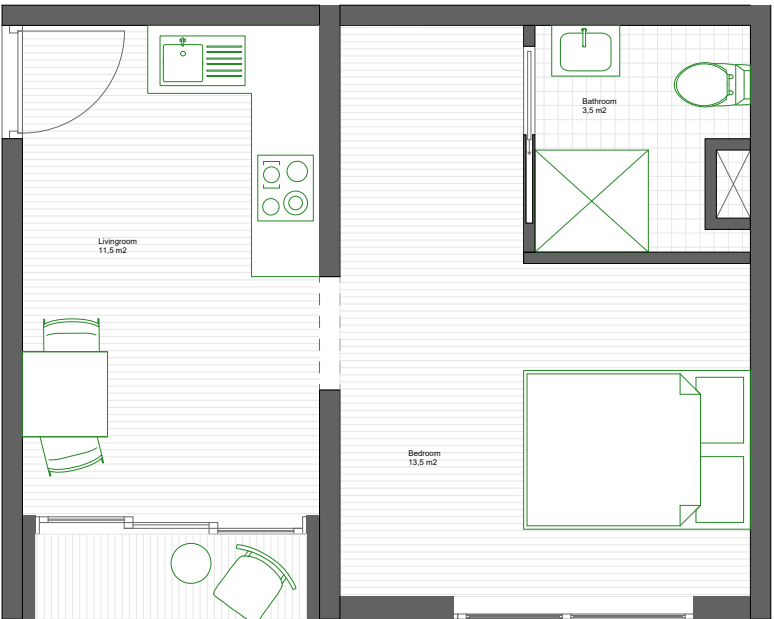
Apartment 1a
32 m²



Apartment 1b
29 m²

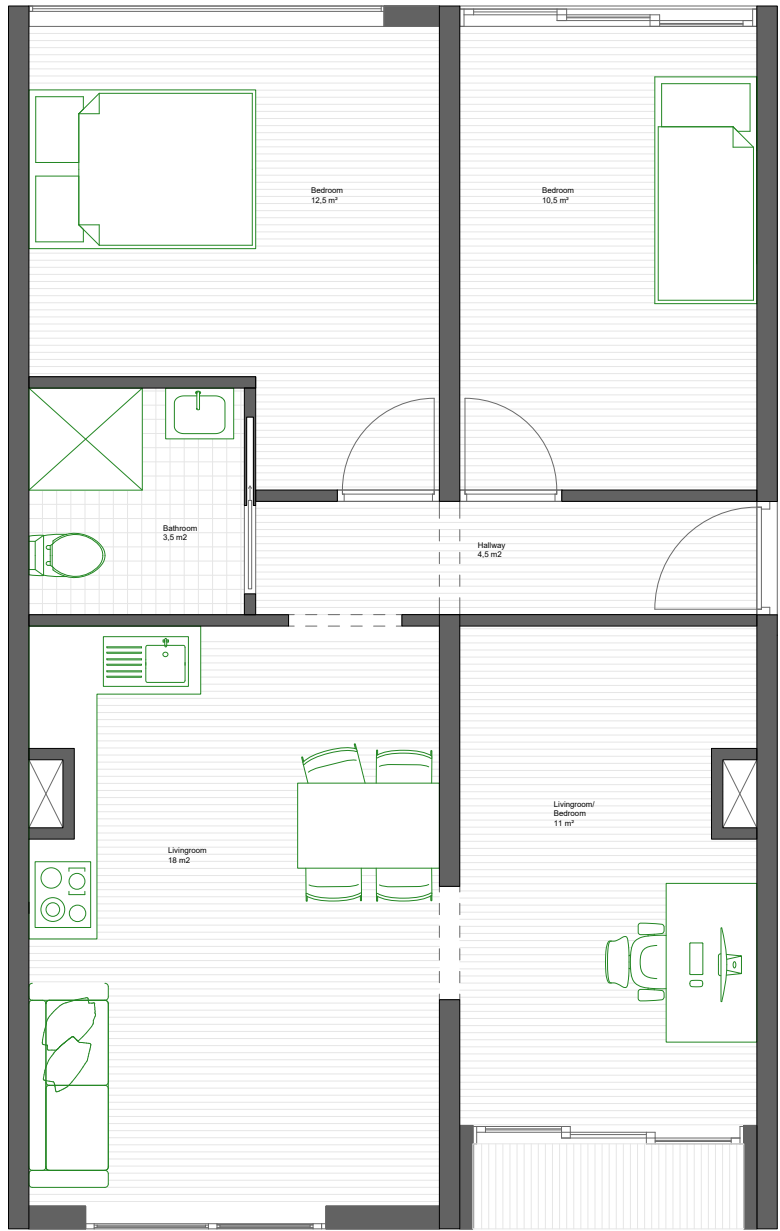


Apartment 1a
32 m²

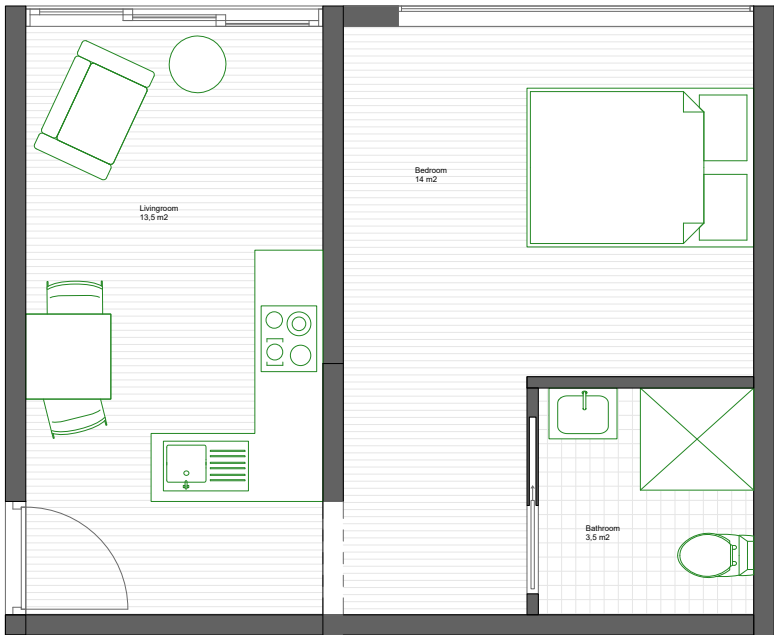
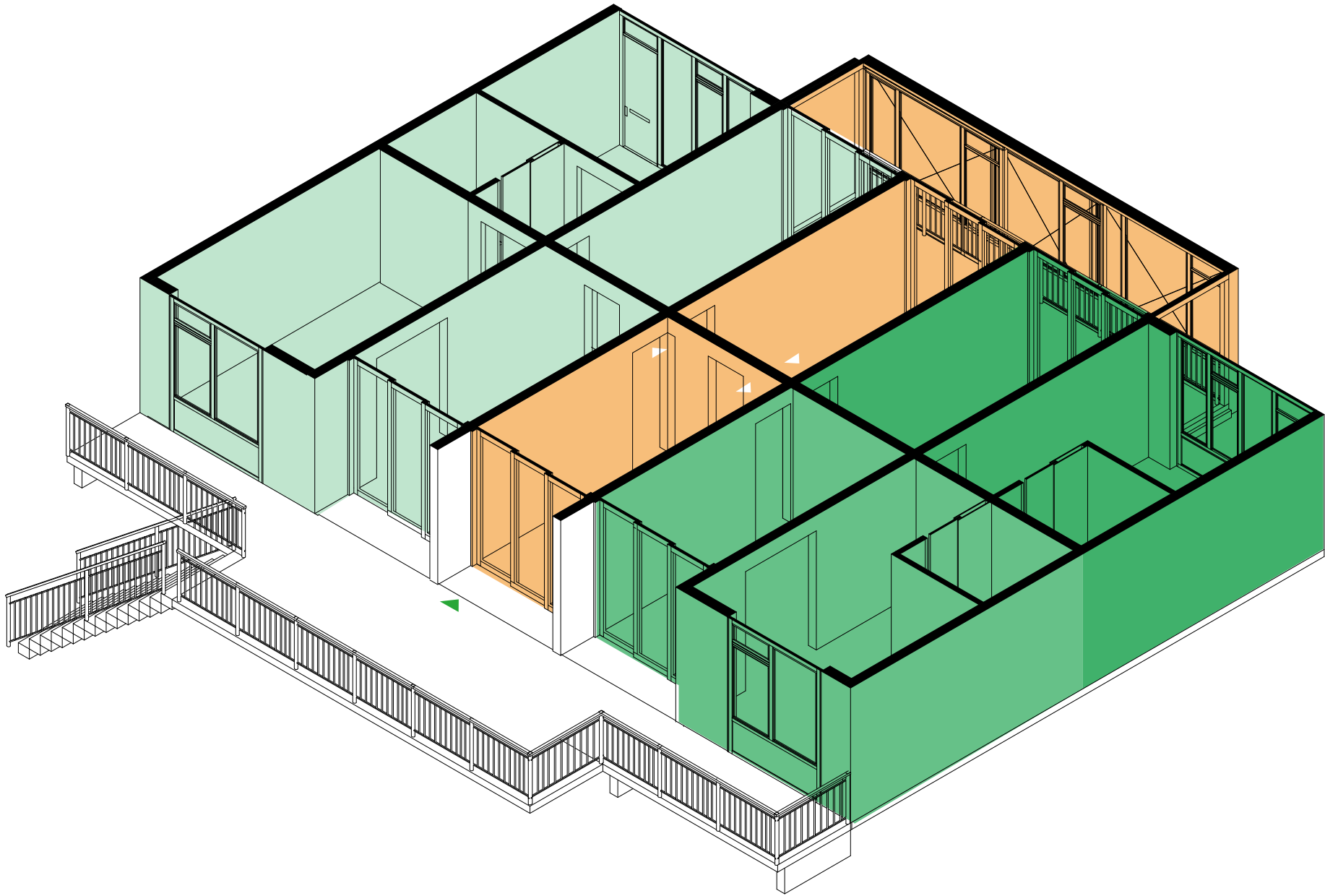


