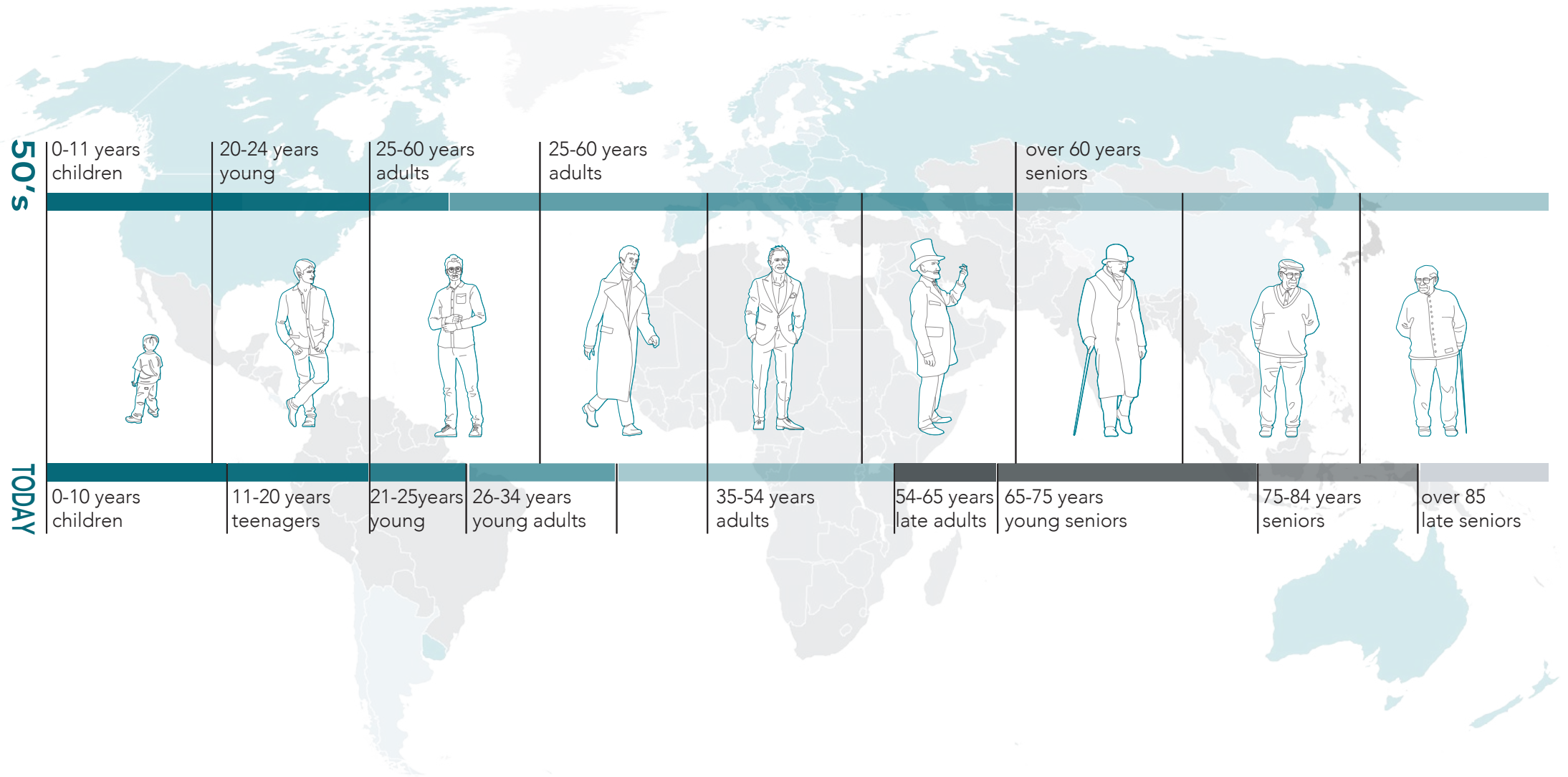
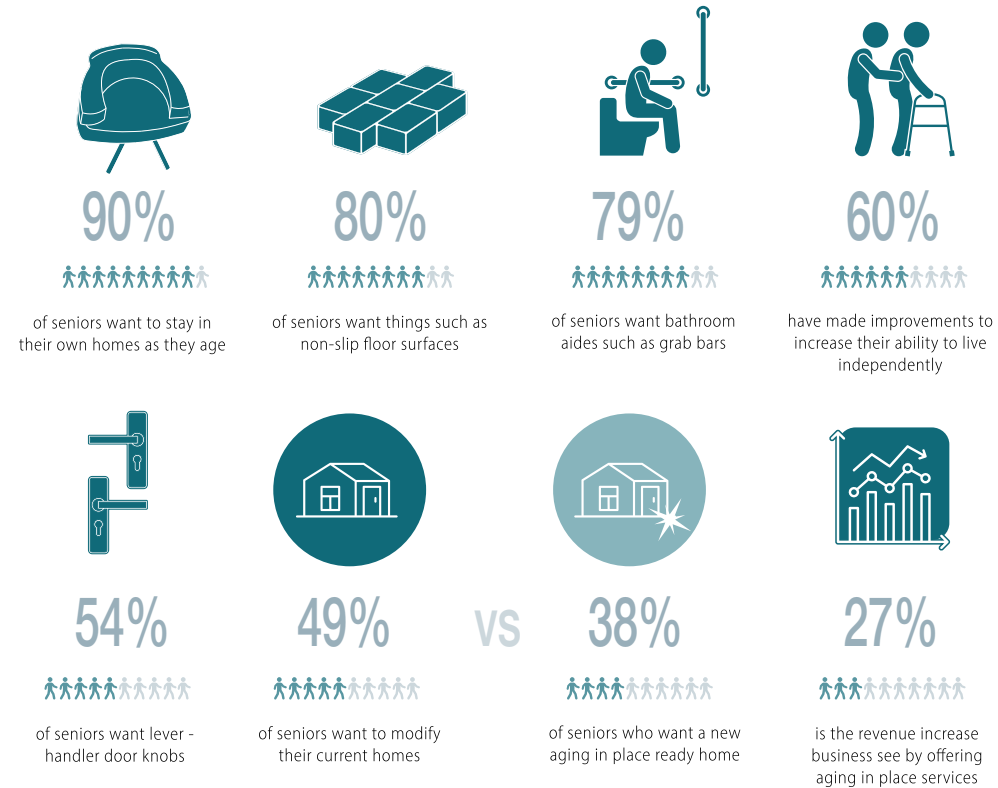


Aging in one place: age-friendly housing in Milan

Ardit Tashi



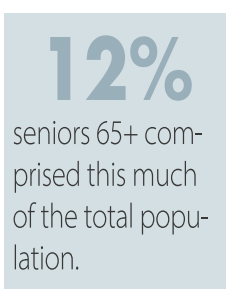
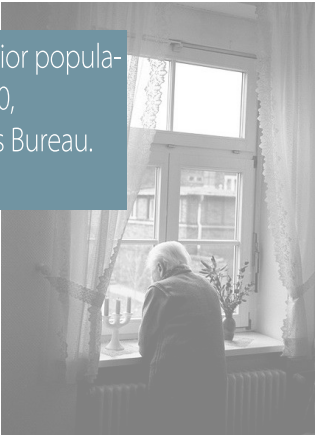
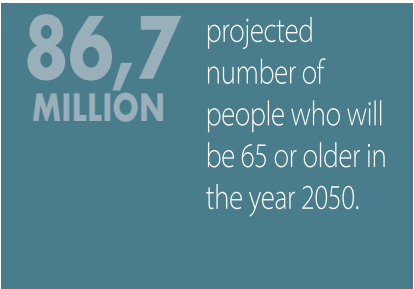
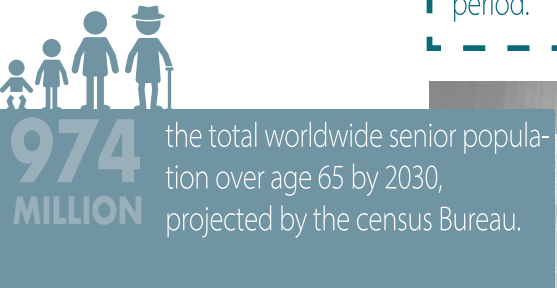
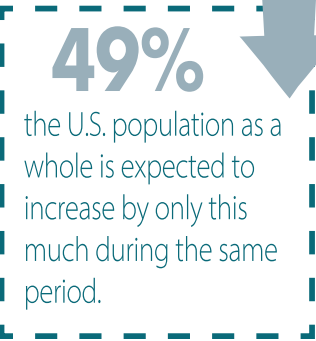
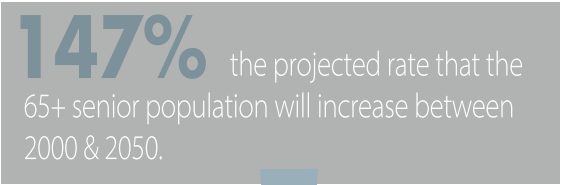
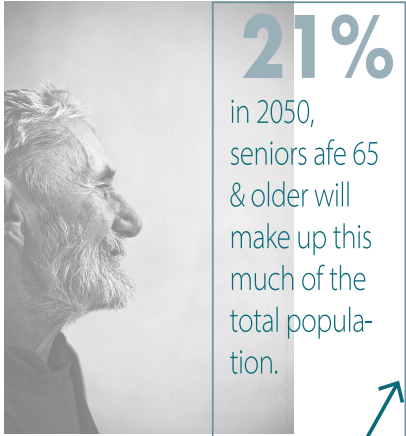
Aging in place is:
the ability for the elderly to continue to live in their own homes for as long as possible.



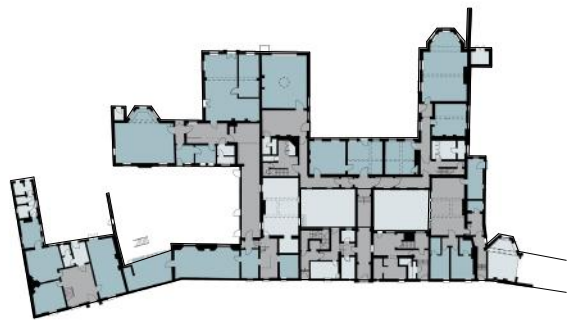
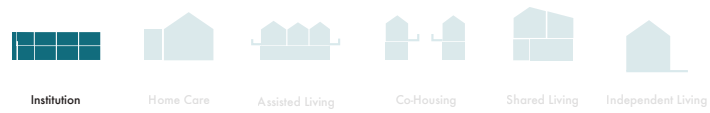
PERCENTAGES OF SENIORS 65 & above

10%

of the €214 billion
home improvement industry
is dedicated
to aging in place

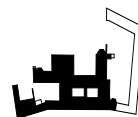


BETHEL HOSPITAL

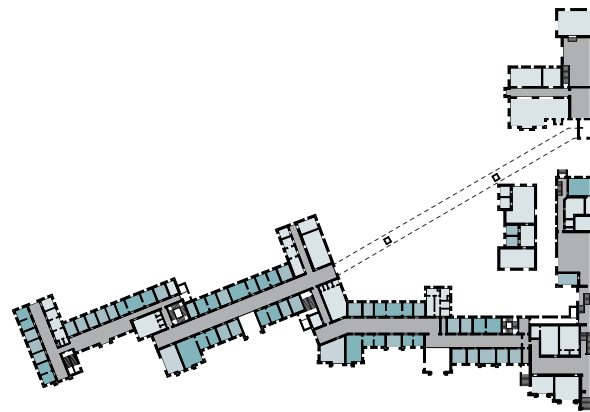
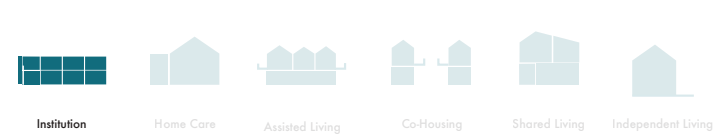