Apartment 1b
29 m²

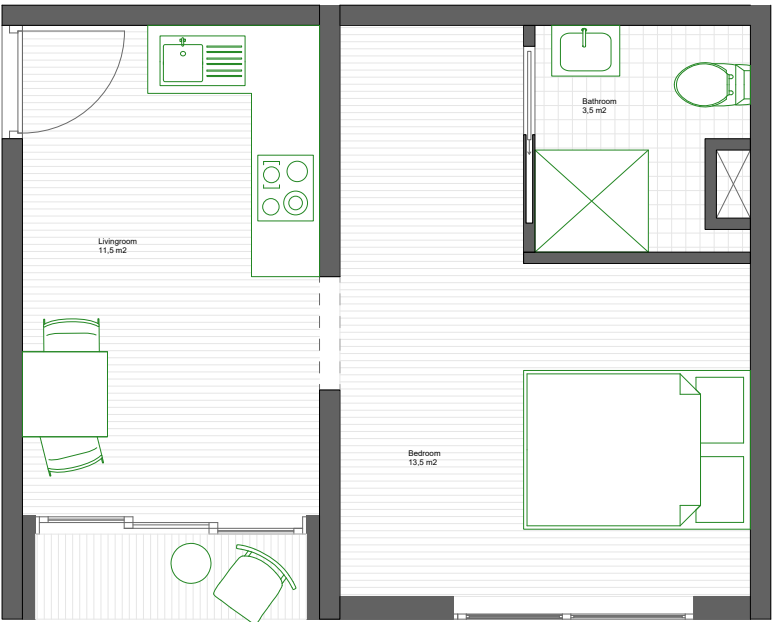
3 woningen



Apartment 2a
61 m2

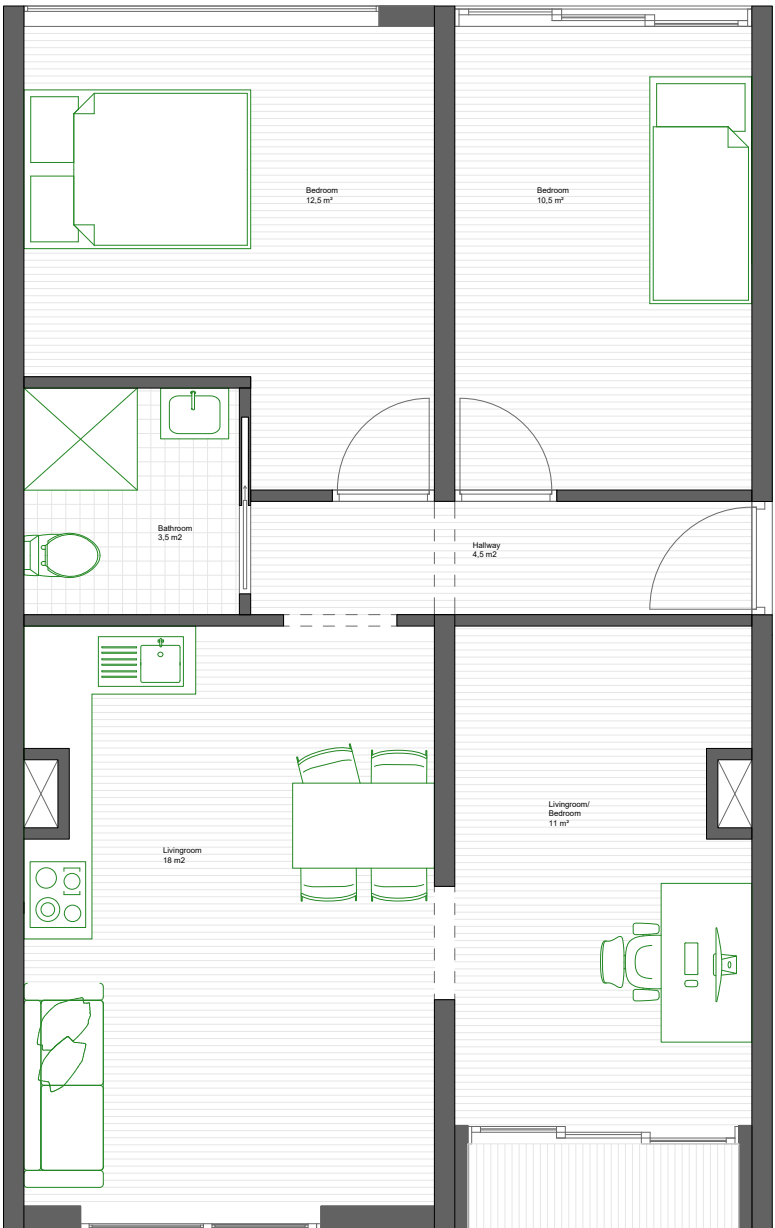


Apartment 1a
32 m2

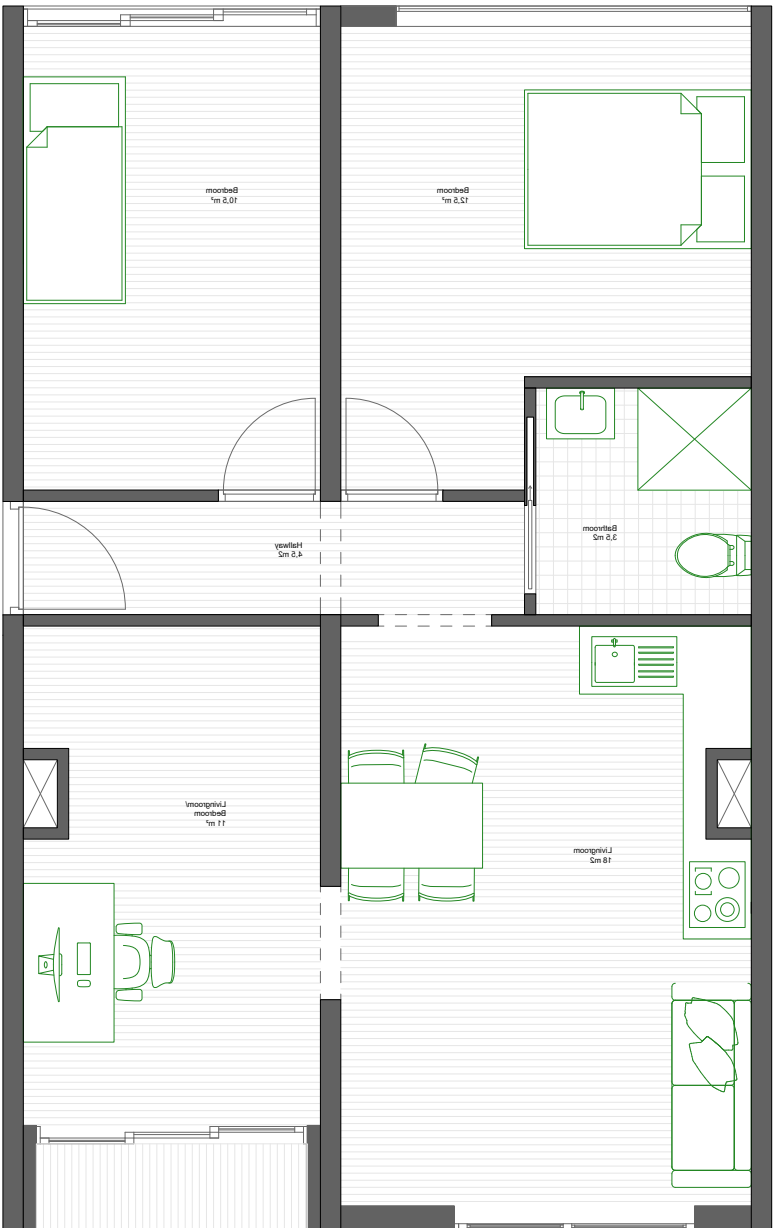
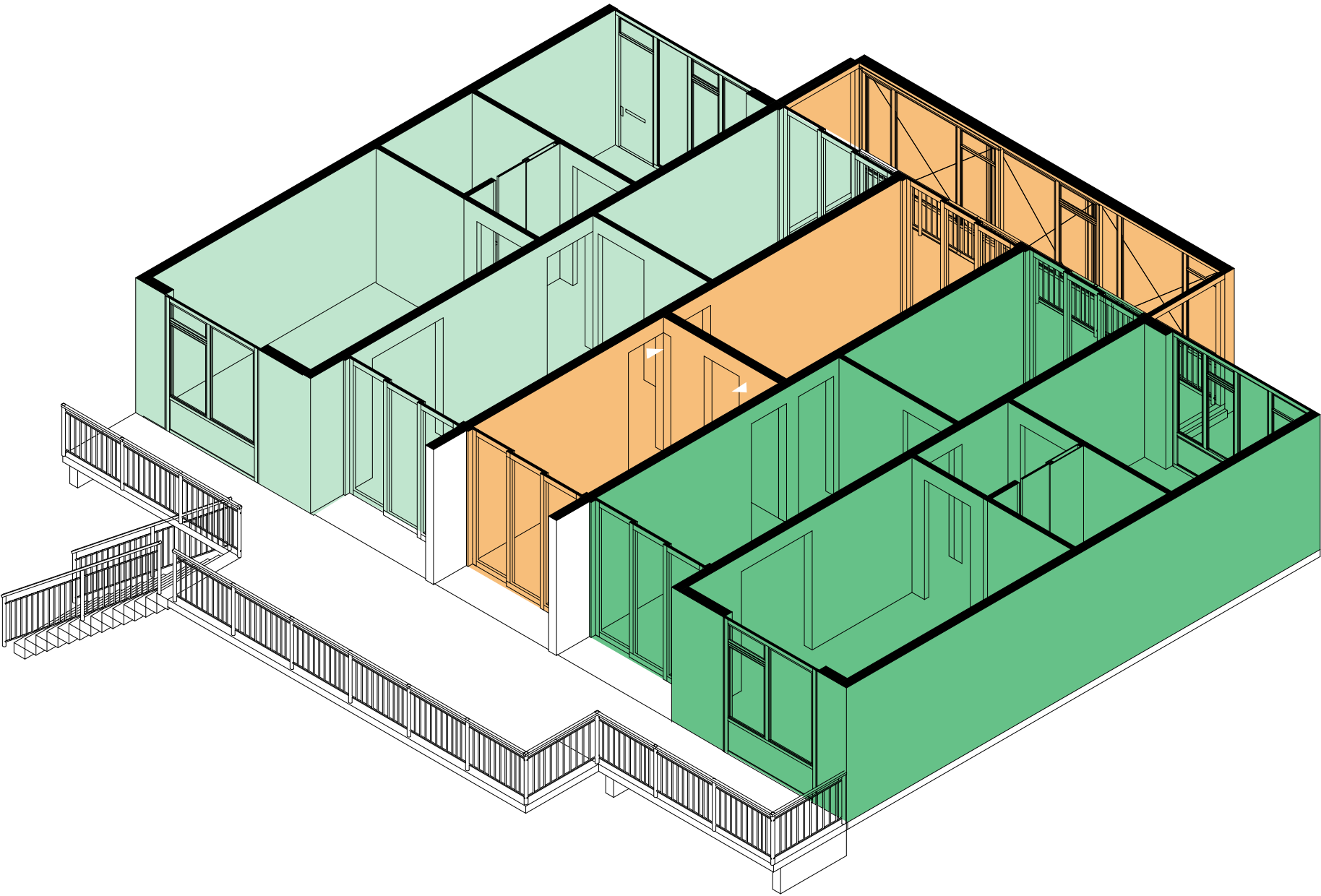


Apartment 1b
29 m2

2 woningen

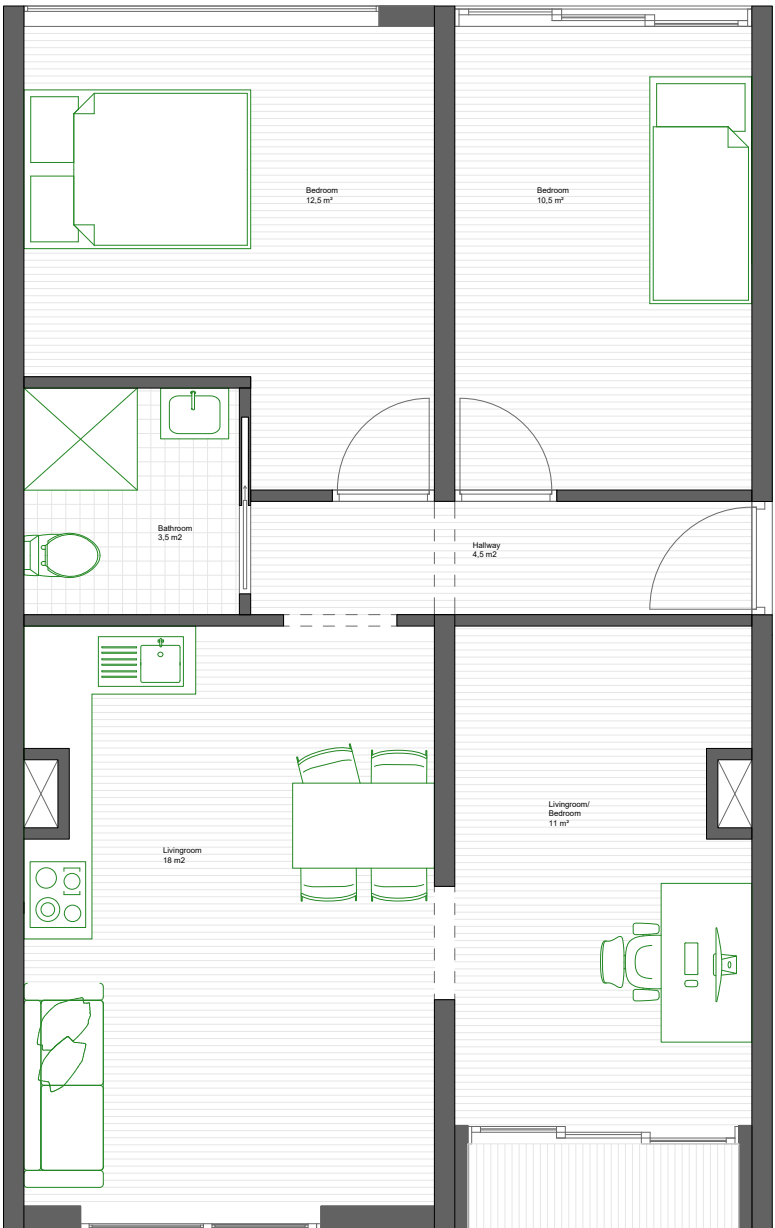


Apartment 2a
61 m2

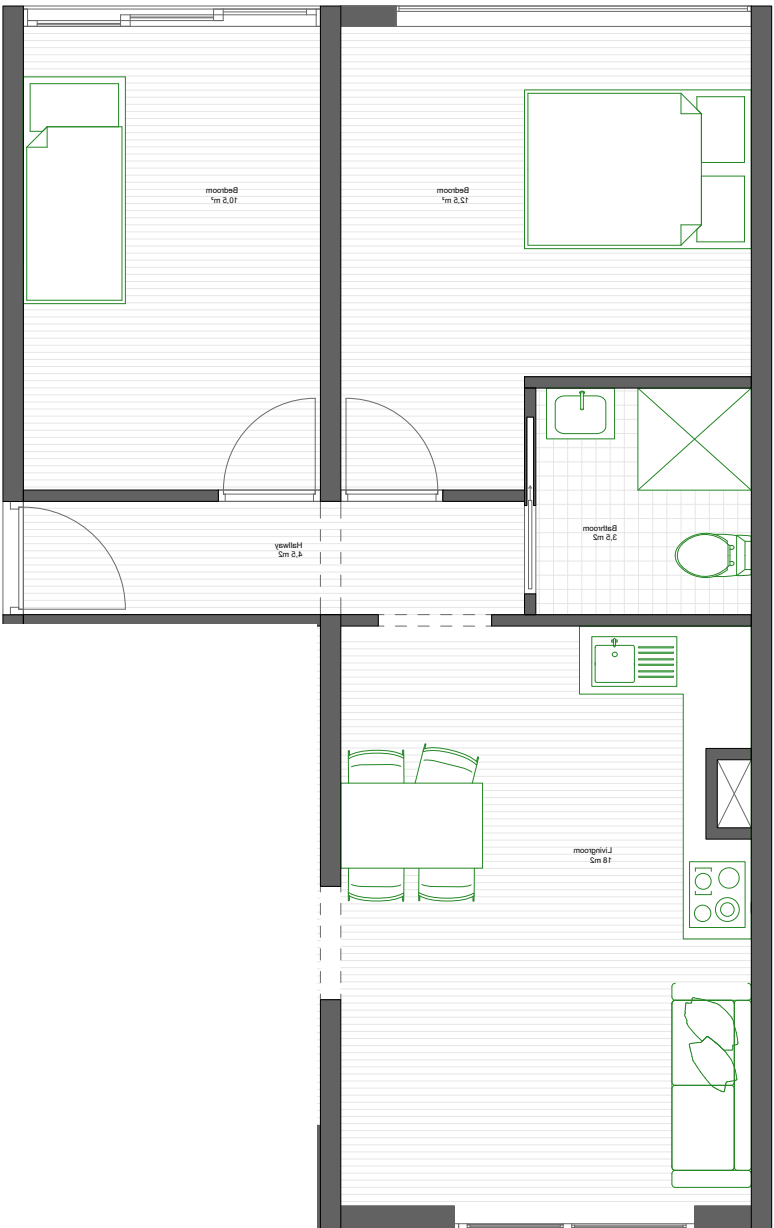
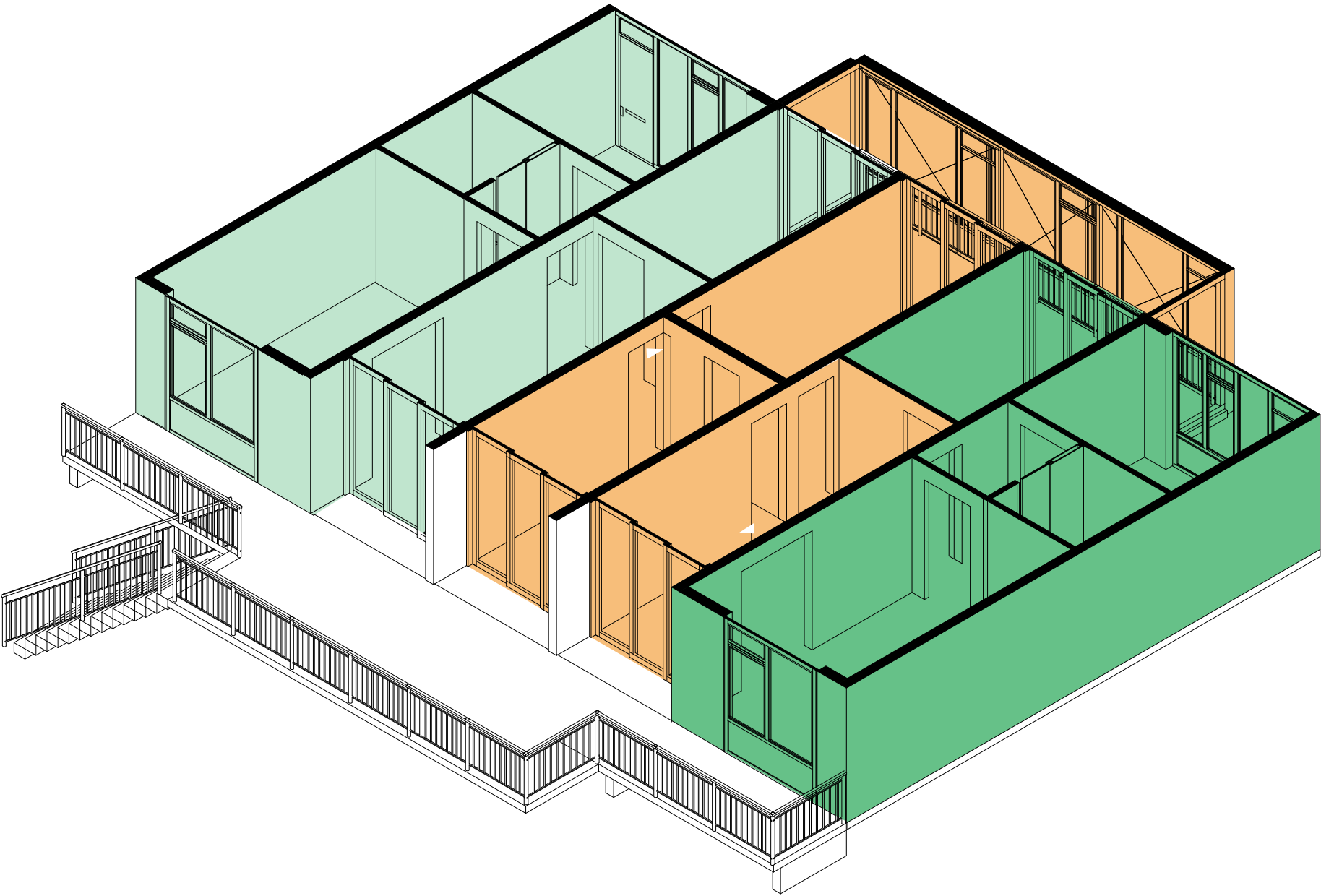