1 - Ground Floor Plan

- Administration and Services
- Patient Rooms
- Circulation Spaces



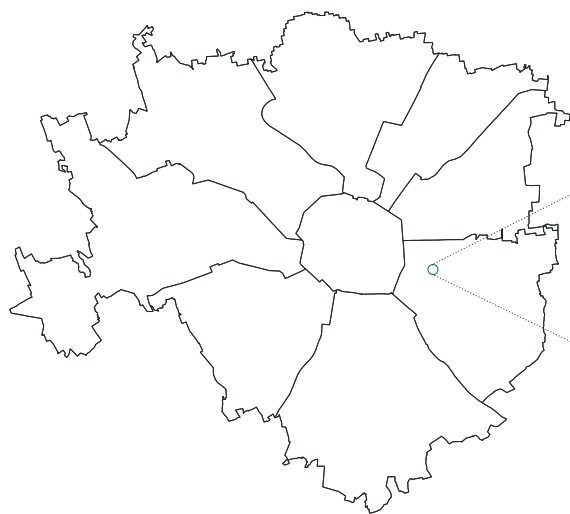
TRAVERSE CITY STATE HOSPITAL



1 - Ground Floor Plan

- Administration and Services
- Day Hospital Rooms
- Independent Rooms
- Communicating Rooms
- Circulation Spaces





THE CITY OF MILAN



THE NEIGHBORHOOD



PROJECT SITE



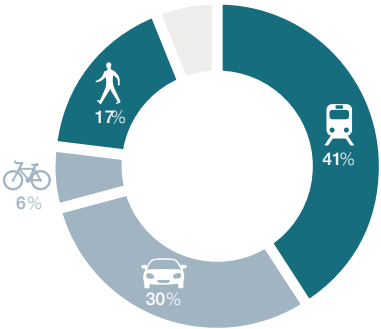




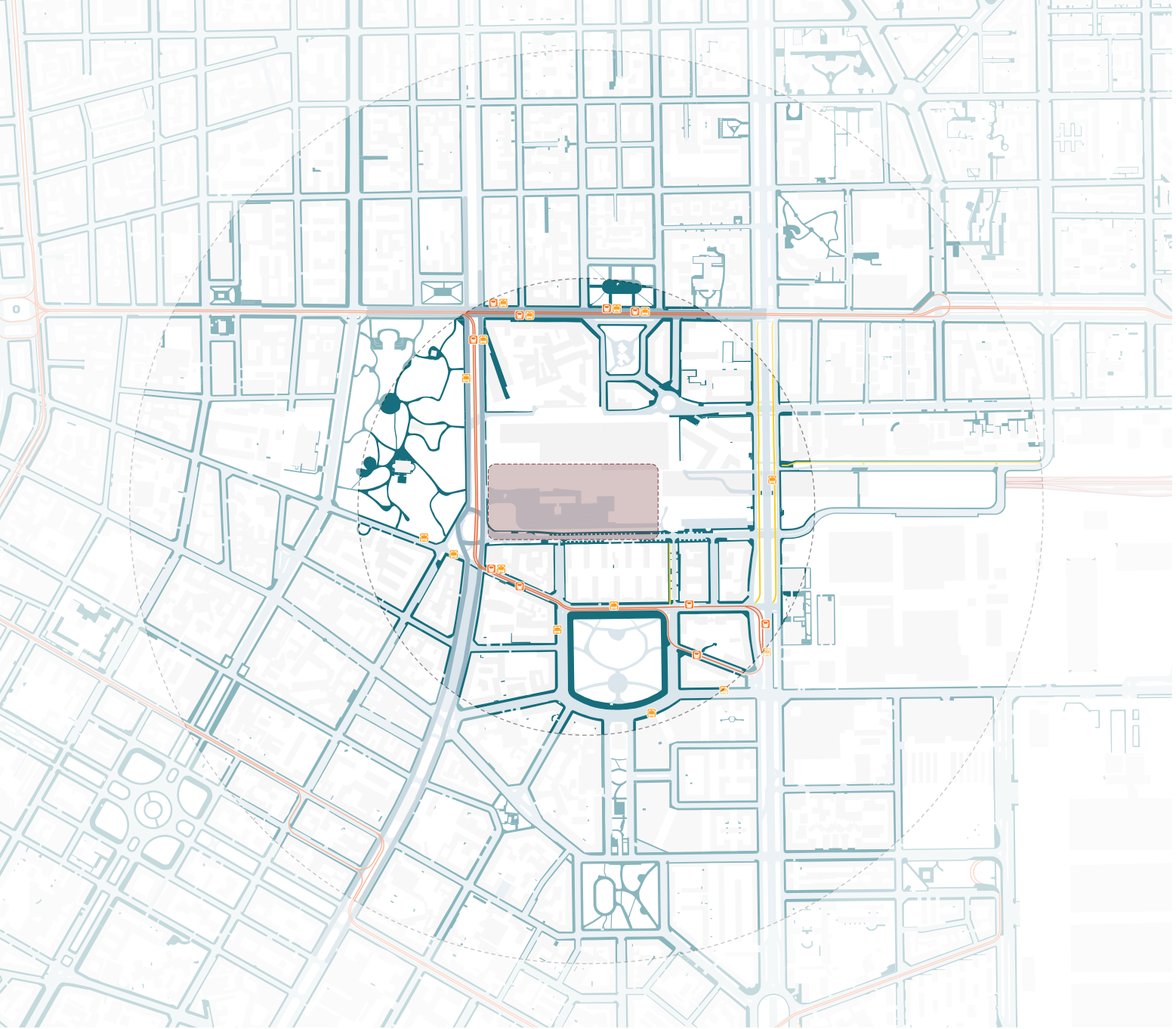
ACCESSIBILITY

3 KM/H
IS THE AVERAGE
WALKING SPEED OF
**65+ PEOPLE (ALL
AVERAGE WALKING
SPEED IS 4.8 KM/H).**

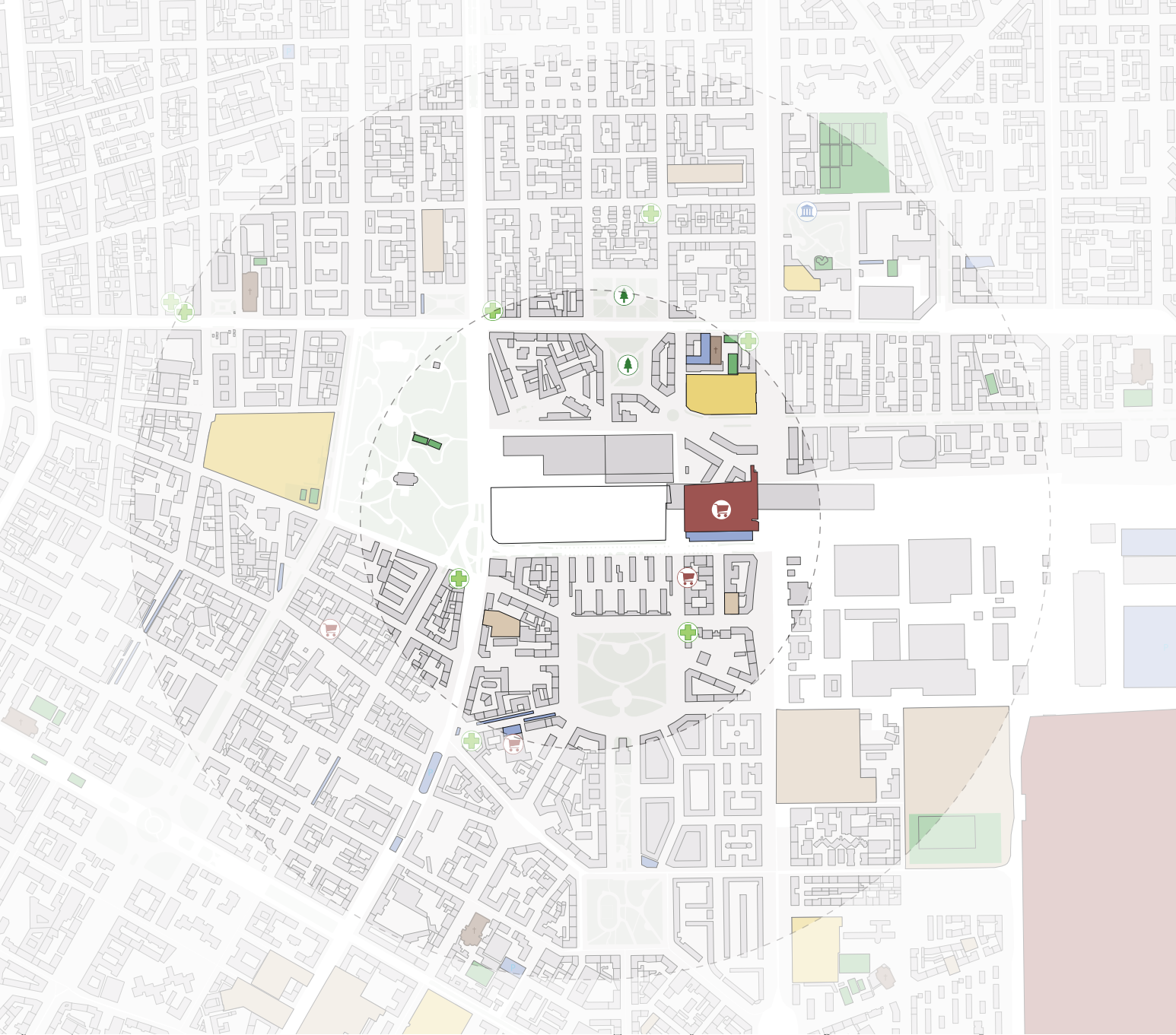
44%
OF DAILY TRIPS DONE
BY **65+ PEOPLE OCCUR**
BY PUBLIC TRANSPORT



modes of transport in milan



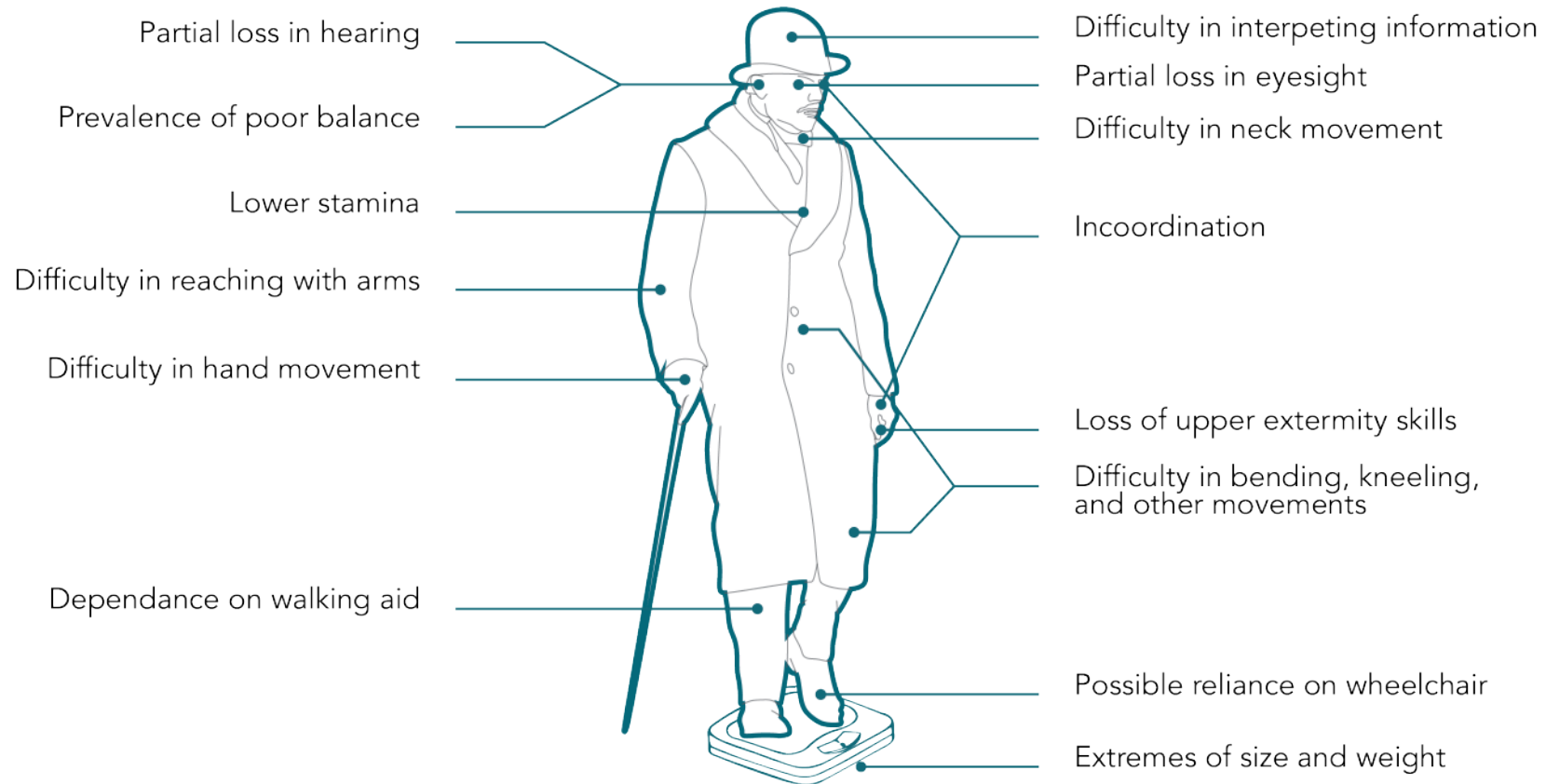
PUBLIC SERVICES

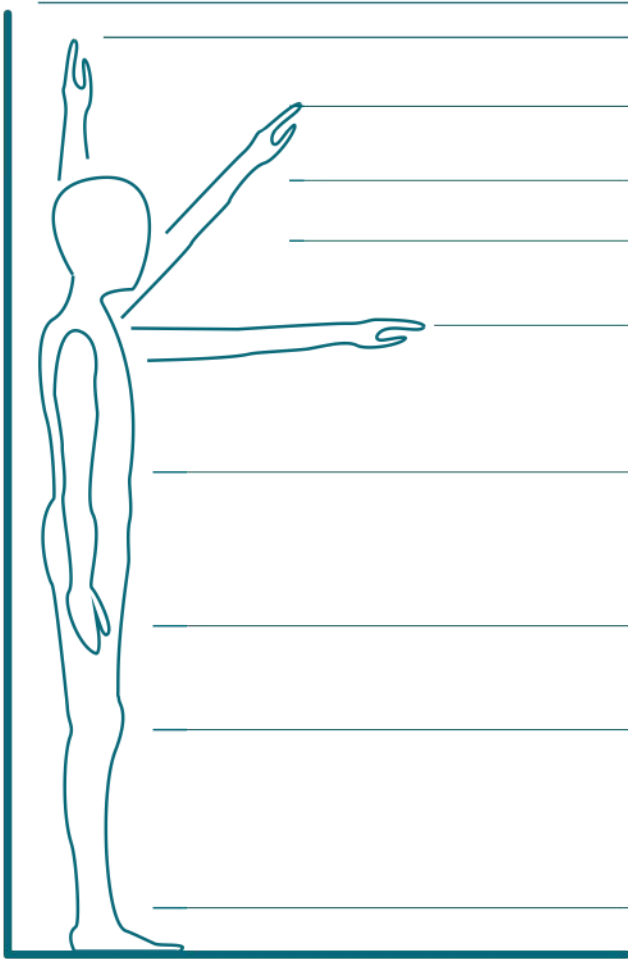


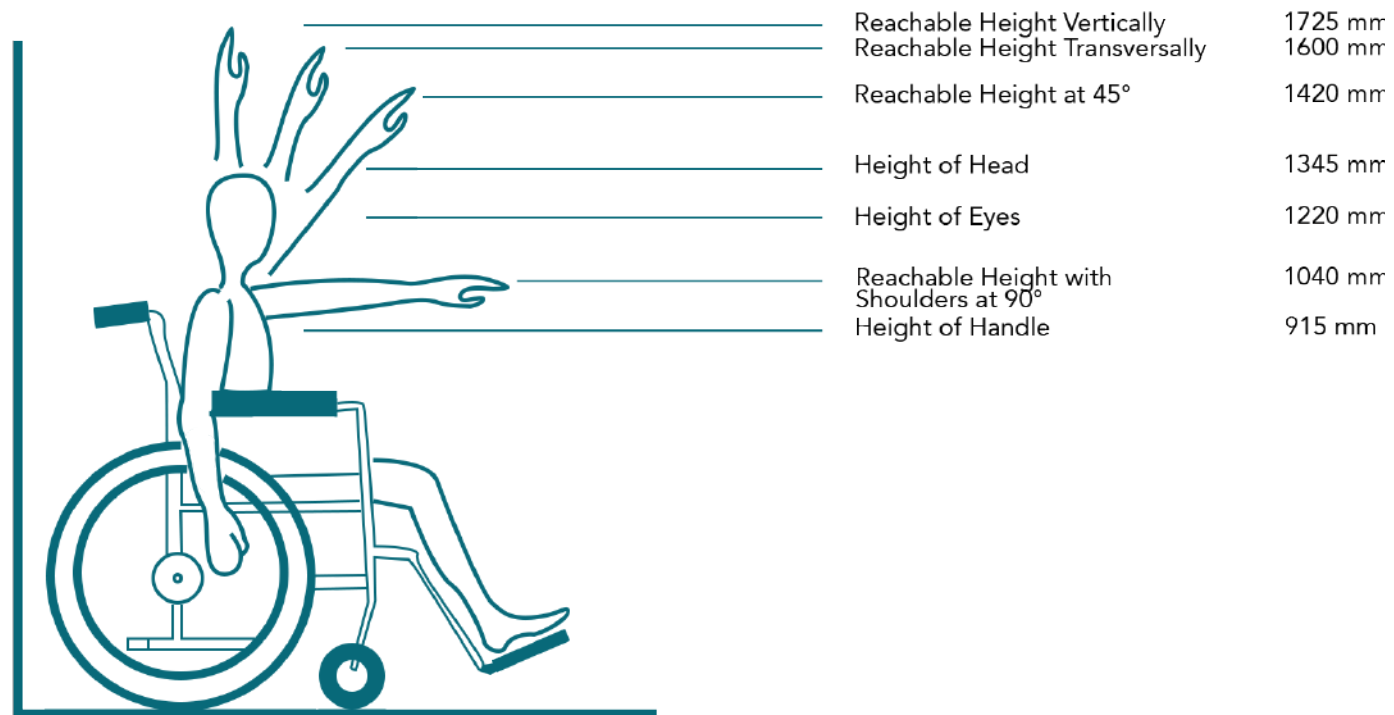
residential industrial school commercial places of worship parking sports



green system in milan



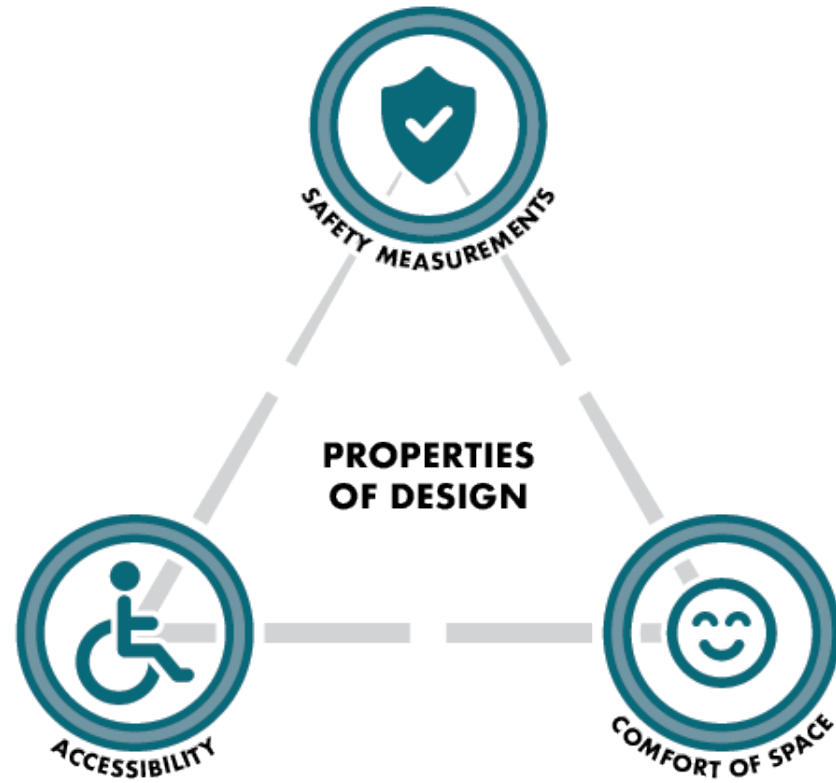
	Average Values for Men	Average Values for Women	Average Values for A woman over the age of 60 years
			
Reachable Height Vertically	850	790	745
Reachable Height Transversally	2140	1970	1860
Reachable Height at 45°	1940	1780	1715
Height of Head	1760	1630	1570
Height of Eyes	1620	1500	1340
Reachable Height with Shoulder at 90°	1440	1370	1290
Height of Elbow	1120	1040	1010
Height of Hands	740	730	725
Height of Knees	520	500	495
Height of Ankles	100	100	95
Heel to Toes	310	290	290