Apartment 2b
61 m2

2 woningen



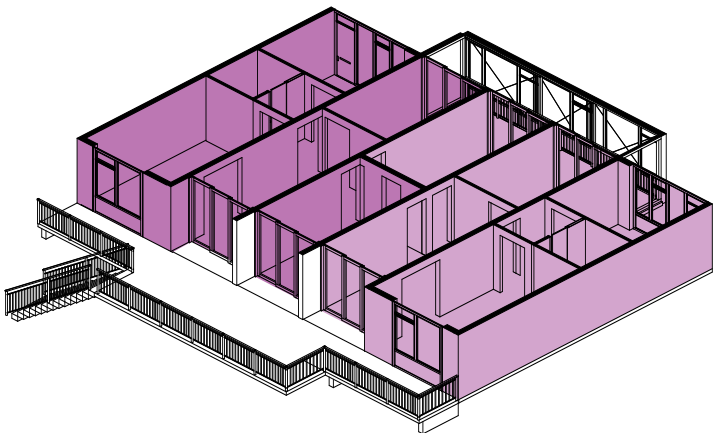
Apartment 2a
61 m2



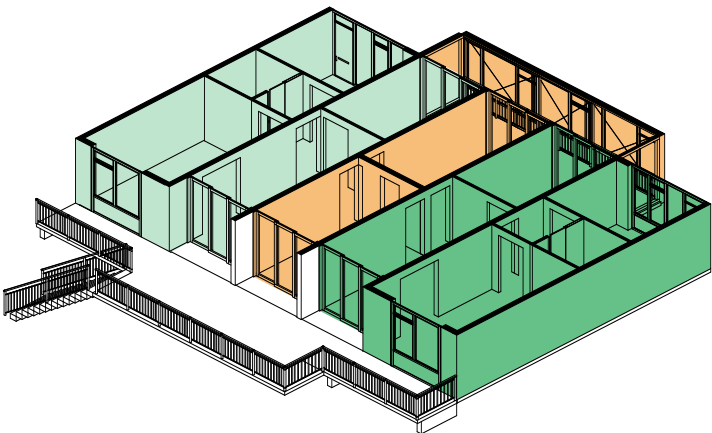
Apartment 3
46 m2

Woning configuratie: aanpasbaarheid

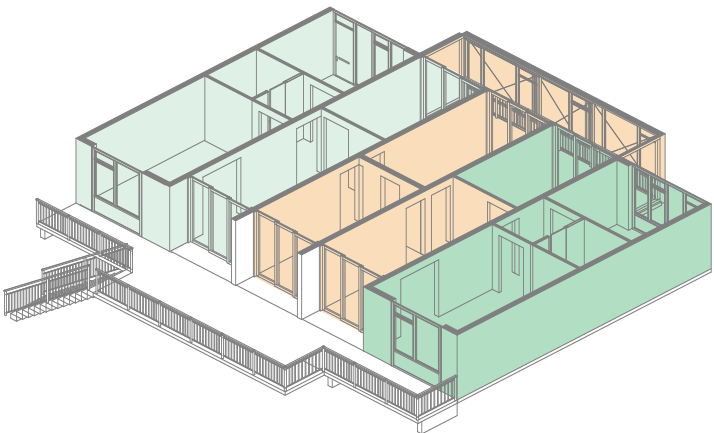
2 units



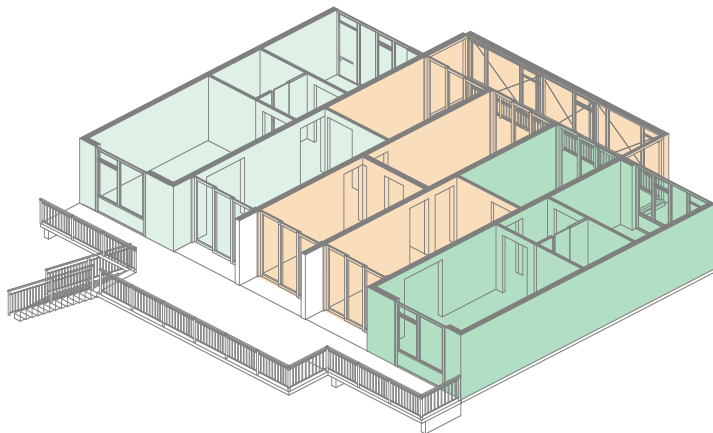
2 Independent dwellings



2 co-housing unit L

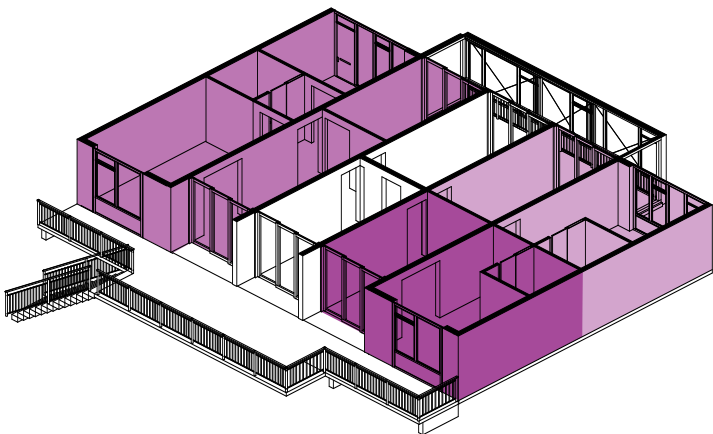


1 co-housing unit L + 1 co-housing unit M

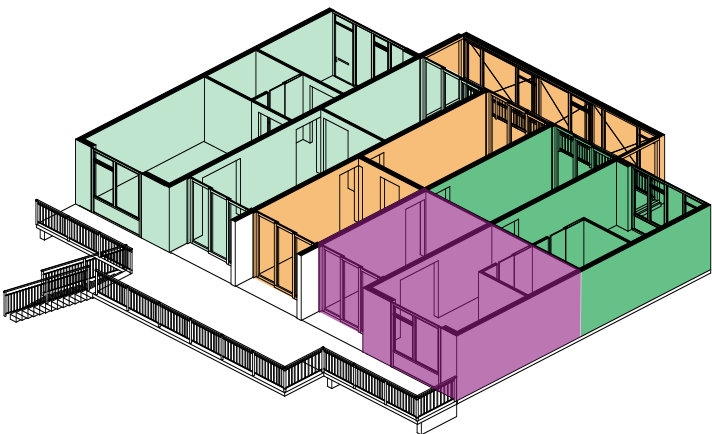


2 co-housing unit M

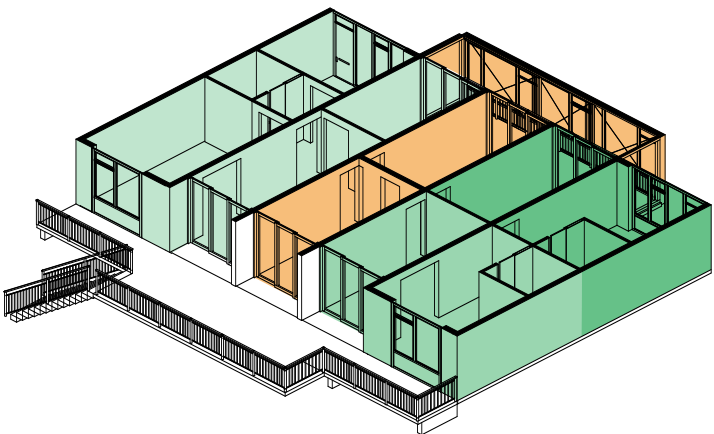
3 units



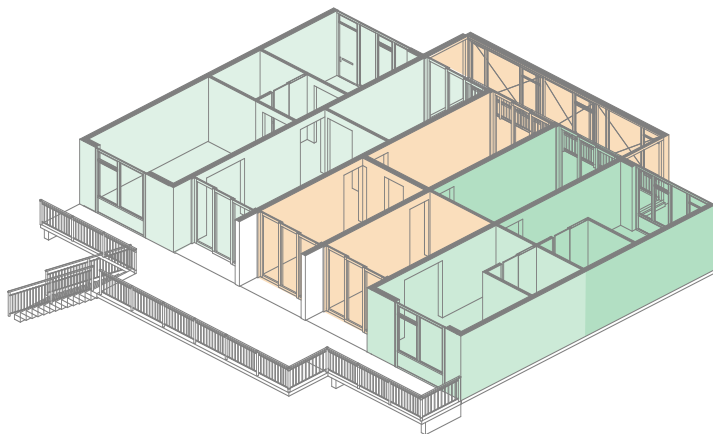
3 Independent dwellings



1 co-housing unit L + 1 co-housing unit S + 1 independend studio

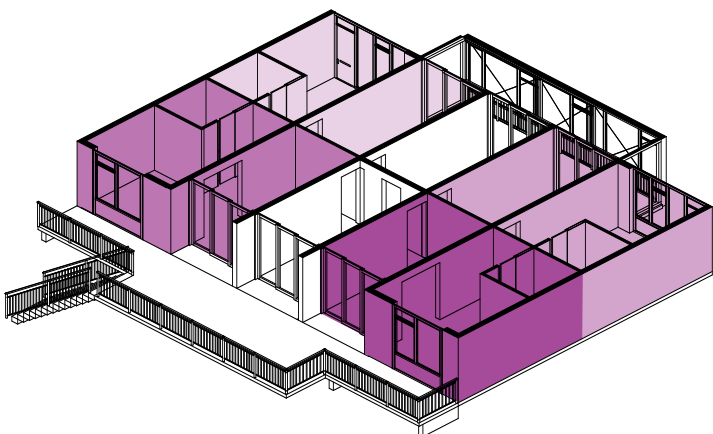


1 co-housing unit L + 2 co-housing unit S

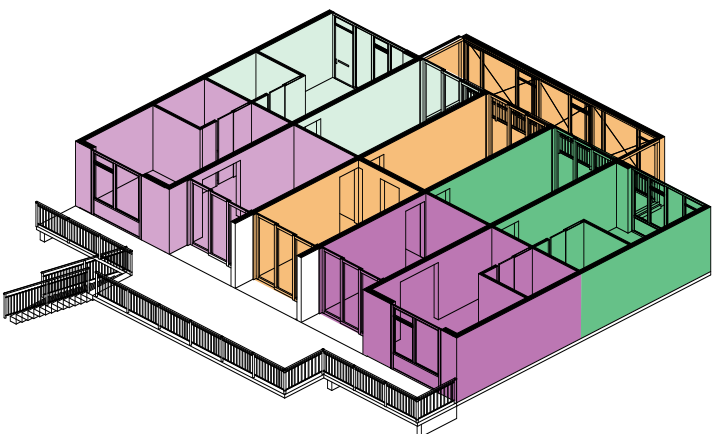


1 co-housing unit L + 1 co-housing unit S + 1 co-housing unit XS

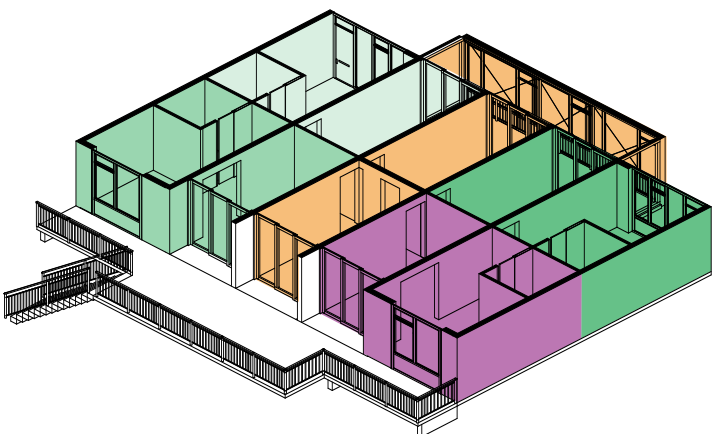
4 units



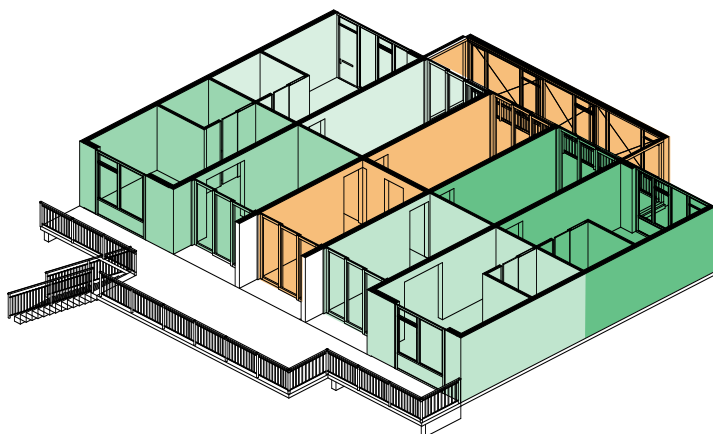
4 Independent dwellings



2 co-housing units S + 2 independend studio's

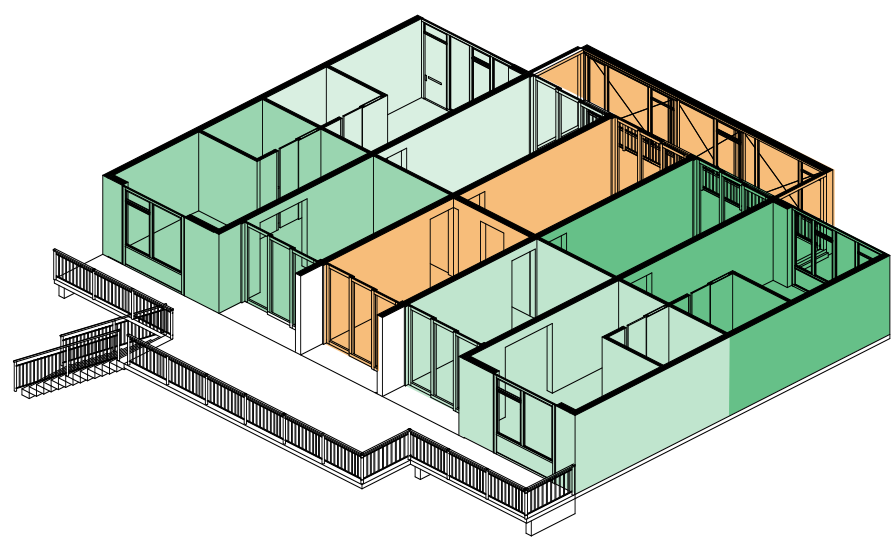


3 co-housing units S + 1 independend studio

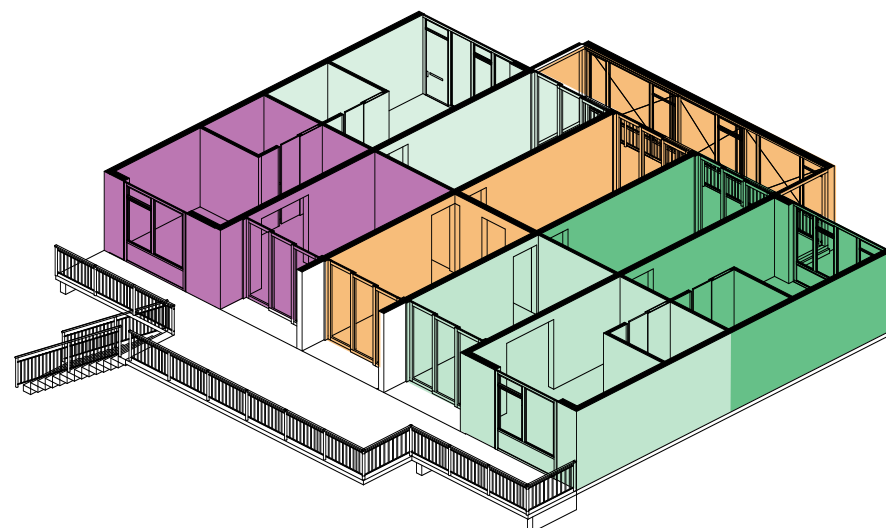
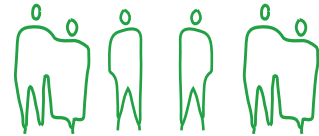


4 co-housing units S

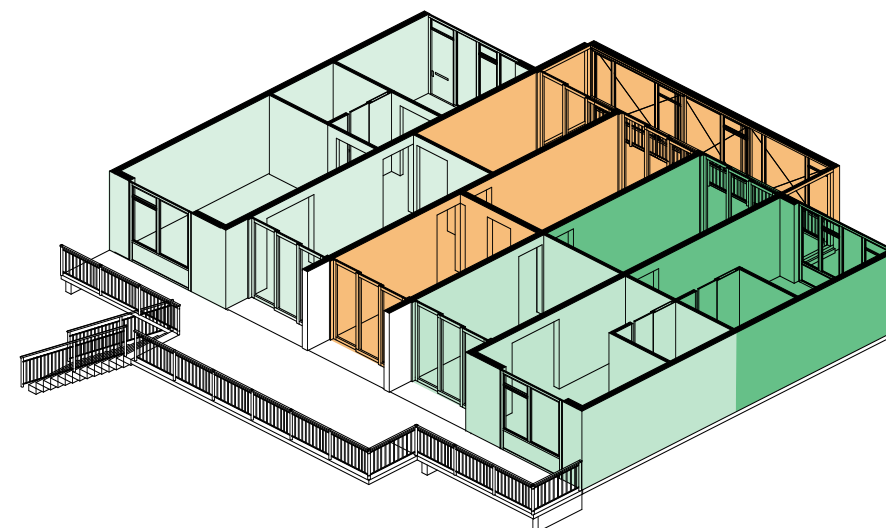
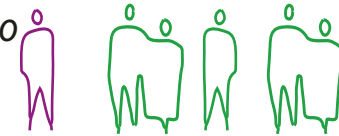
Voorbeeld levensloop: co-living



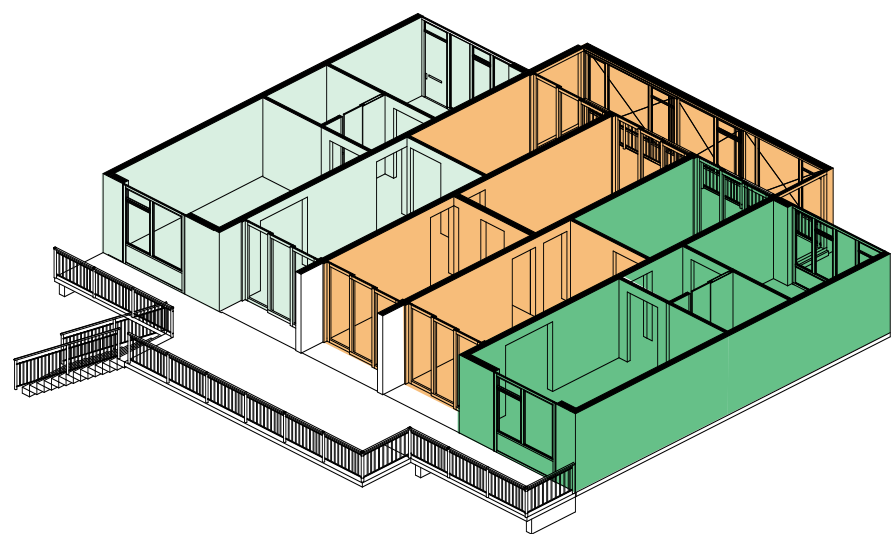
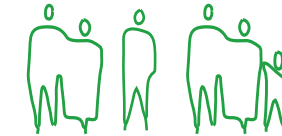
4 co-housing units S
4 friends (single and/or couples)



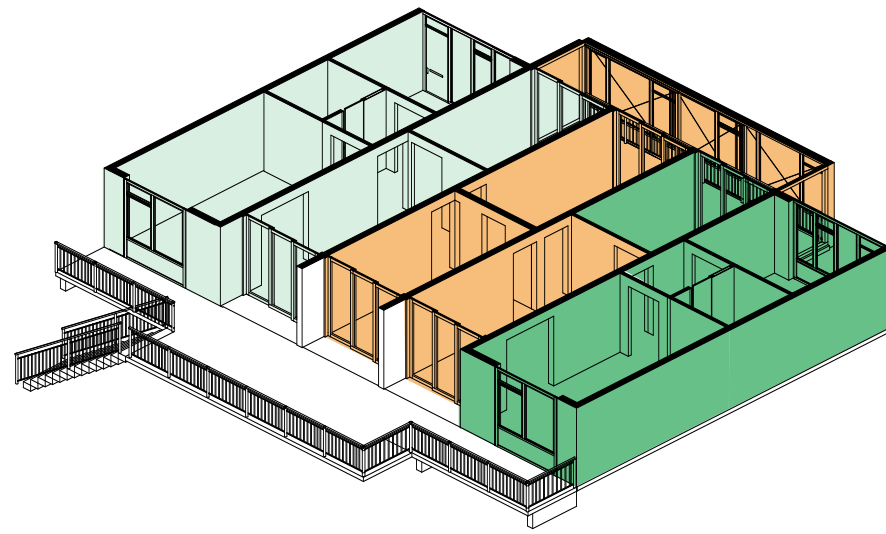
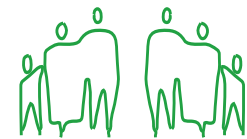
3 co-housing units S + 1 independent studio
3 friends + 1 independent studio



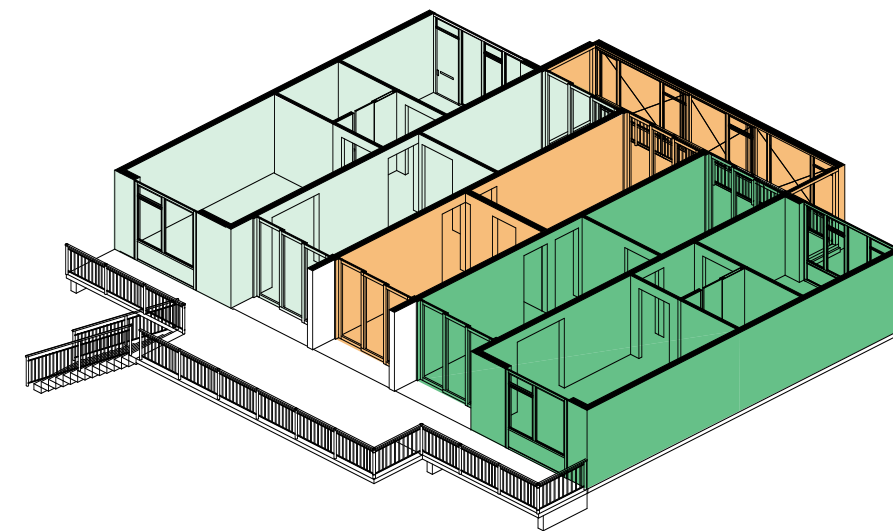
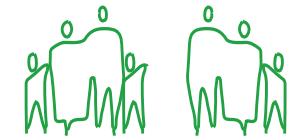
1 co-housing unit L + 2 co-housing unit S
1 family & 2 friends



2 co-housing unit M
2 families



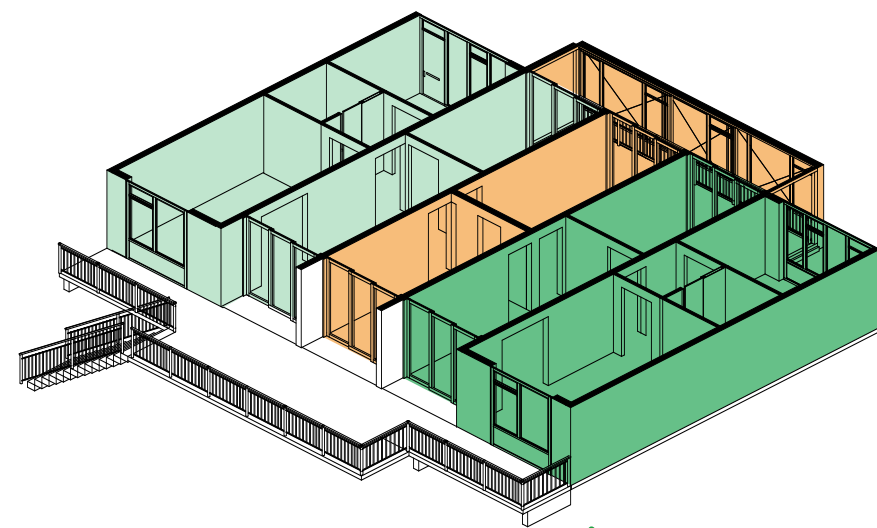
1 co-housing units L + 1 co-housing unit M
2 families



2 co-housing unit L
2 families

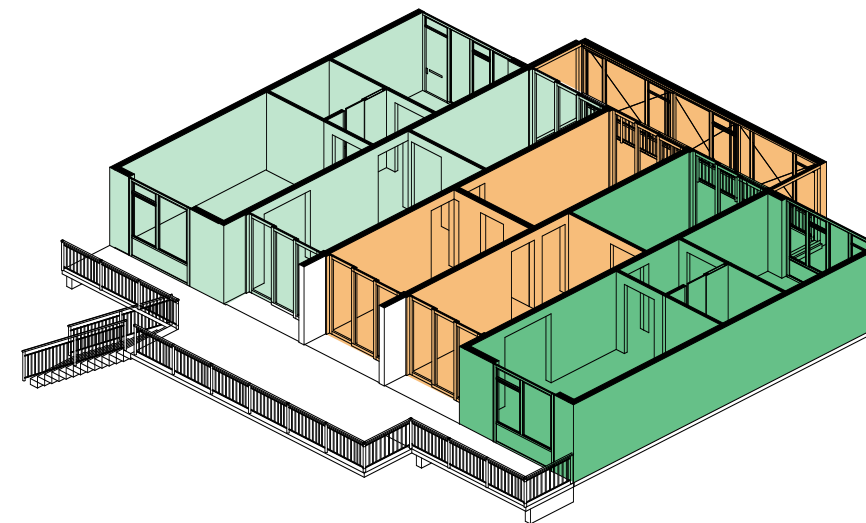
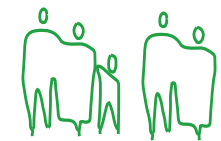


Voorbeeld levensloop: meergeneratiewoning



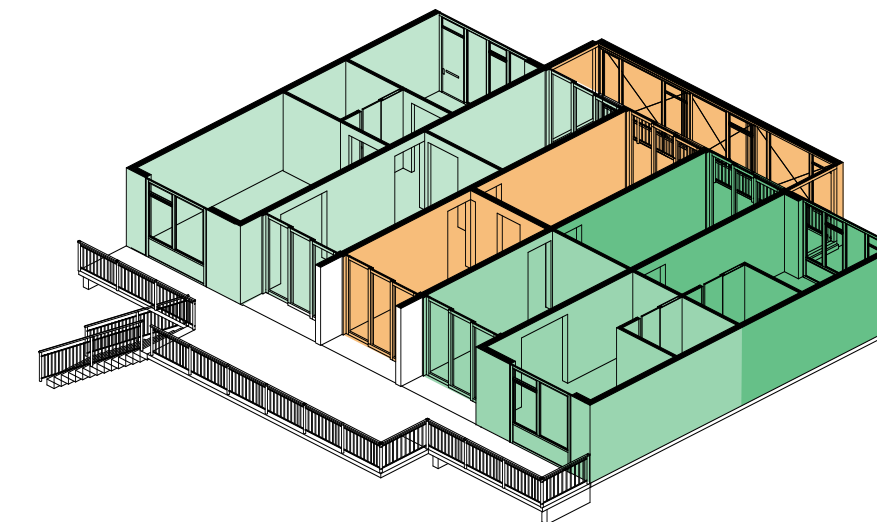
2 co-housing unit L

Parents + Grandparents



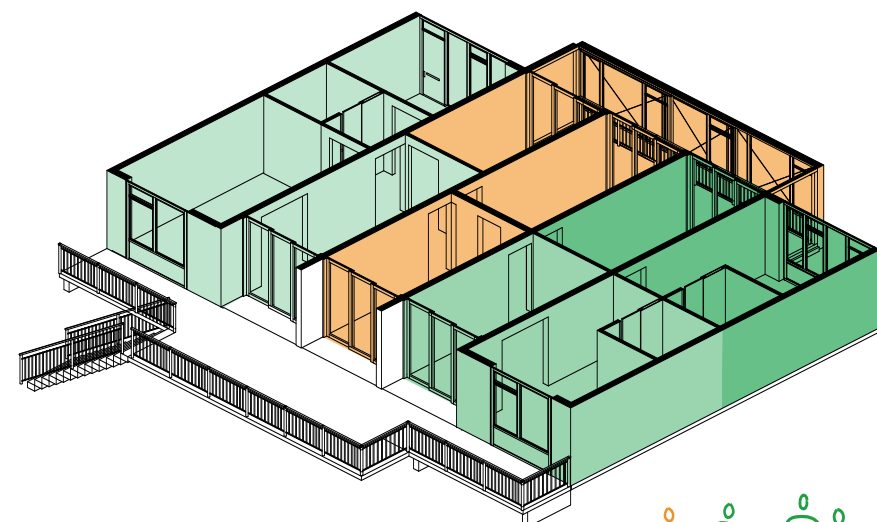
1 co-housing unit L + 1 co-housing unit M

Parents + Grandparents + Guestroom



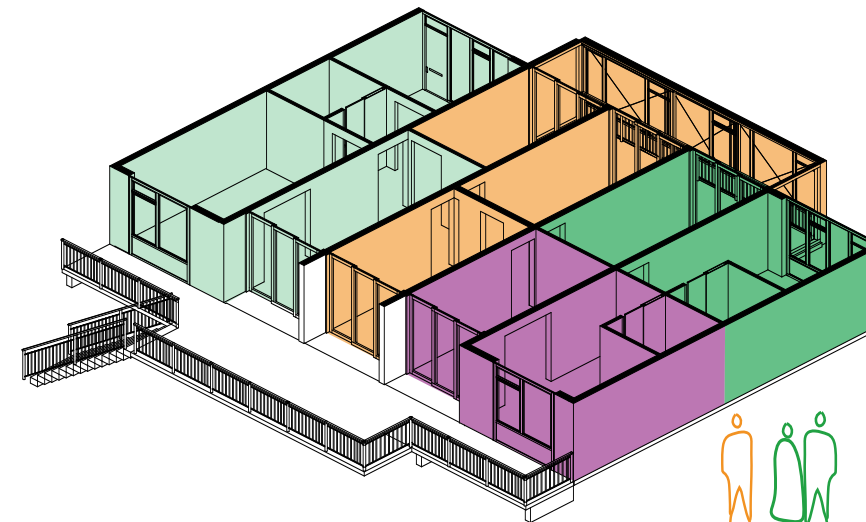
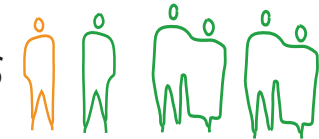
1 co-housing unit L + 2 co-housing unit S