SCALES OF DESIGN



PROPERTIES OF DESIGN

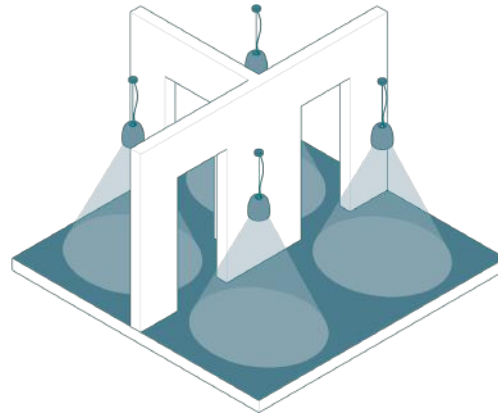


ELEMENTS OF DESIGN LIGHTING SOLUTIONS

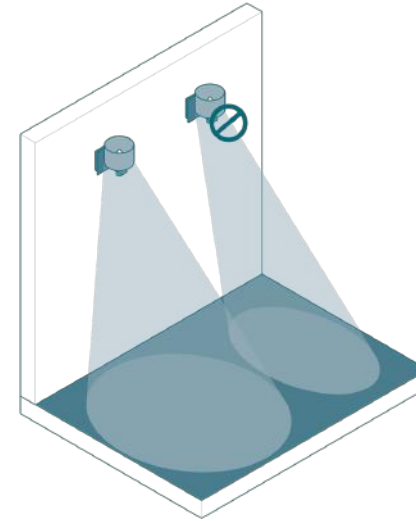
CHOICE OF LIGHT BULBS



LIGHT CONSISTENCY

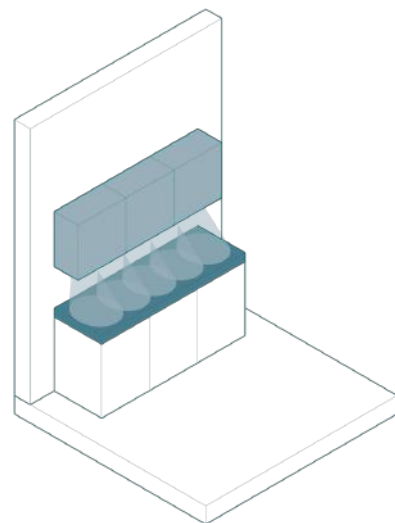


LIGHT ANGLES

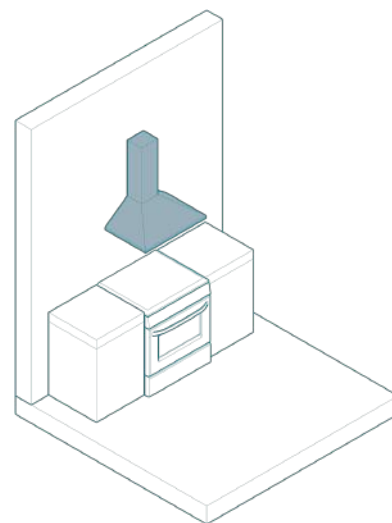


ELEMENTS OF DESIGN
KITCHEN

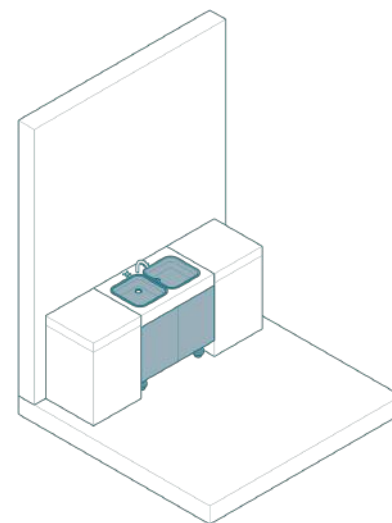
UPPER CABINETS



EXHAUST SYSTEMS

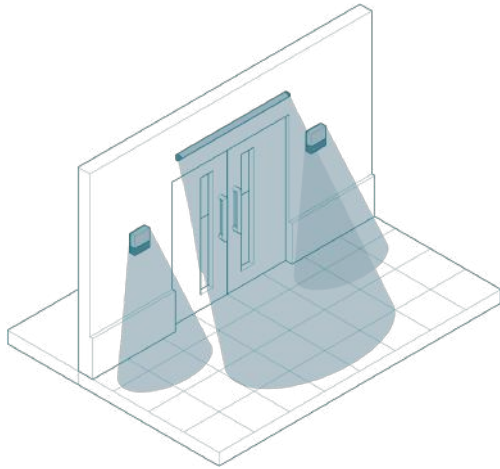