Parents + Grandparents + Grandchild



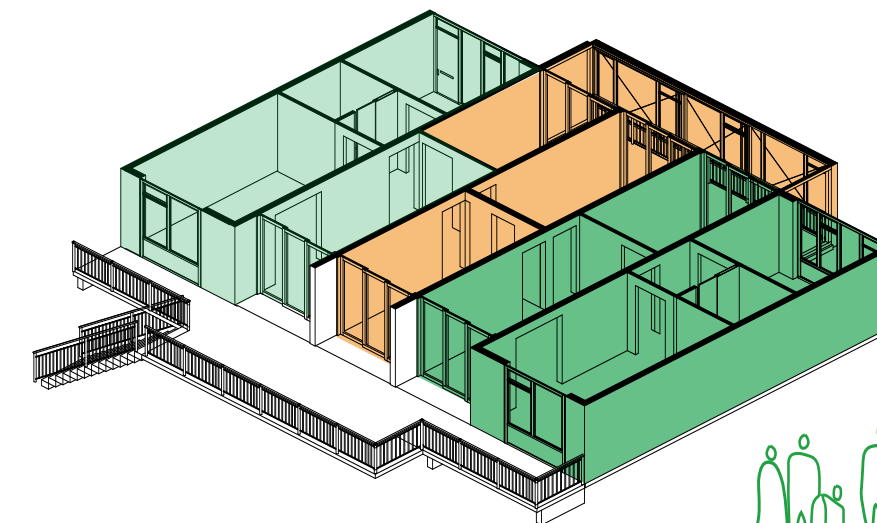
1 co-housing unit M + 2 co-housing unit S

Parents + Grandparents + Grandchild + Guestroom



1 co-housing unit M + 1 co-housing unit S + 1 independent

Parents + Grandchild + Guestroom & Independent studio



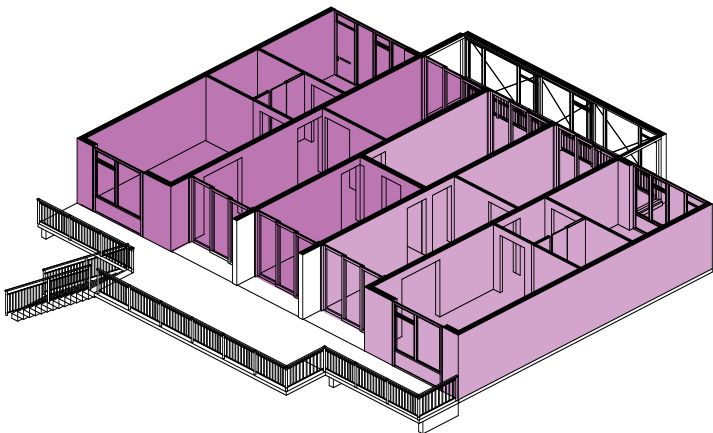
1 co-housing unit L + 1 co-housing unit M