KITCHEN SINK

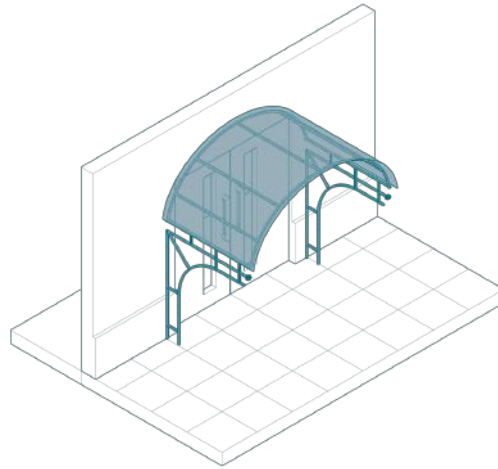


ELEMENTS OF DESIGN ENTRANCE TO BUILDING

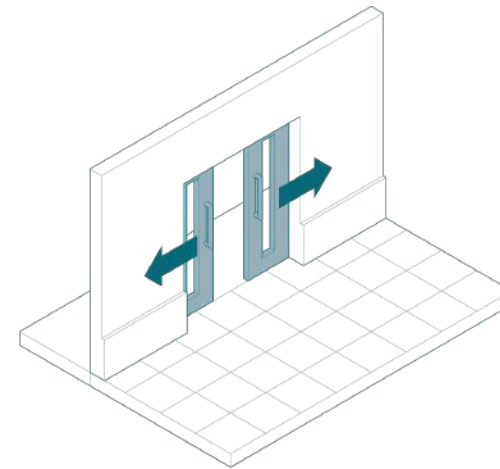
LIGHTING THE ENTRANCES



WEATHER PROTECTION

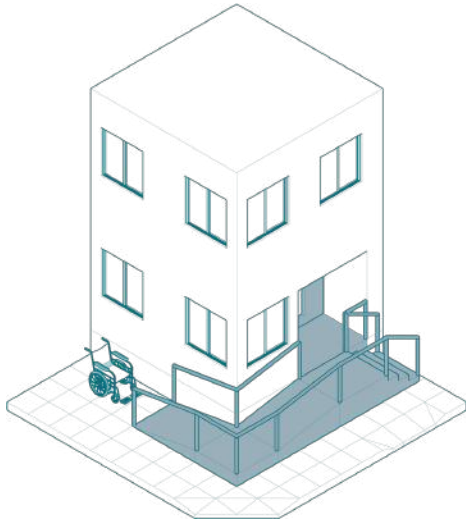


AUTOMATIC DOORS

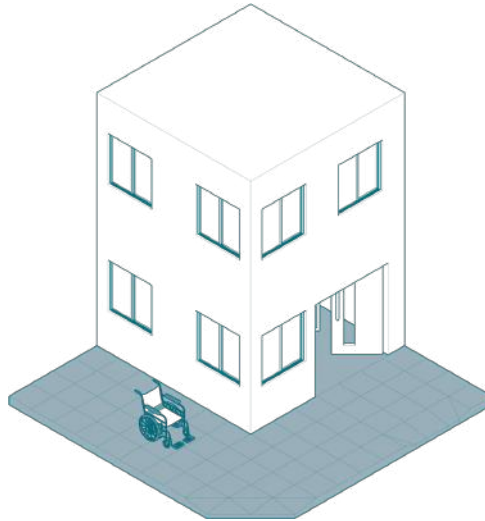


ELEMENTS OF DESIGN SIDEWALKS

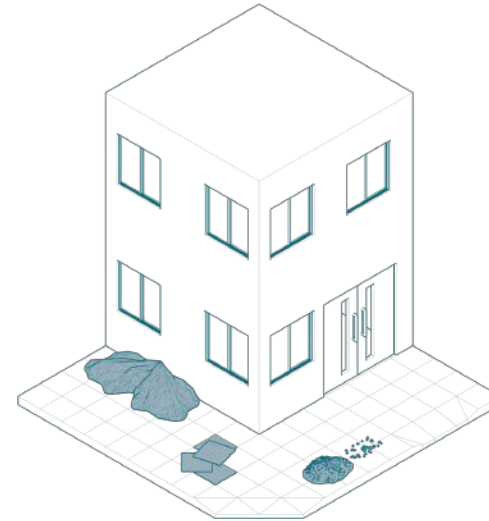
RAISED ENTRANCES



ACCESSIBILITY

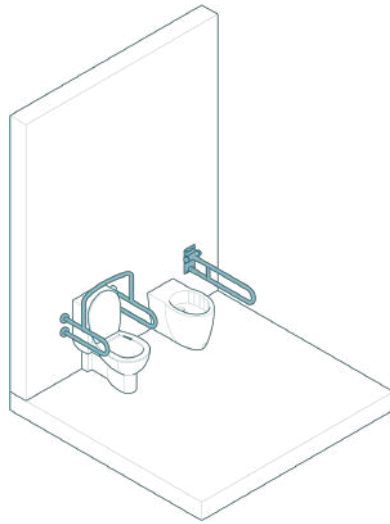