Parents + Grandchildren + Guestroom

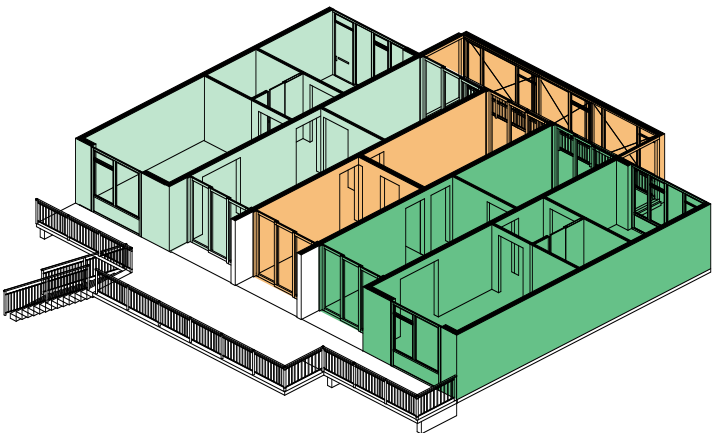


Voorbeeld levensloop: meergeneratiewoning

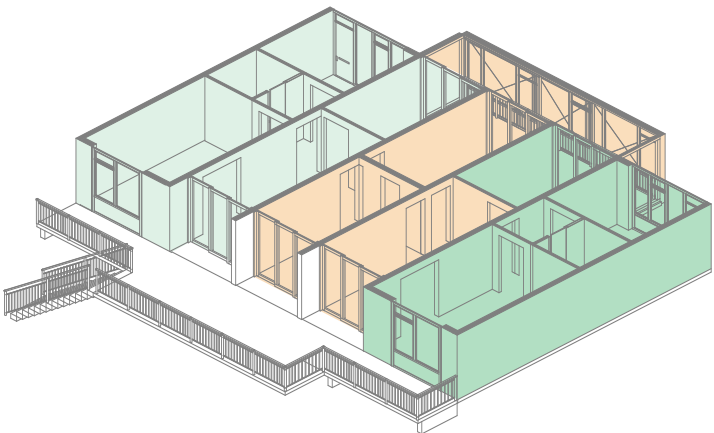
2 units



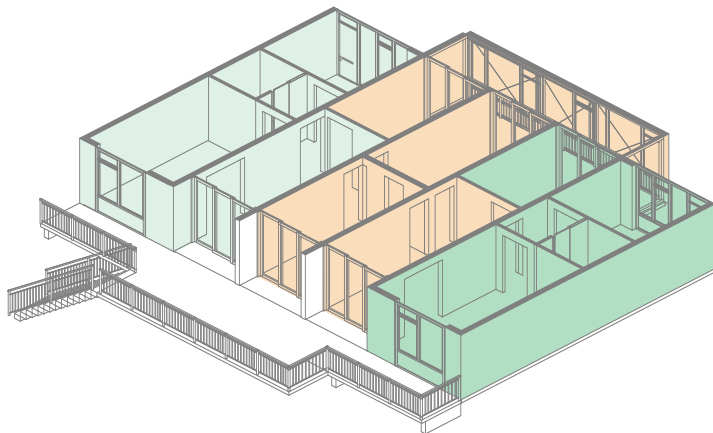
2 Independent dwellings



2 co-housing unit L

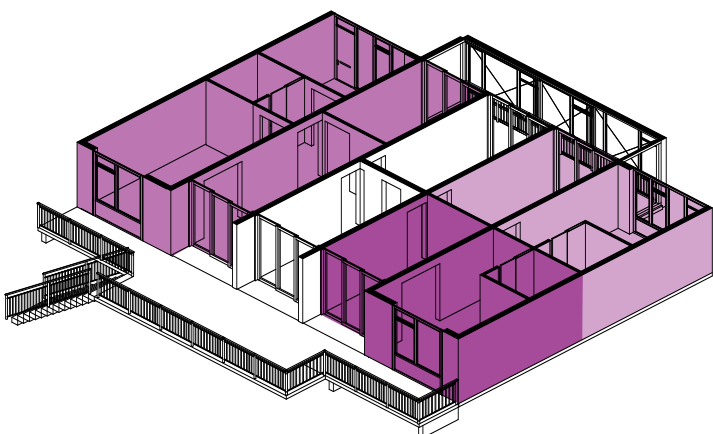


1 co-housing unit L + 1 co-housing unit M

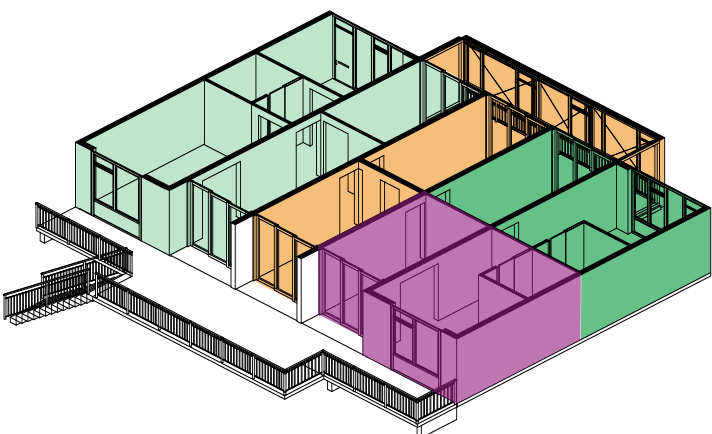


2 co-housing unit M

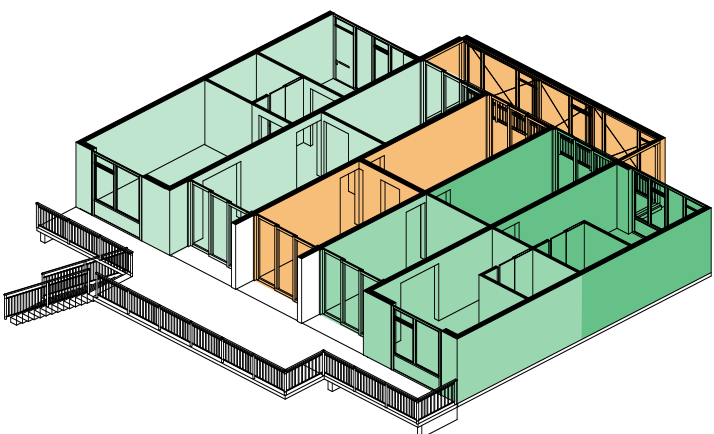
3 units



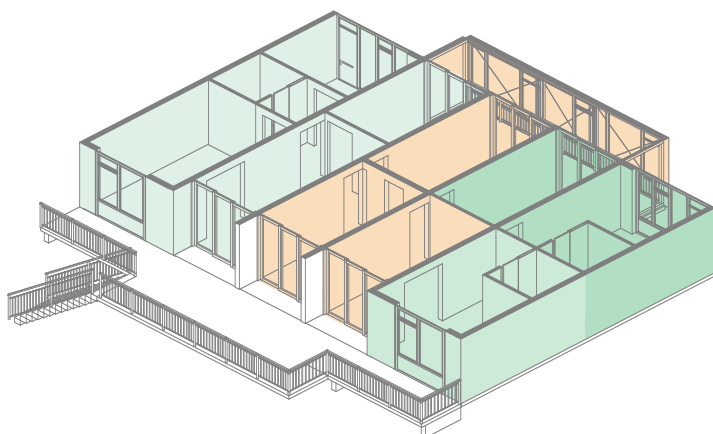
3 Independent dwellings



1 co-housing unit L + 1 co-housing unit S + 1 independend studio

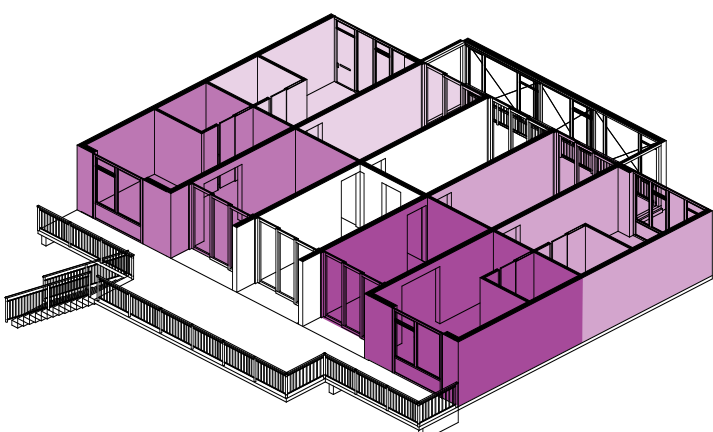


1 co-housing unit L + 2 co-housing unit S

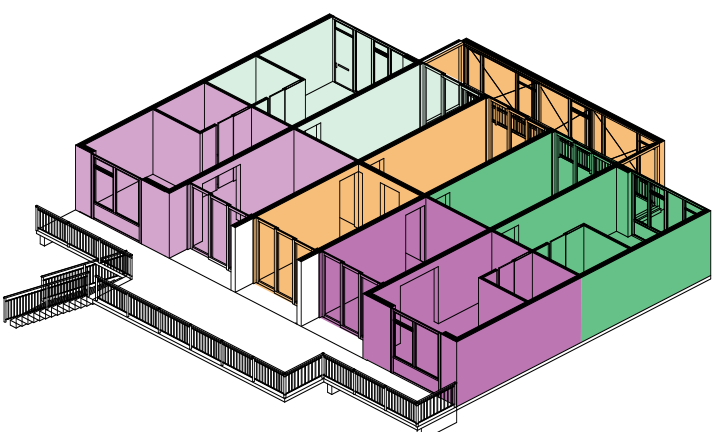


1 co-housing unit L + 1 co-housing unit S + 1 co-housing unit XS

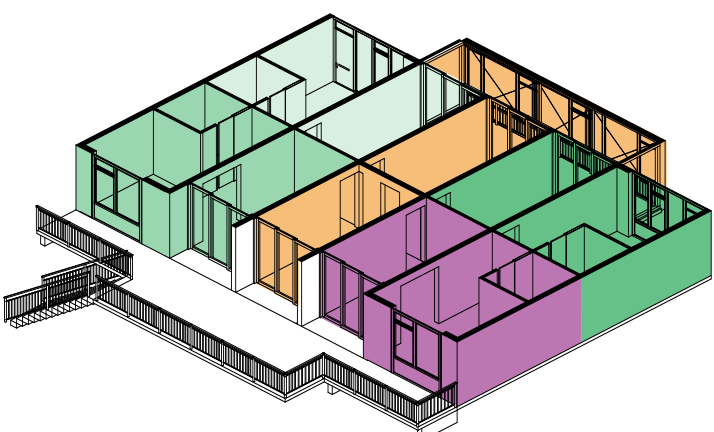
4 units



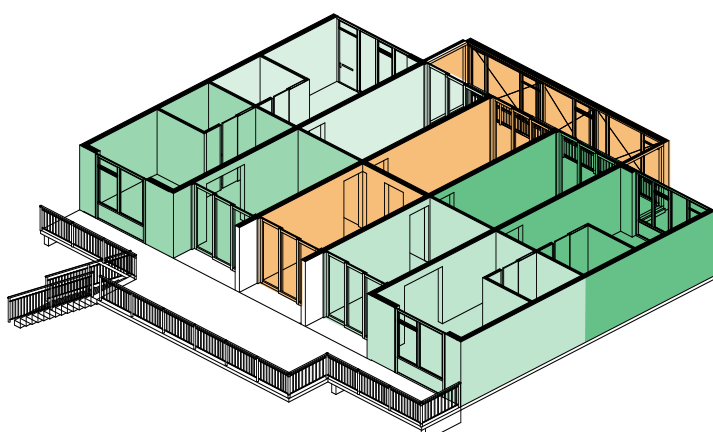
4 Independent dwellings



2 co-housing units S + 2 independend studio's



3 co-housing units S + 1 independend studio

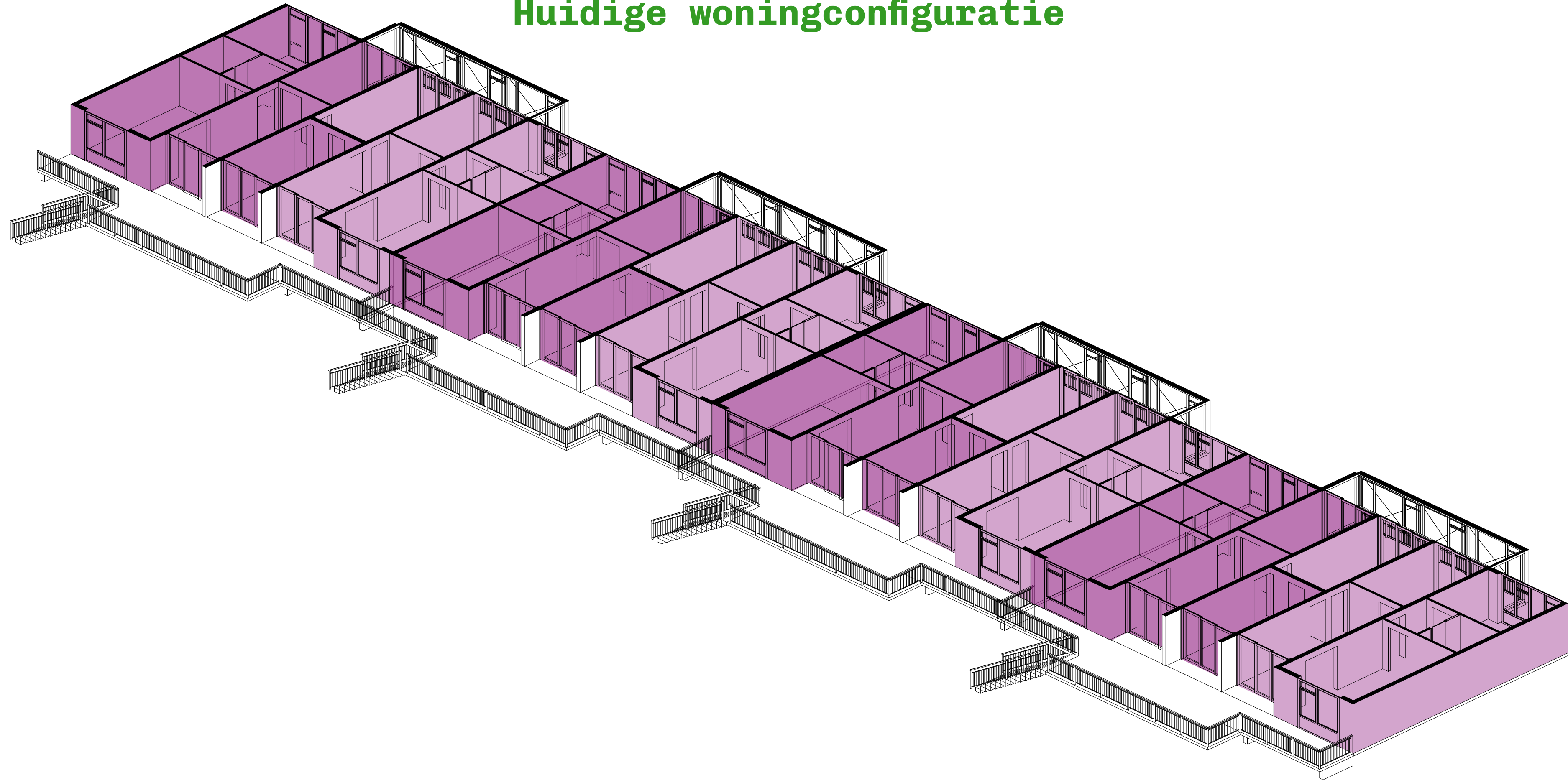


4 co-housing units S

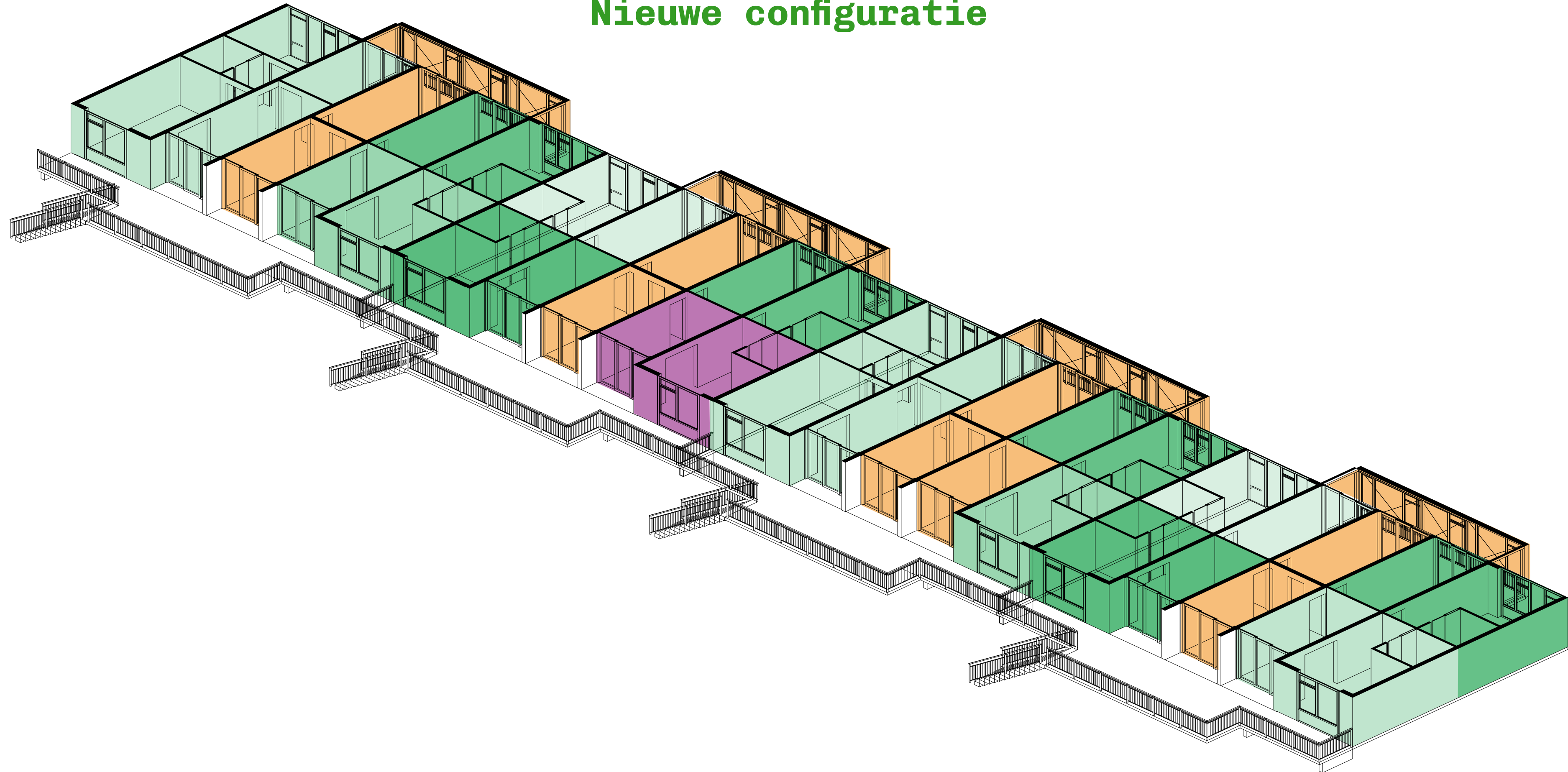
Plattegrond 2e & 4e verdieping