SIDEWALK MAINTENANCE

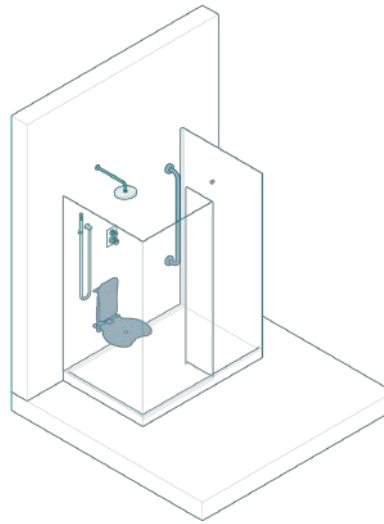


ELEMENTS OF DESIGN BATHROOMS

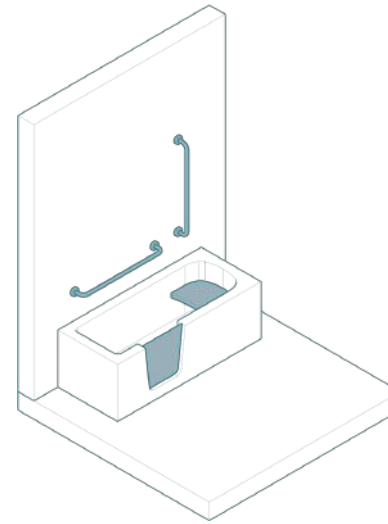
TOILET SEATS



SHOWERS

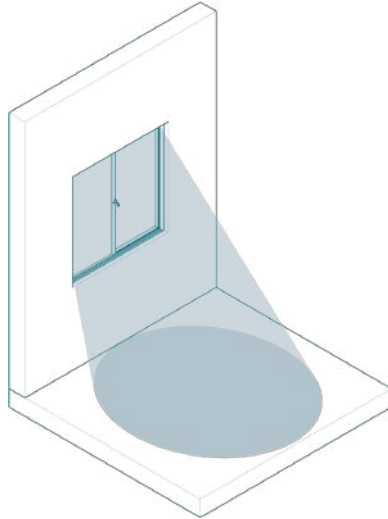


BATHTUBS

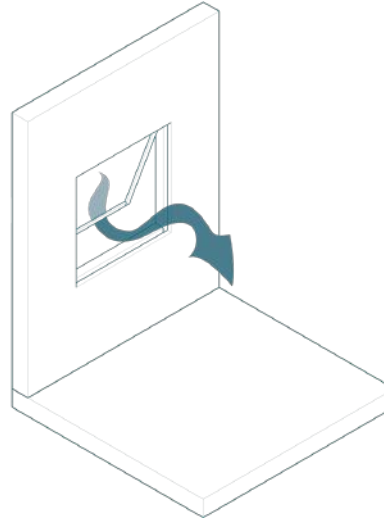


ELEMENTS OF DESIGN WINDOWS

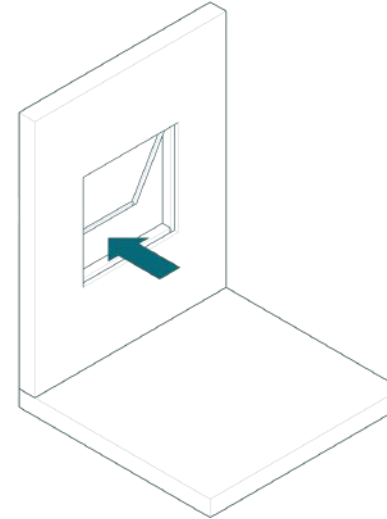
NATURAL SUNLIGHT



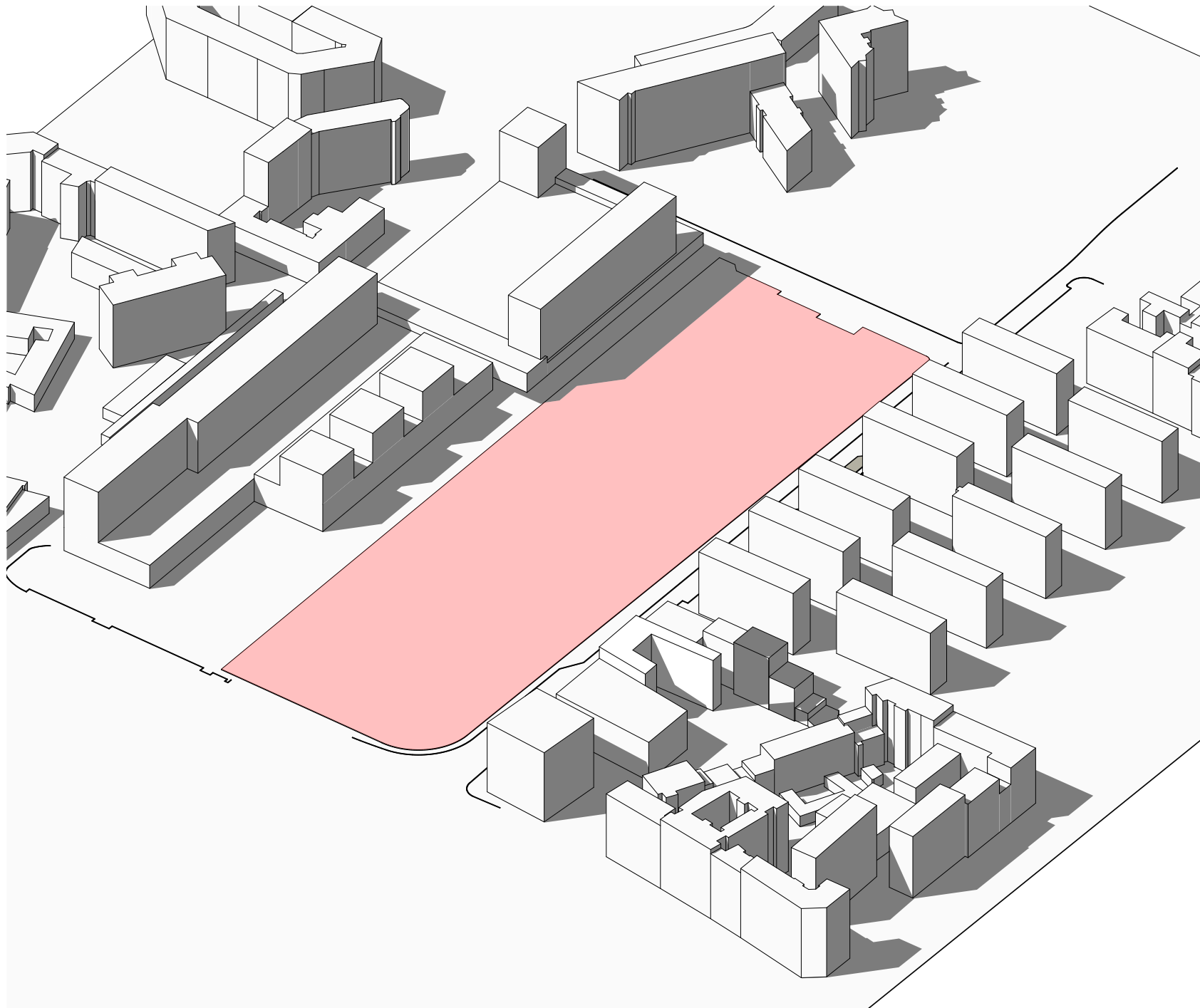
NATURAL VENTILATION

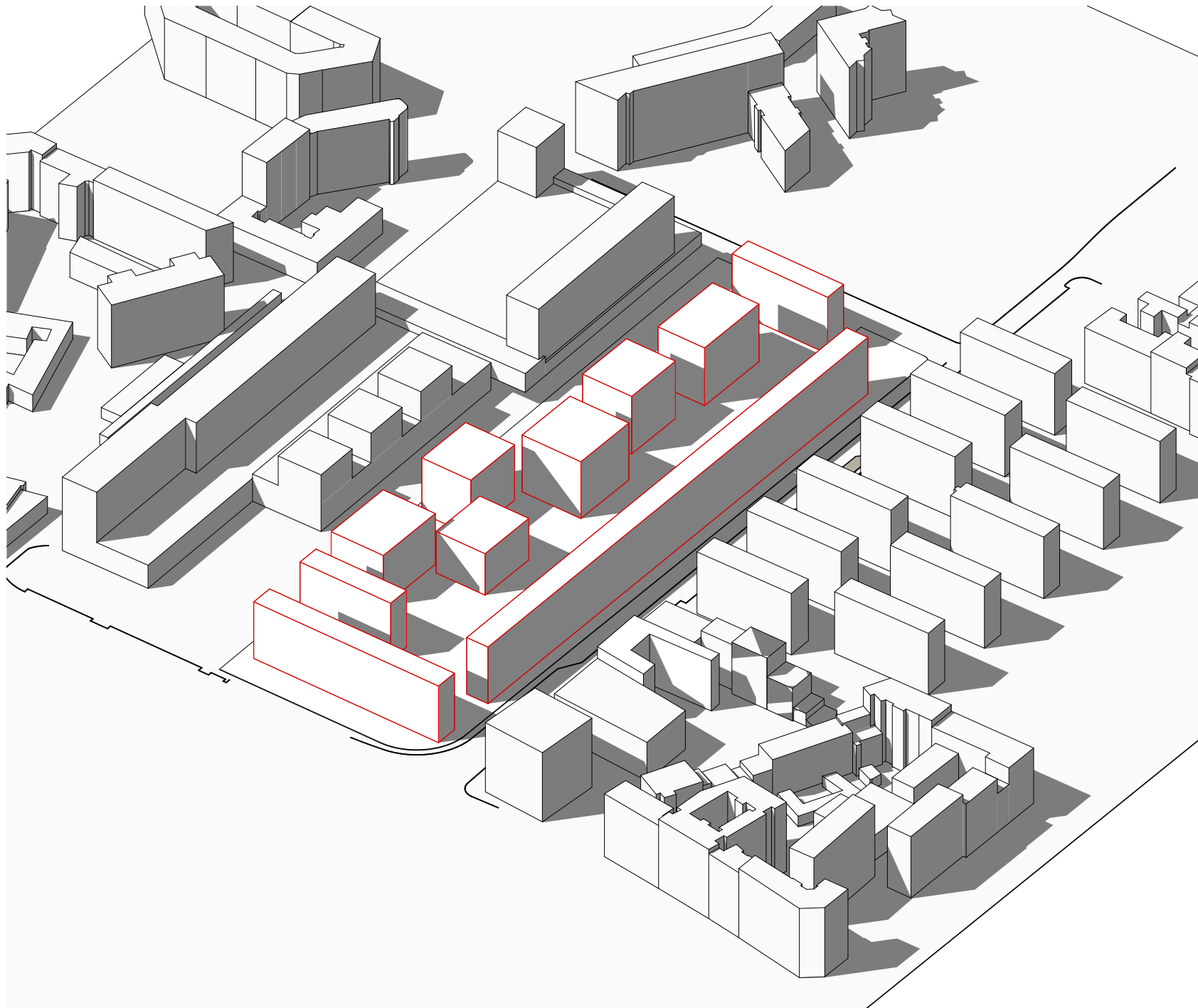


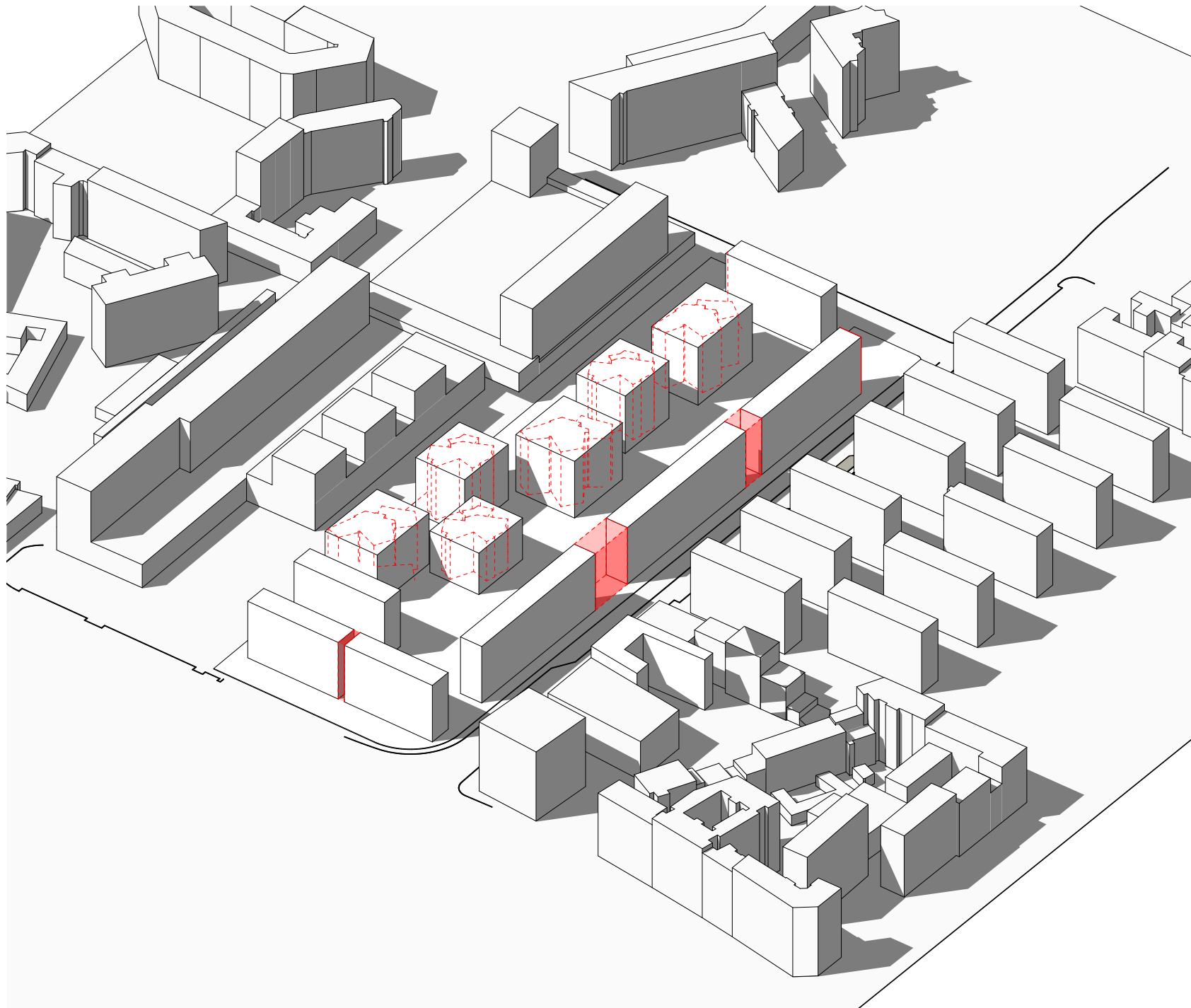
WINDOW TYPE

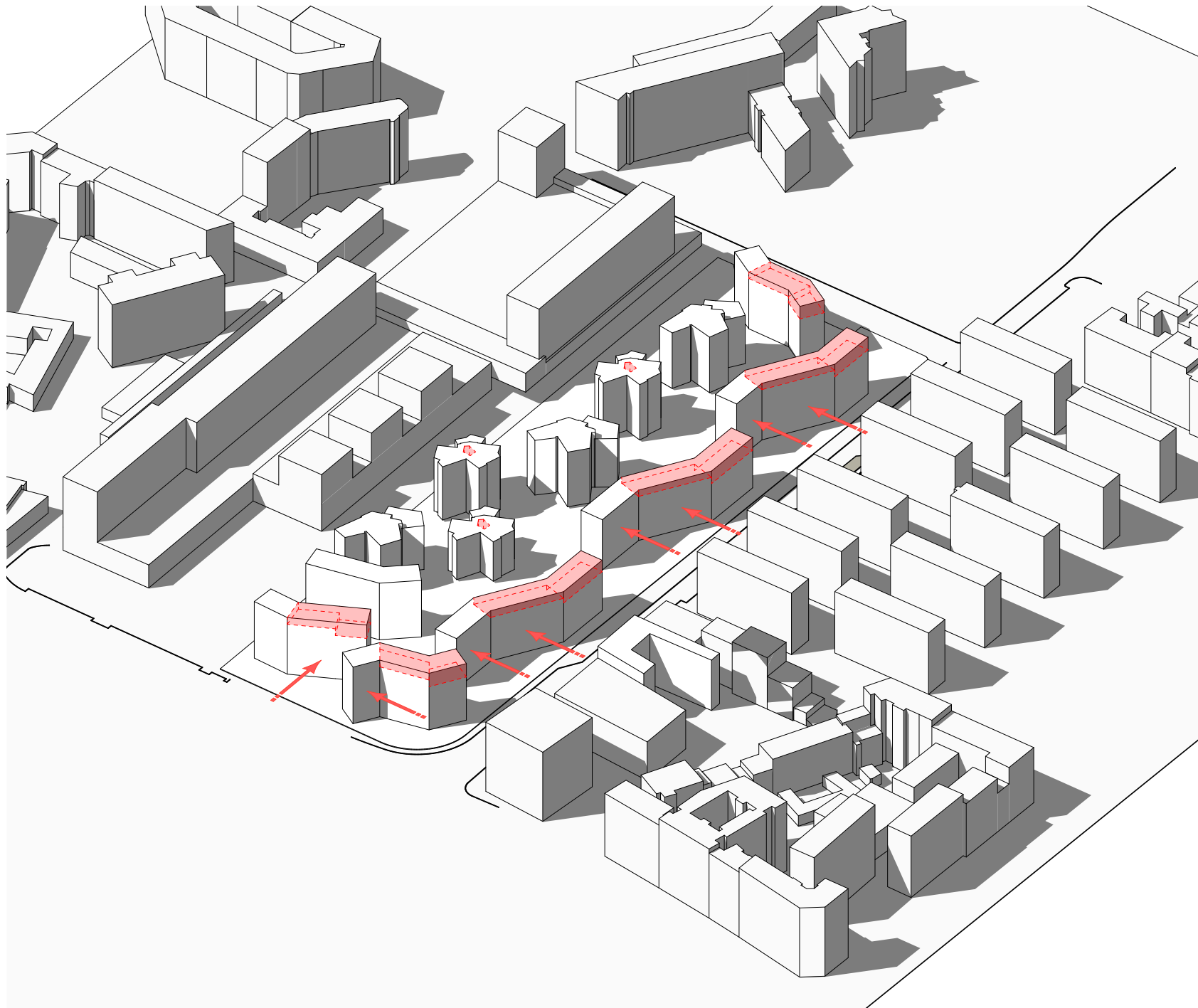


Aging in one place: age-friendly housing in Milan



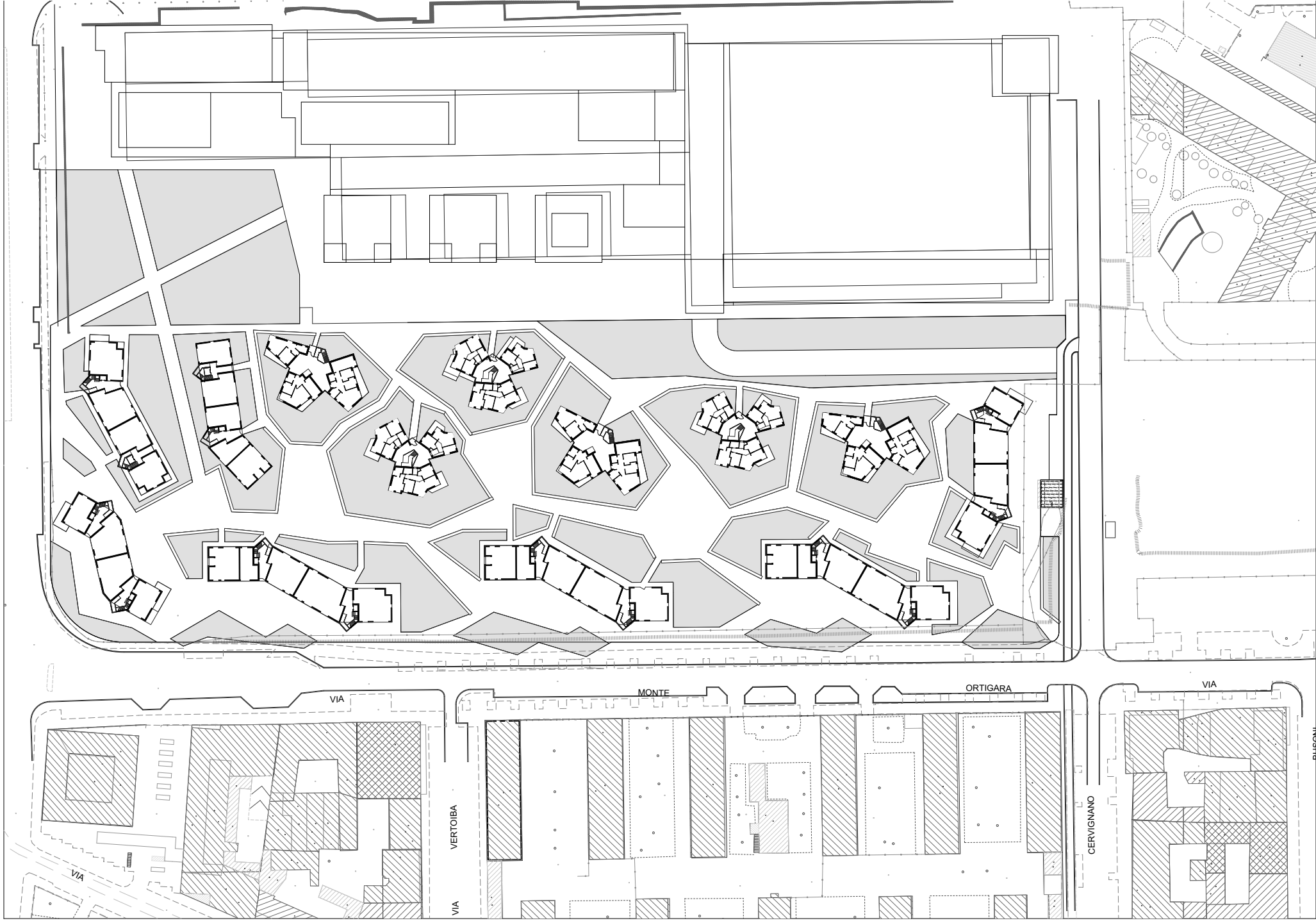


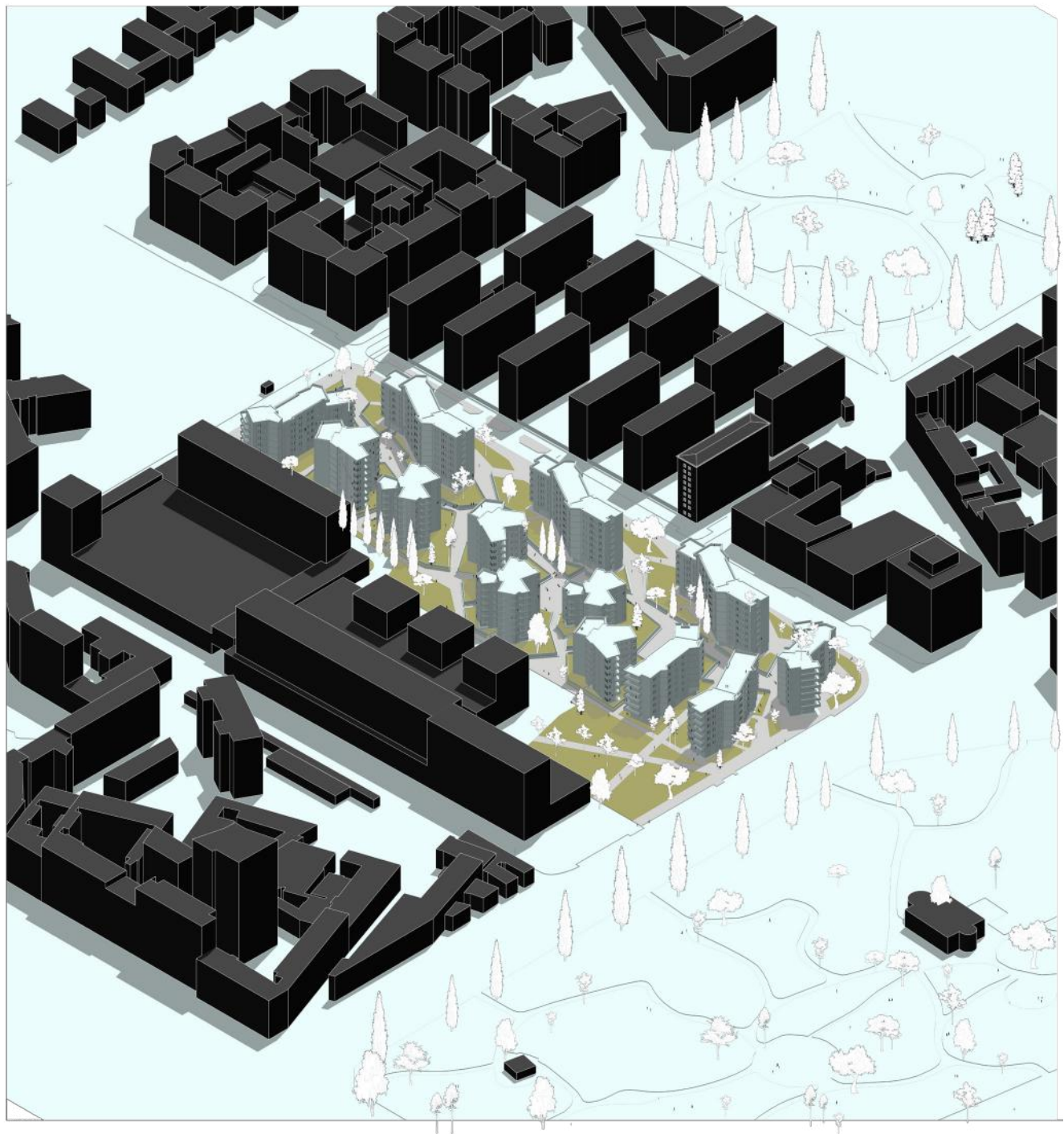


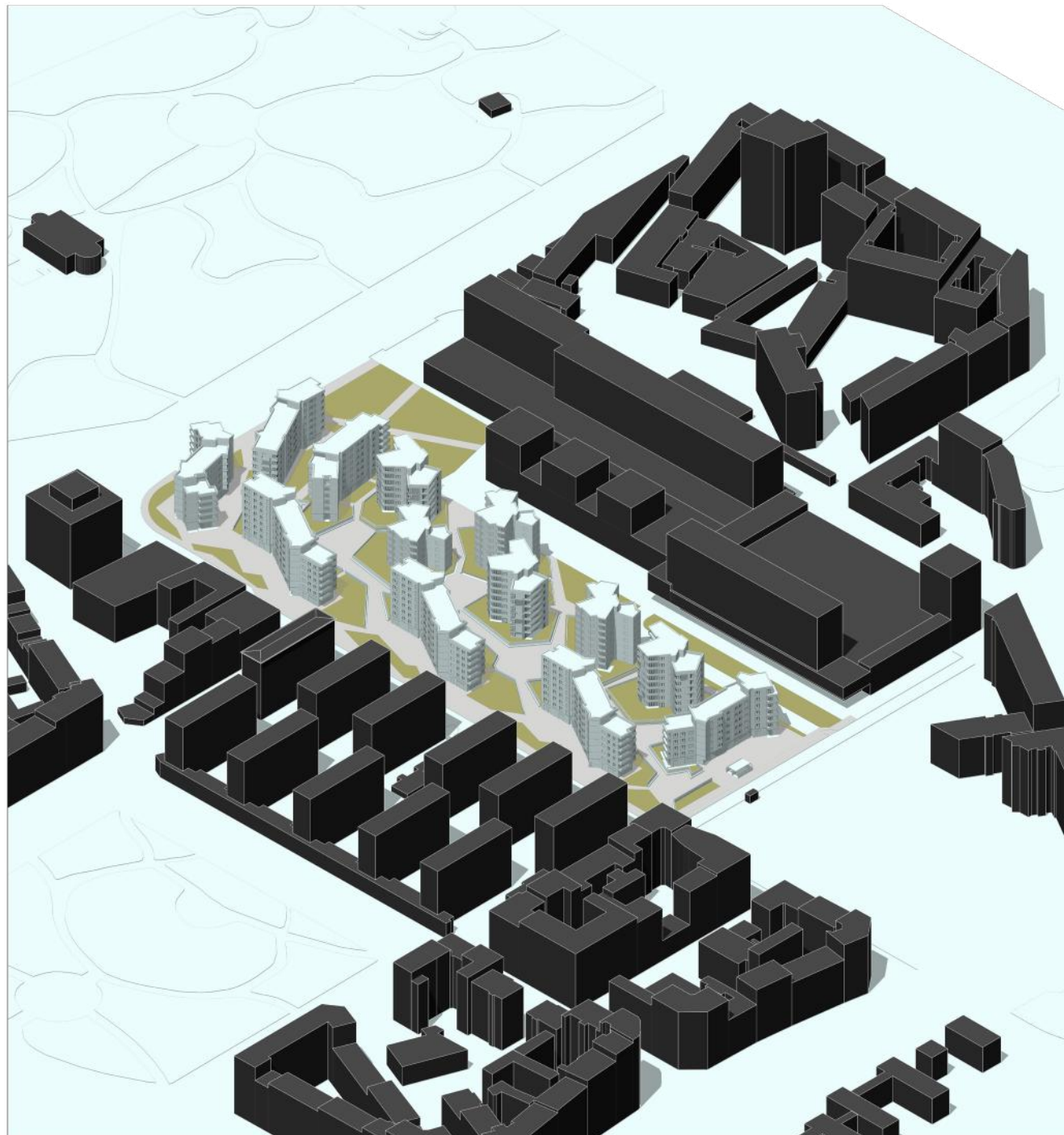


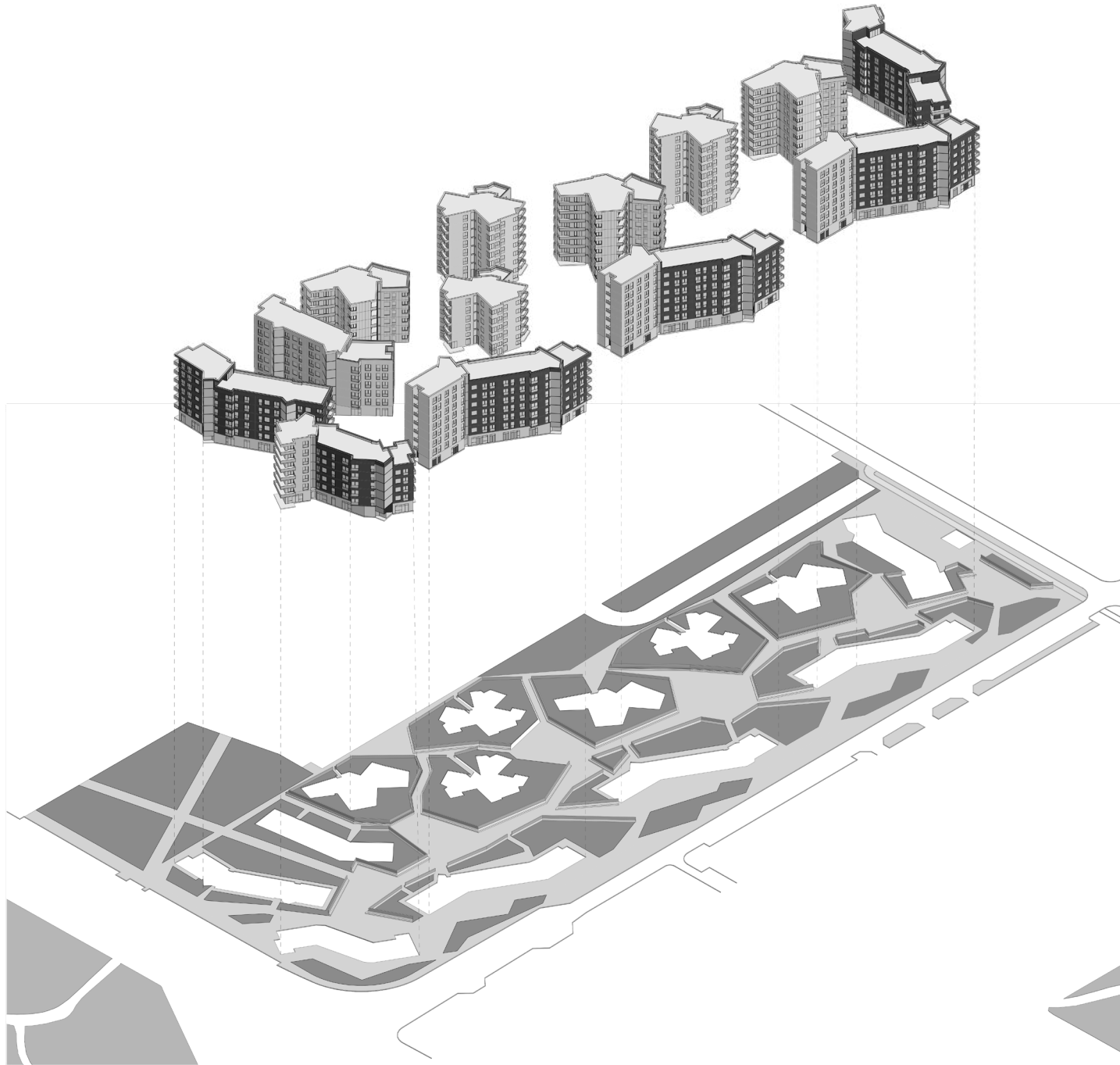
















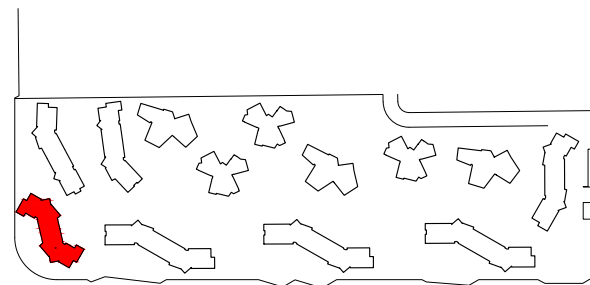
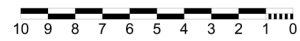
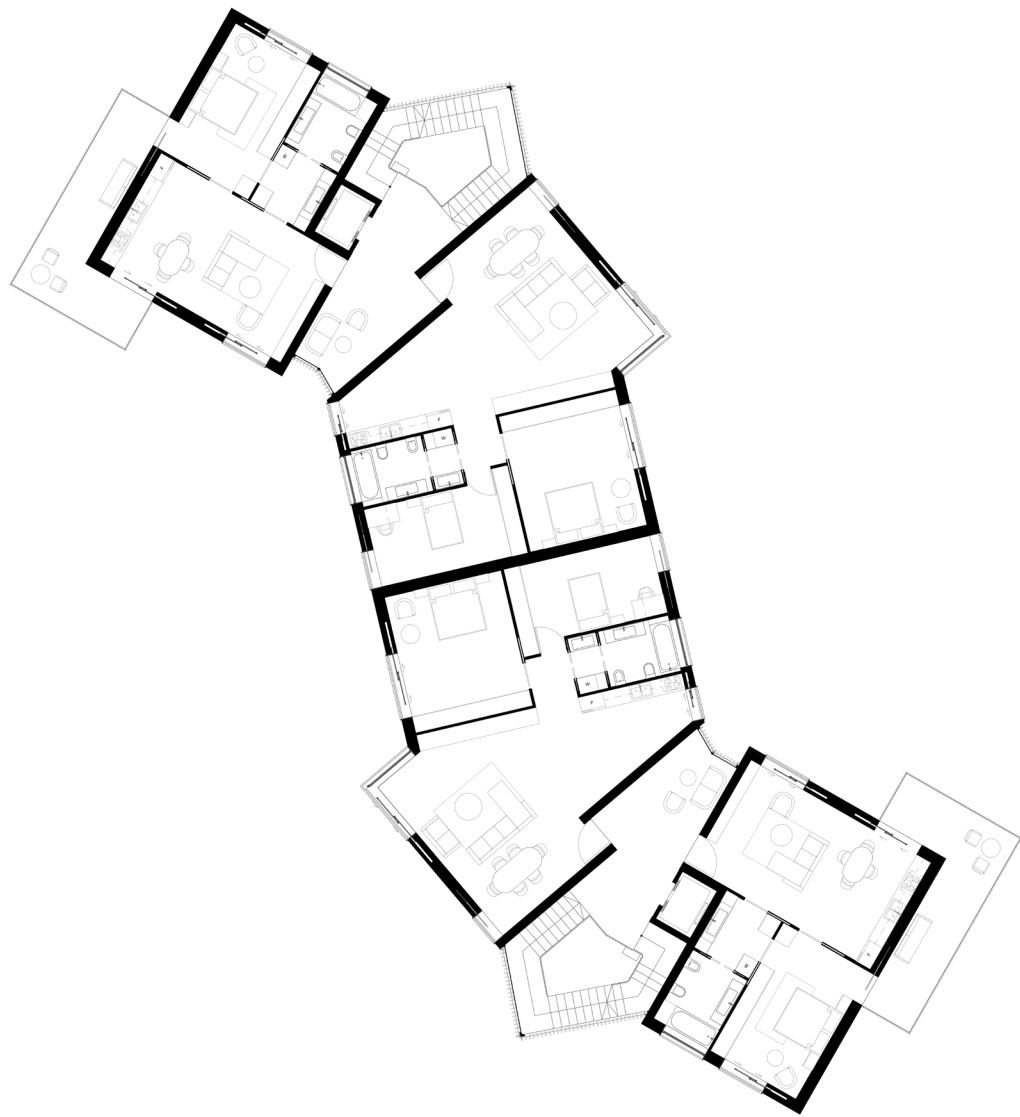