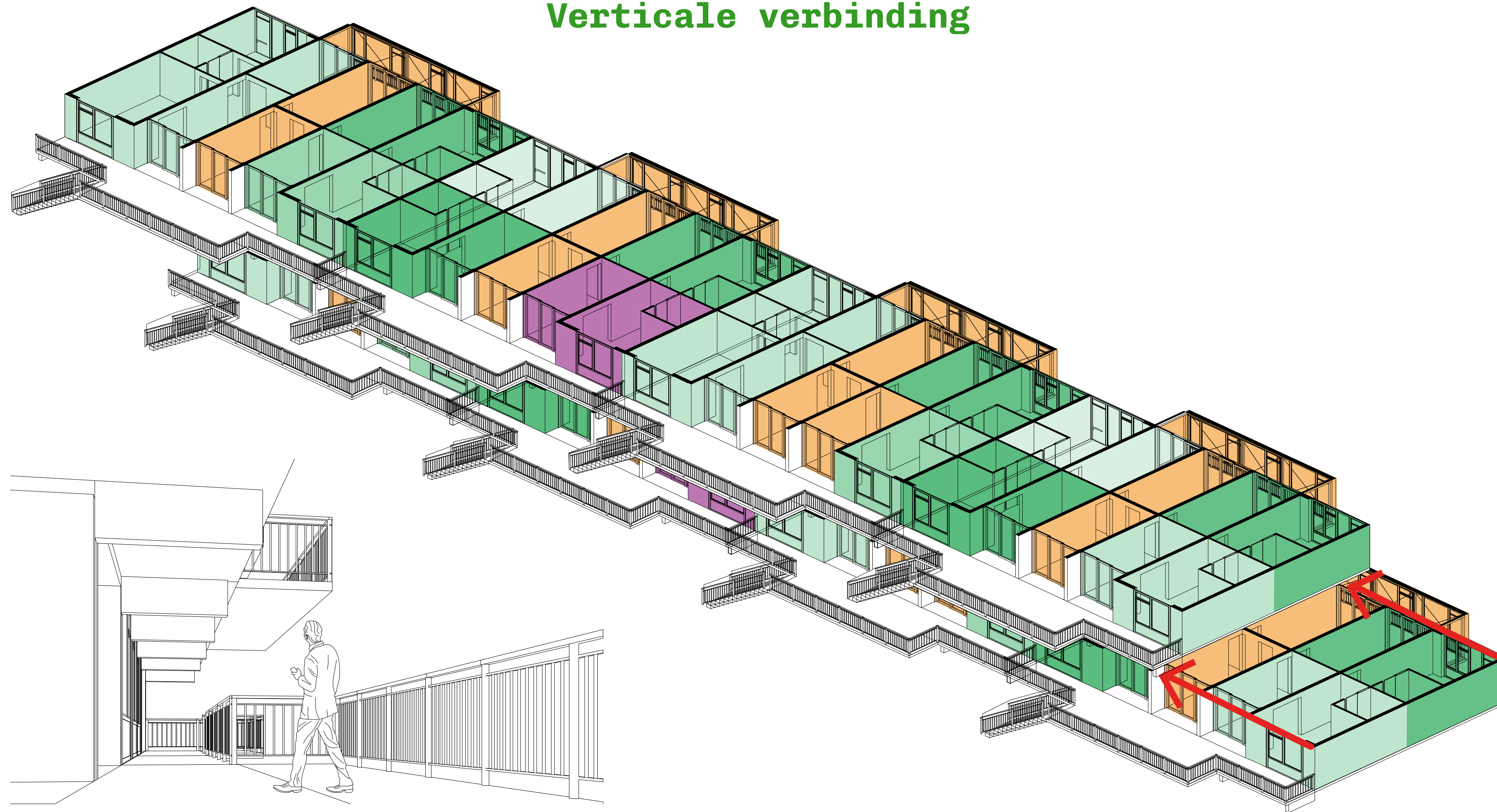
Huidige woningconfiguratie



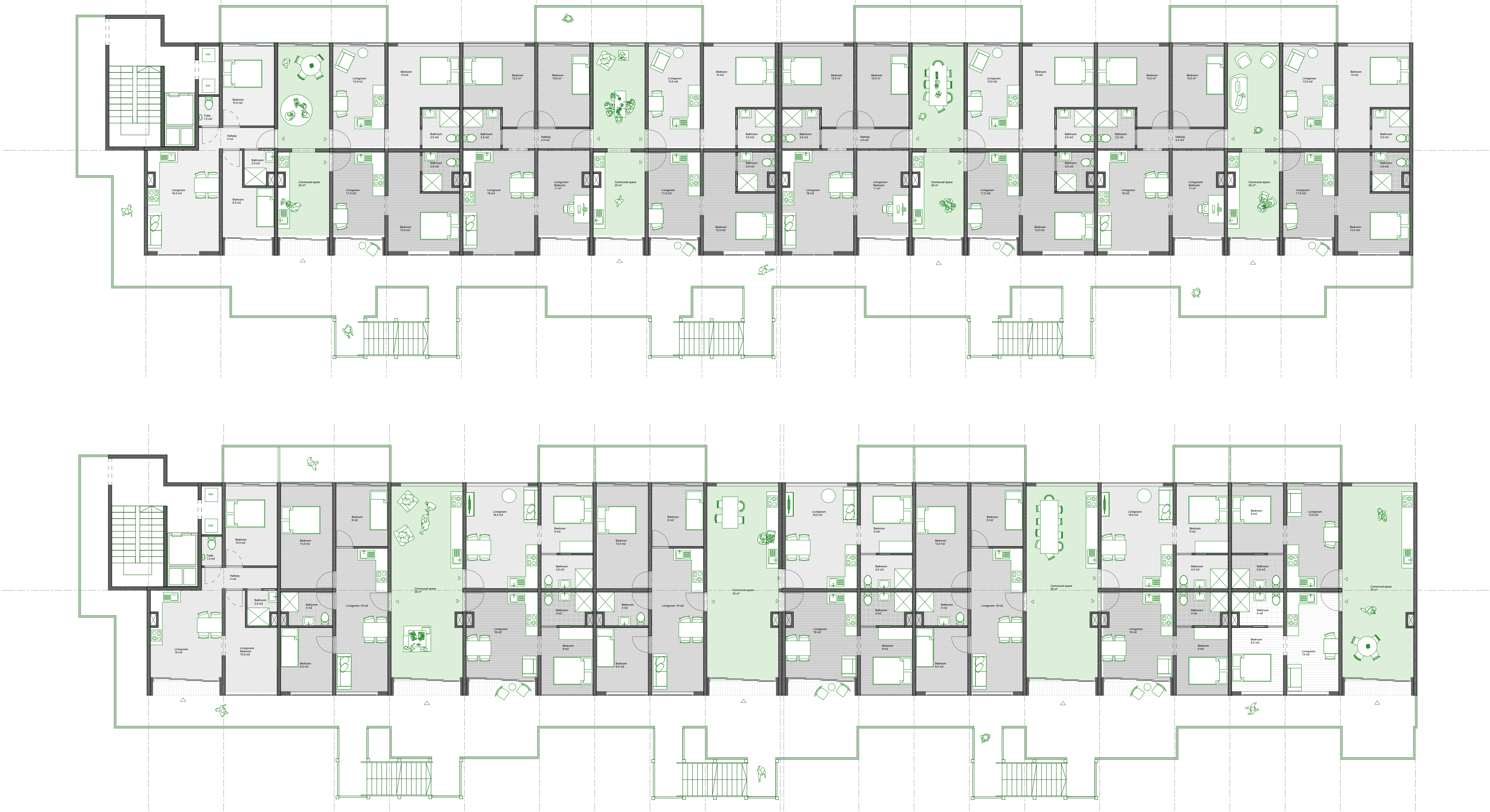
Nieuwe configuratie



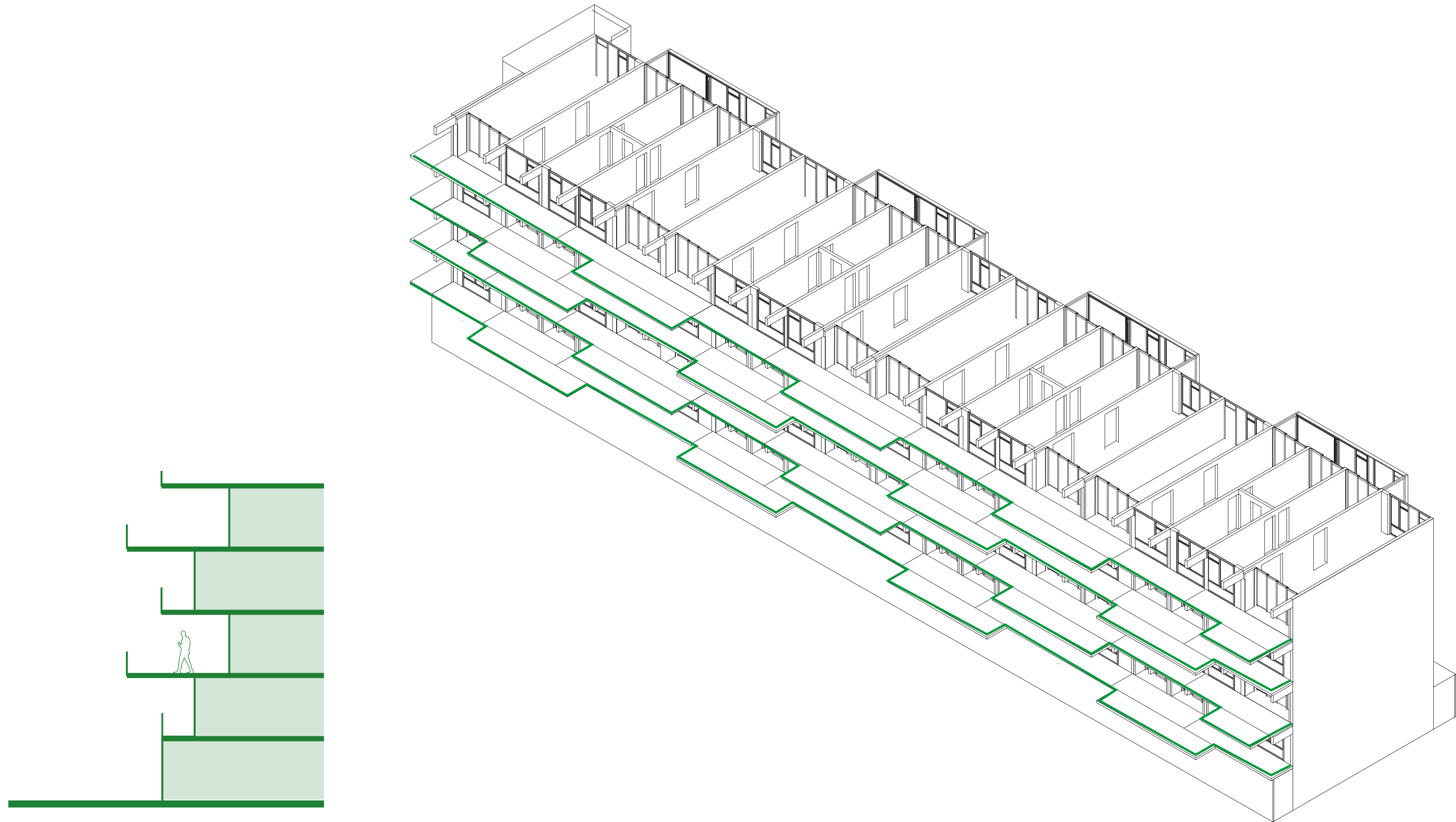
Verticale verbinding



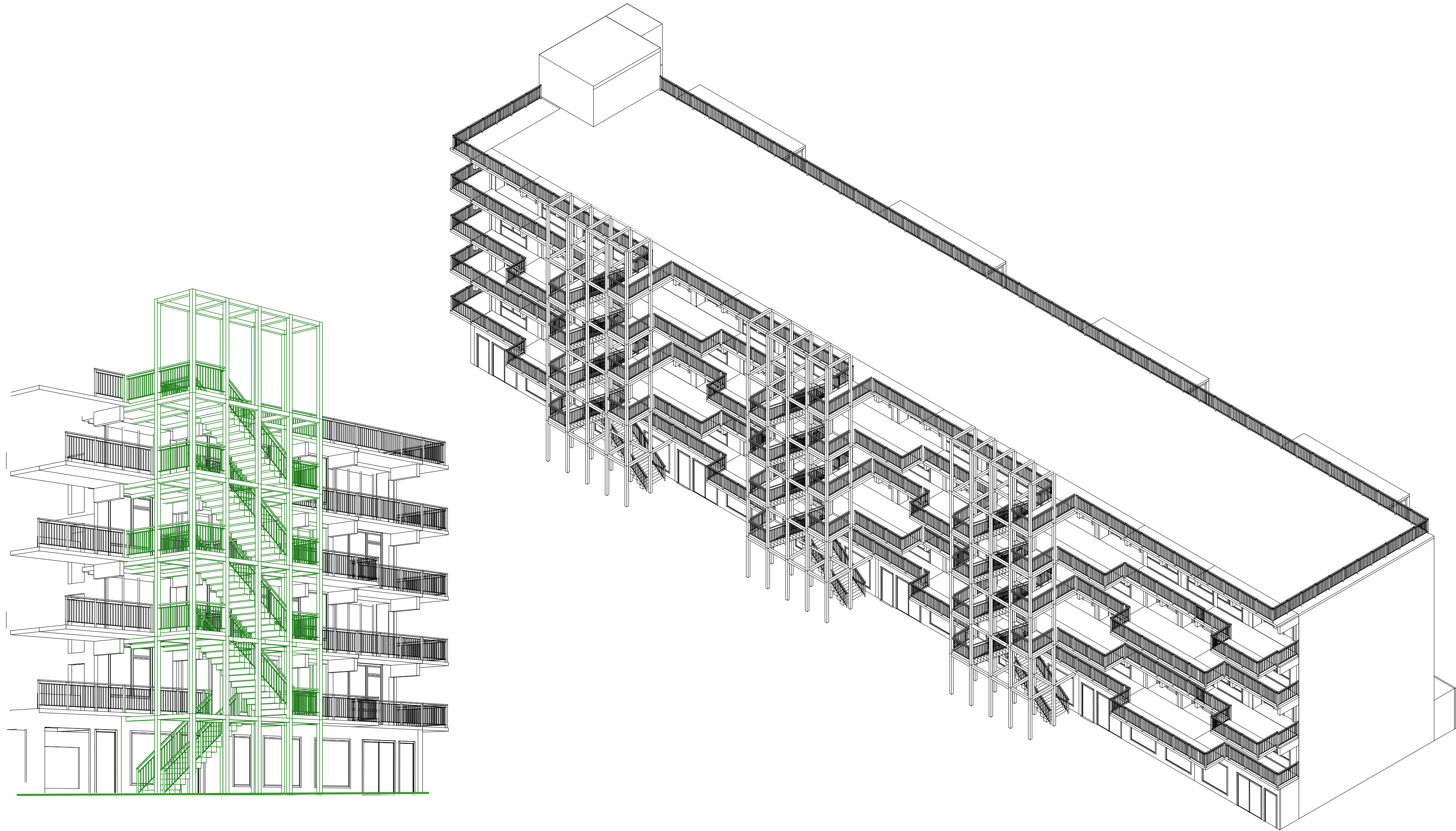
Plattegrond verdiepingen



Verticale verbinding



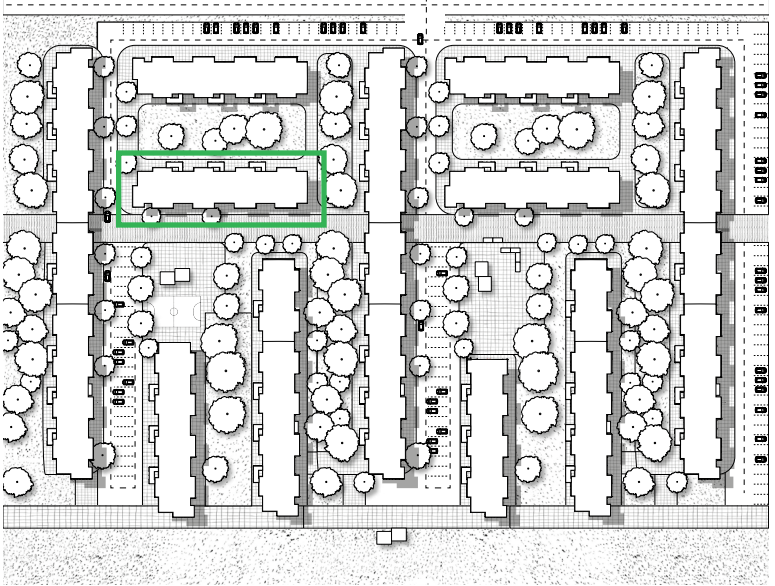
Verticale verbinding



Verticale verbinding



Plattegrond Begane Grond



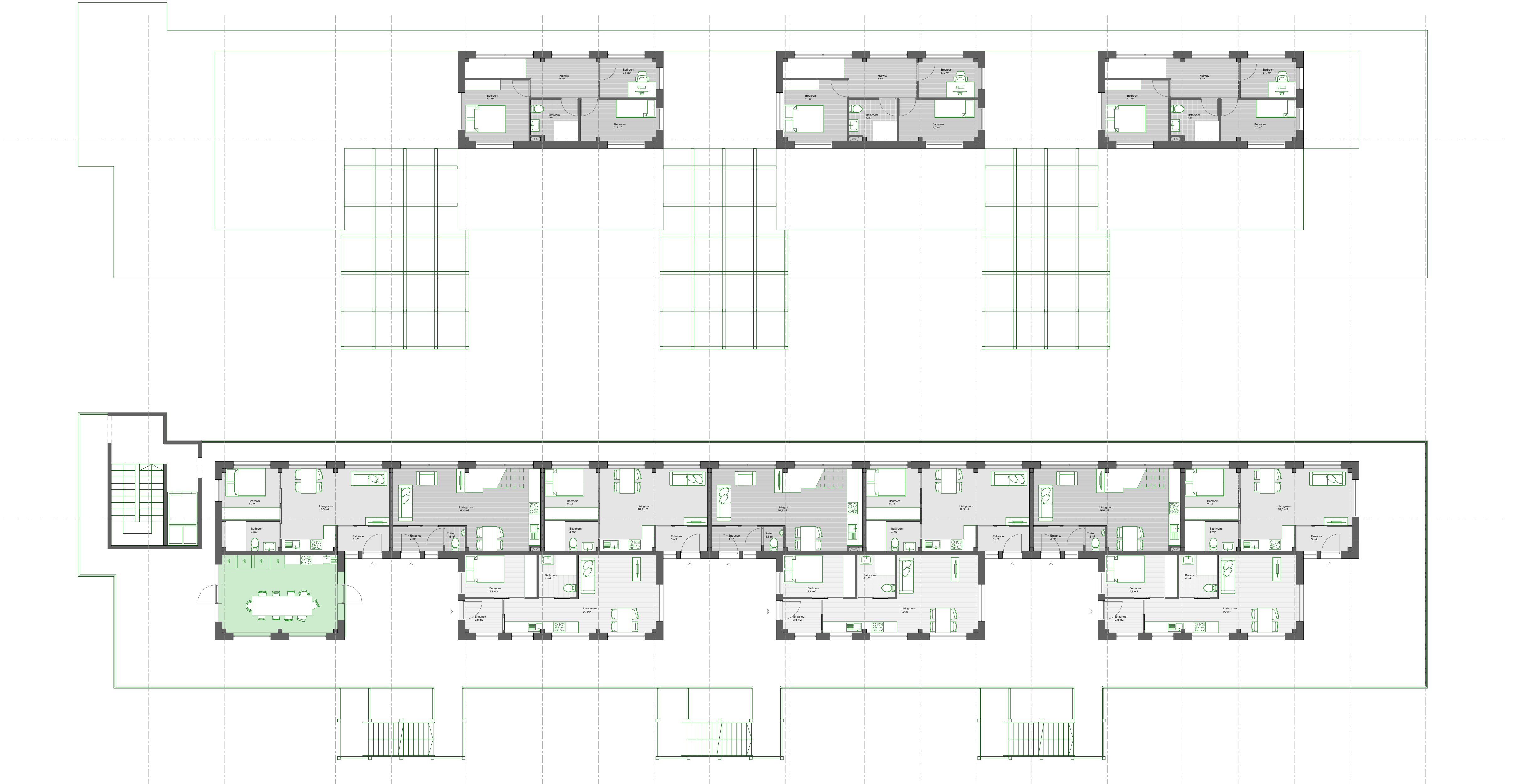
Plattegrond Begane Grond



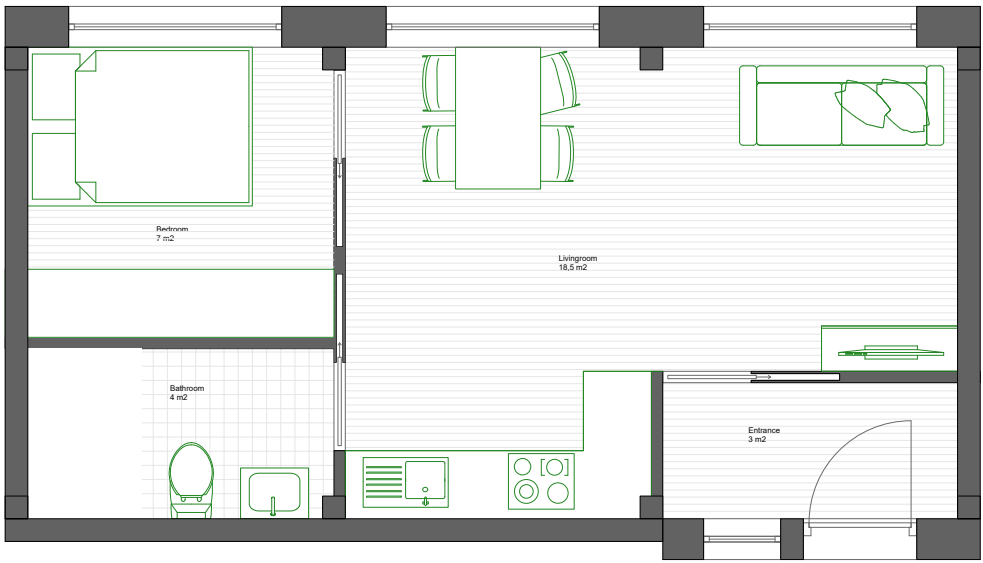
Optop



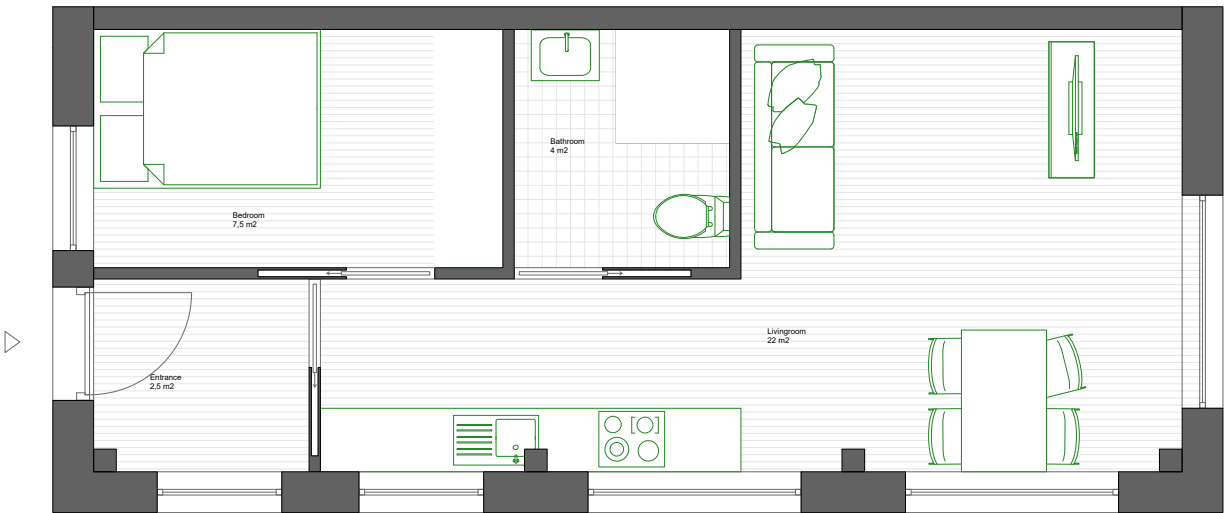
Plattegrond 5de & 6de verdieping



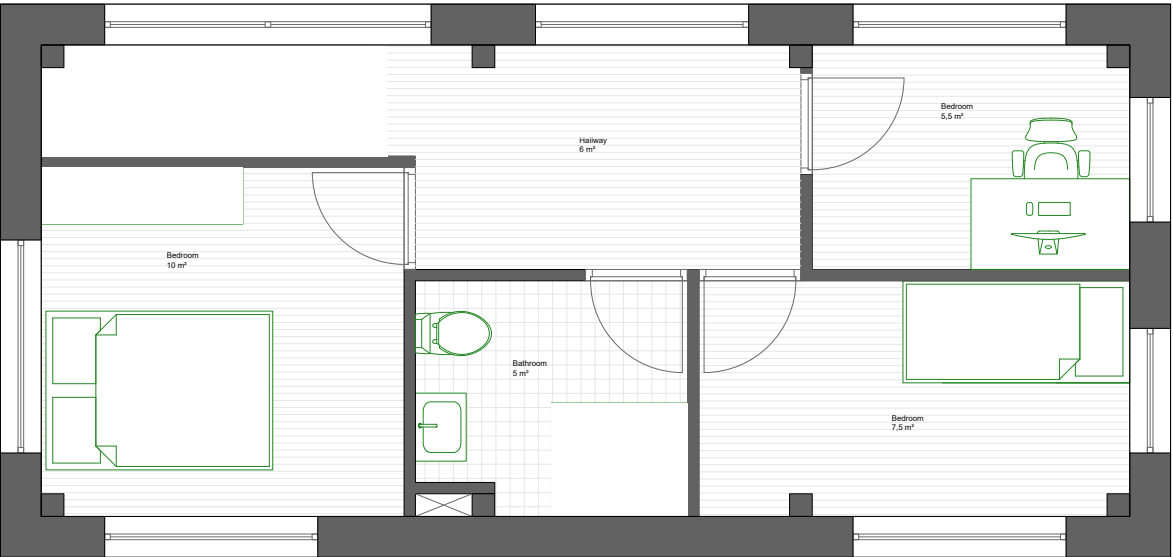
Plattegrond 5de & 6de verdieping



Apartment B
32,5



Apartment A
36 m2

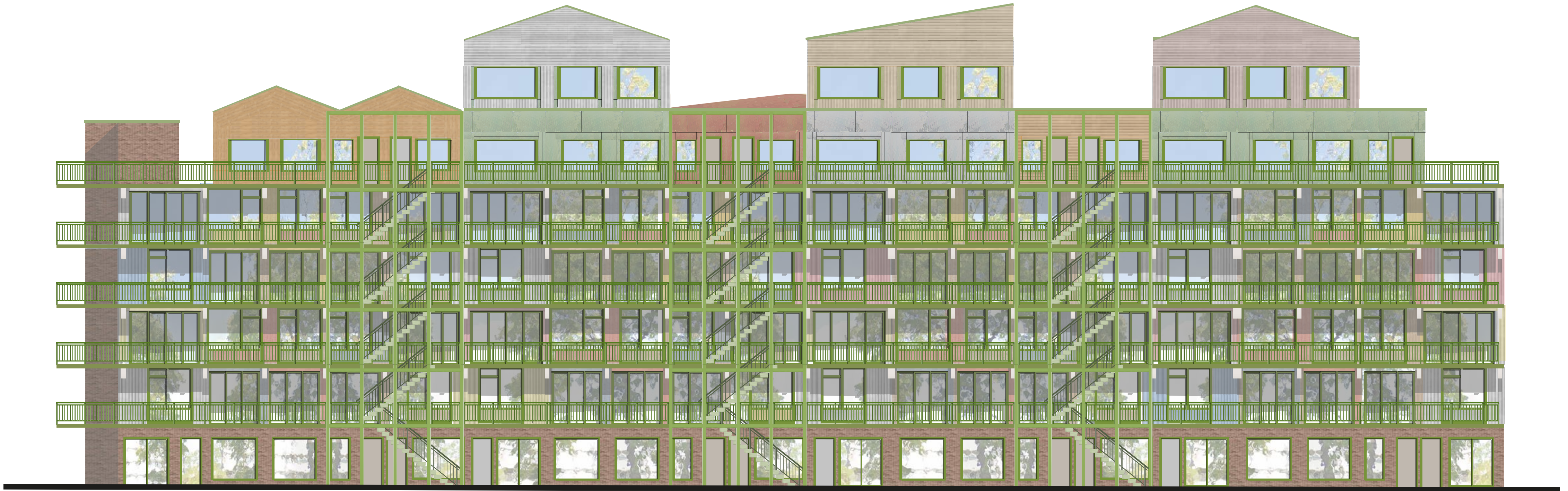


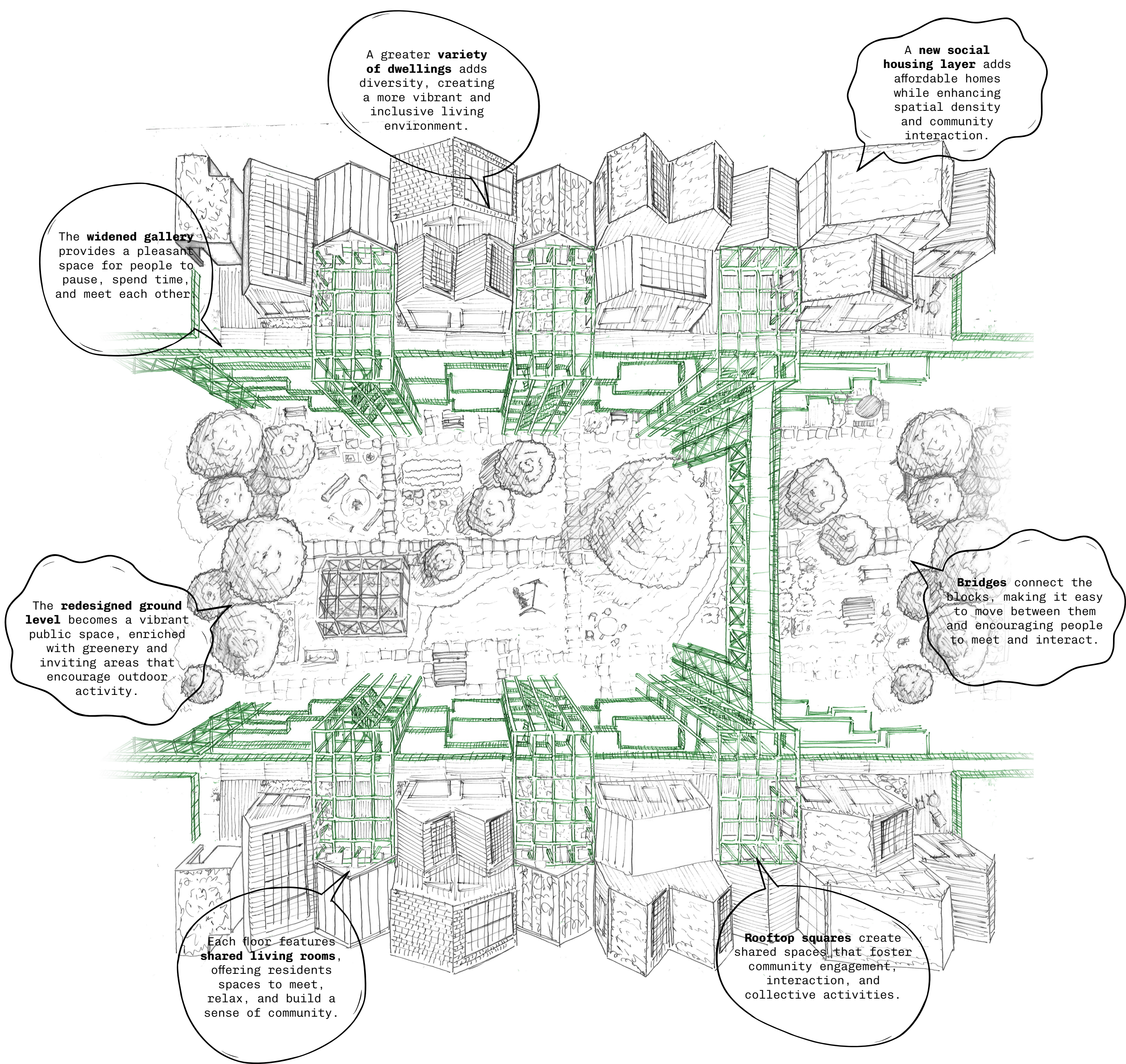
Apartment C
64m2

Impressie optop



Aanzicht galerijzijde





A greater **variety of dwellings** adds diversity, creating a more vibrant and inclusive living environment.

A **new social housing layer** adds affordable homes while enhancing spatial density and community interaction.

The **widened gallery** provides a pleasant space for people to pause, spend time, and meet each other.

The **redesigned ground level** becomes a vibrant public space, enriched with greenery and inviting areas that encourage outdoor activity.

Bridges connect the blocks, making it easy to move between them and encouraging people to meet and interact.

Each floor features **shared living rooms**, offering residents spaces to meet, relax, and build a sense of community.

Rooftop squares create shared spaces that foster community engagement, interaction, and collective activities.

Woningen

Verdicht

+ 4 to 20

+ 66 to 330

Opgetopt

+ 10

+ 165

Totaal

+ 14 to 30

+ 231 to 495

Hergebruik

Intern

+/- 75%

Extern

tot 60%

Sociaal

Wonen

Delen

Ontmoeten









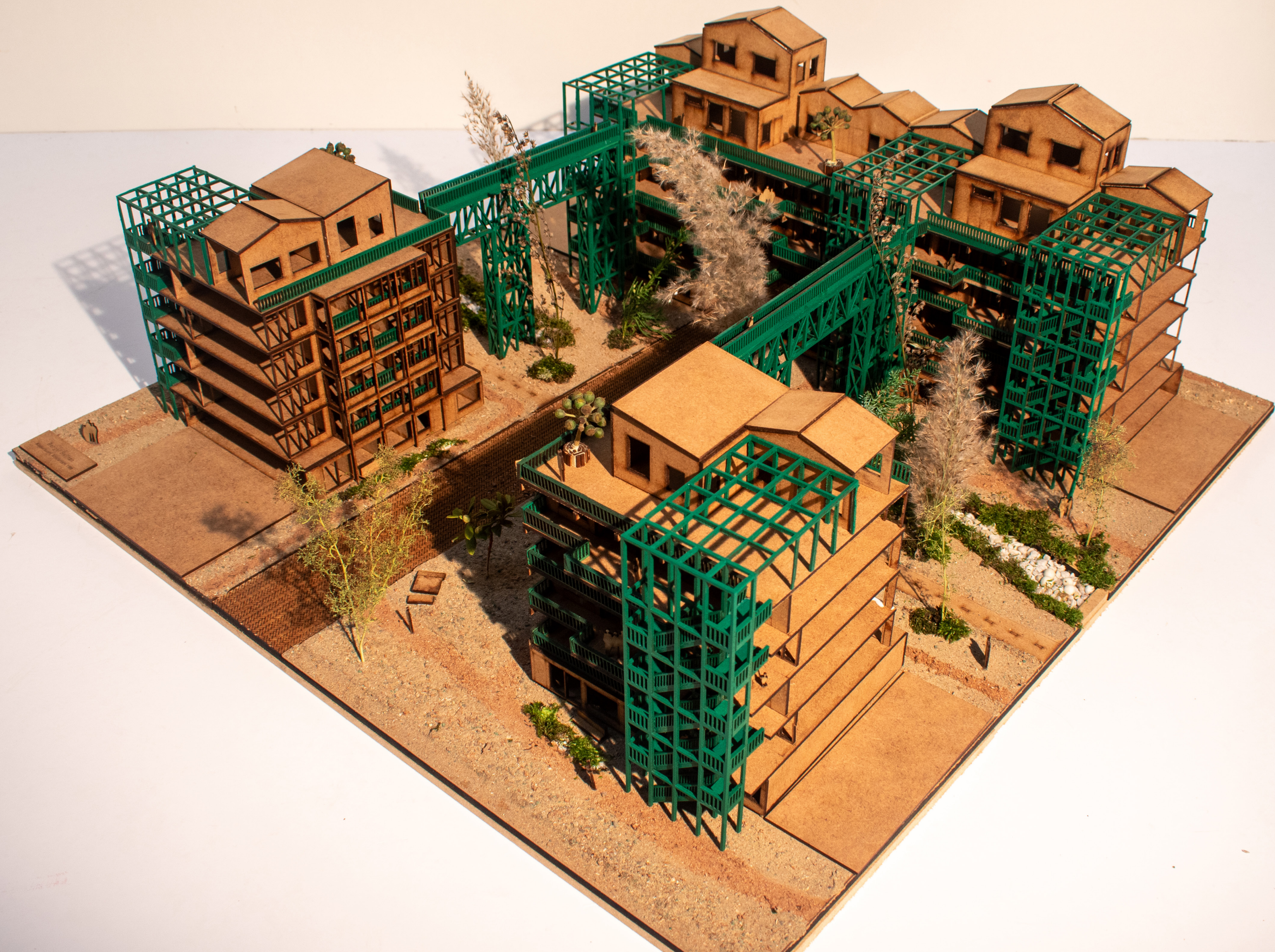












A miniature architectural model of a building with a green metal frame and terraces, set in a landscape with small plants and a toy tricycle.

Met dank aan

Thomas Offermans, Paddy Tomeson, Jos de Krieger

Aart Oxenaar, Ferry Adema

Marit Smit, Quinten van Buren, Stijn Blom

Marieke Russchen, Nikita Ham, Marilotte Stemerding

Olivia Lensen, Julian Wijnen

Papa en Mama

Sybren en Meerten

En alle anderen!