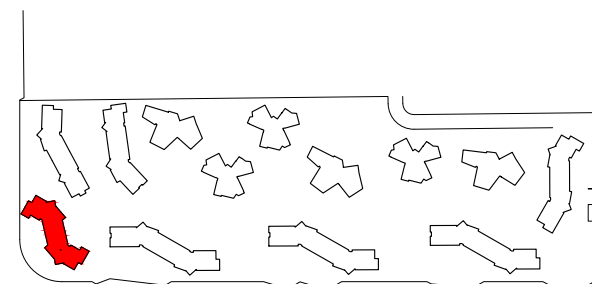


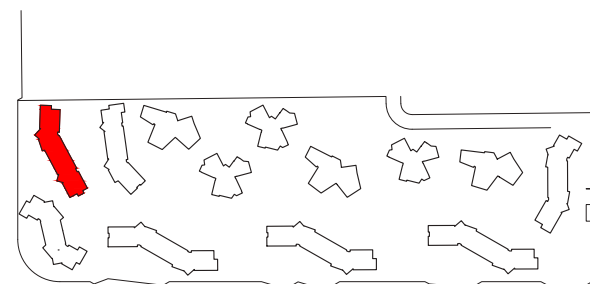
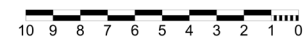
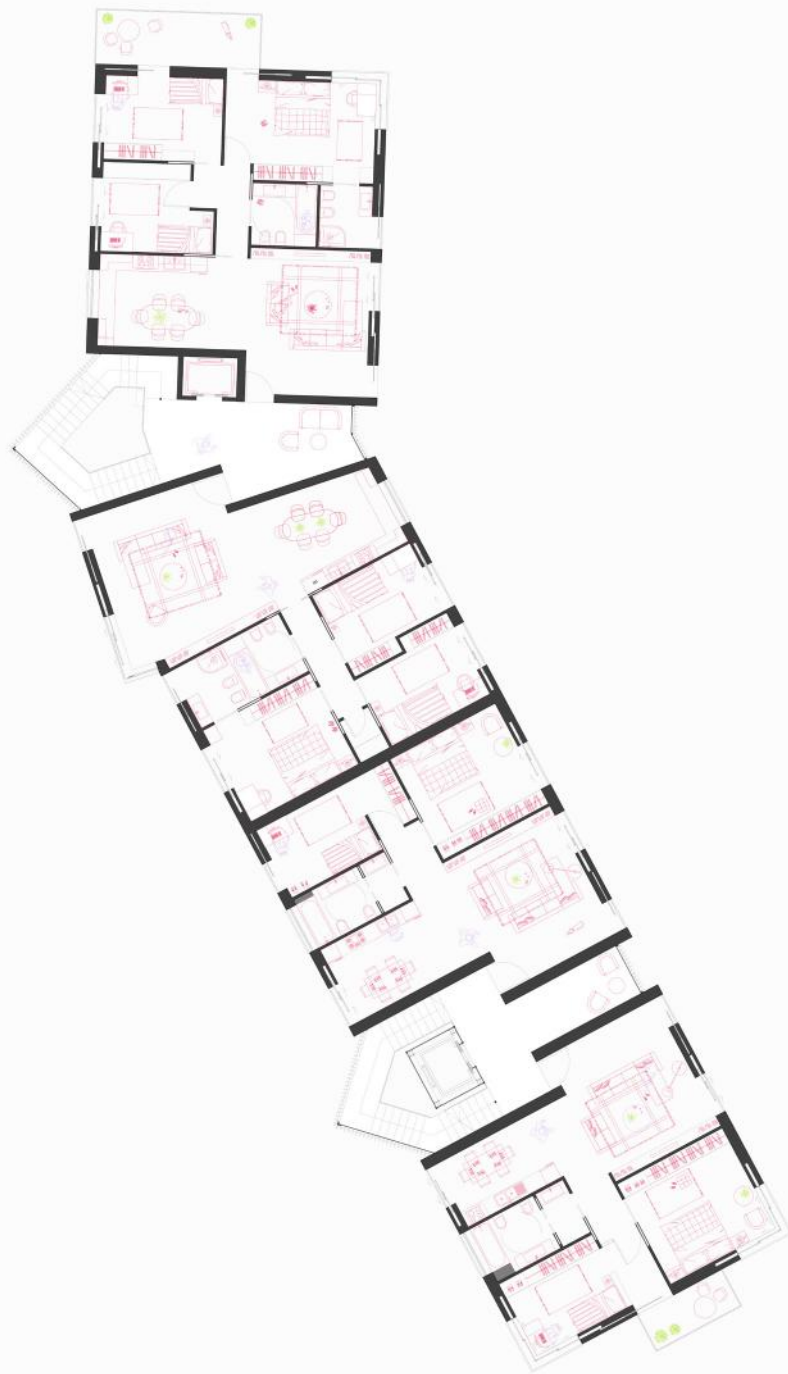


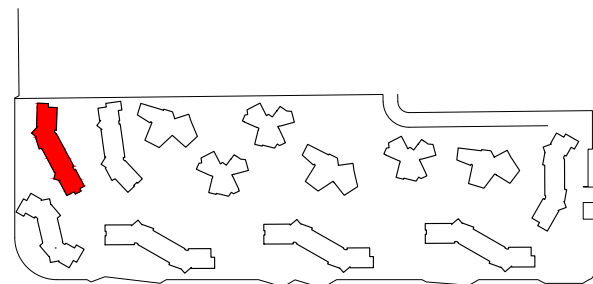


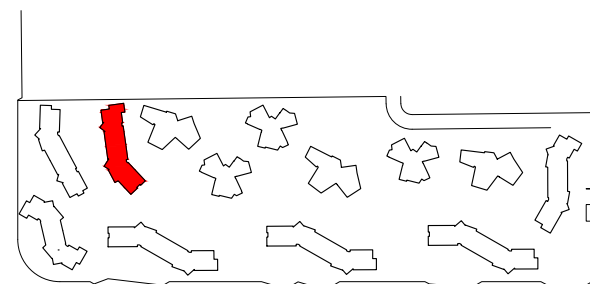
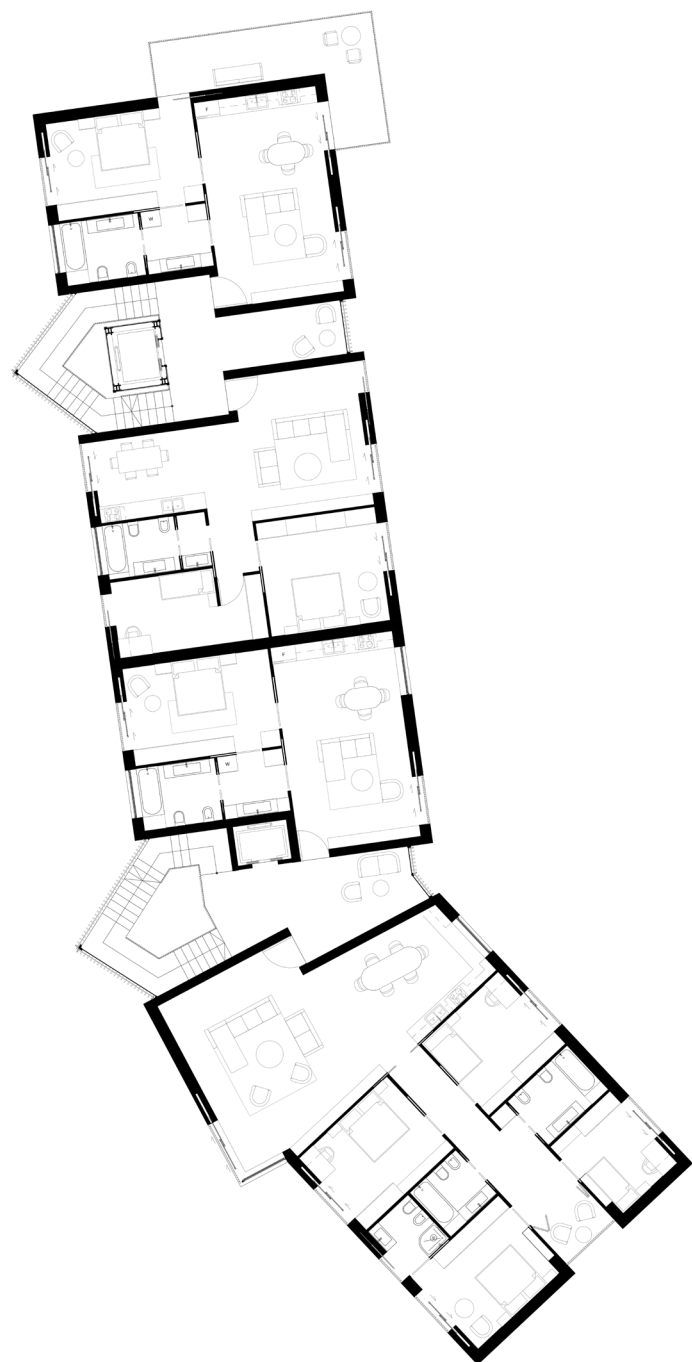


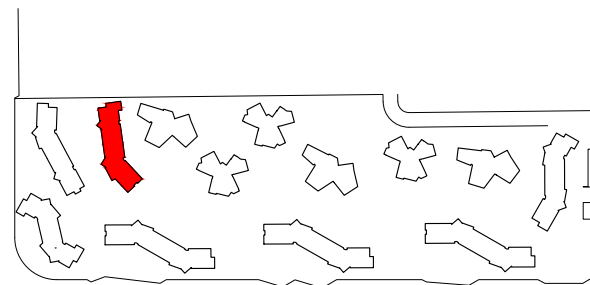


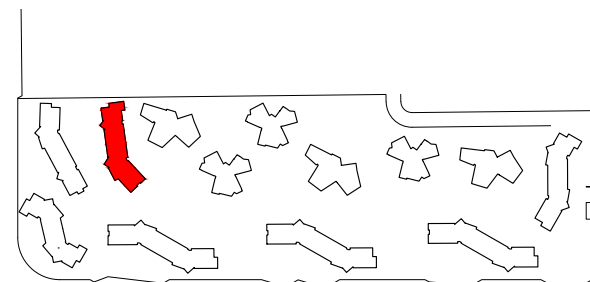
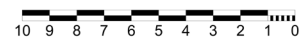
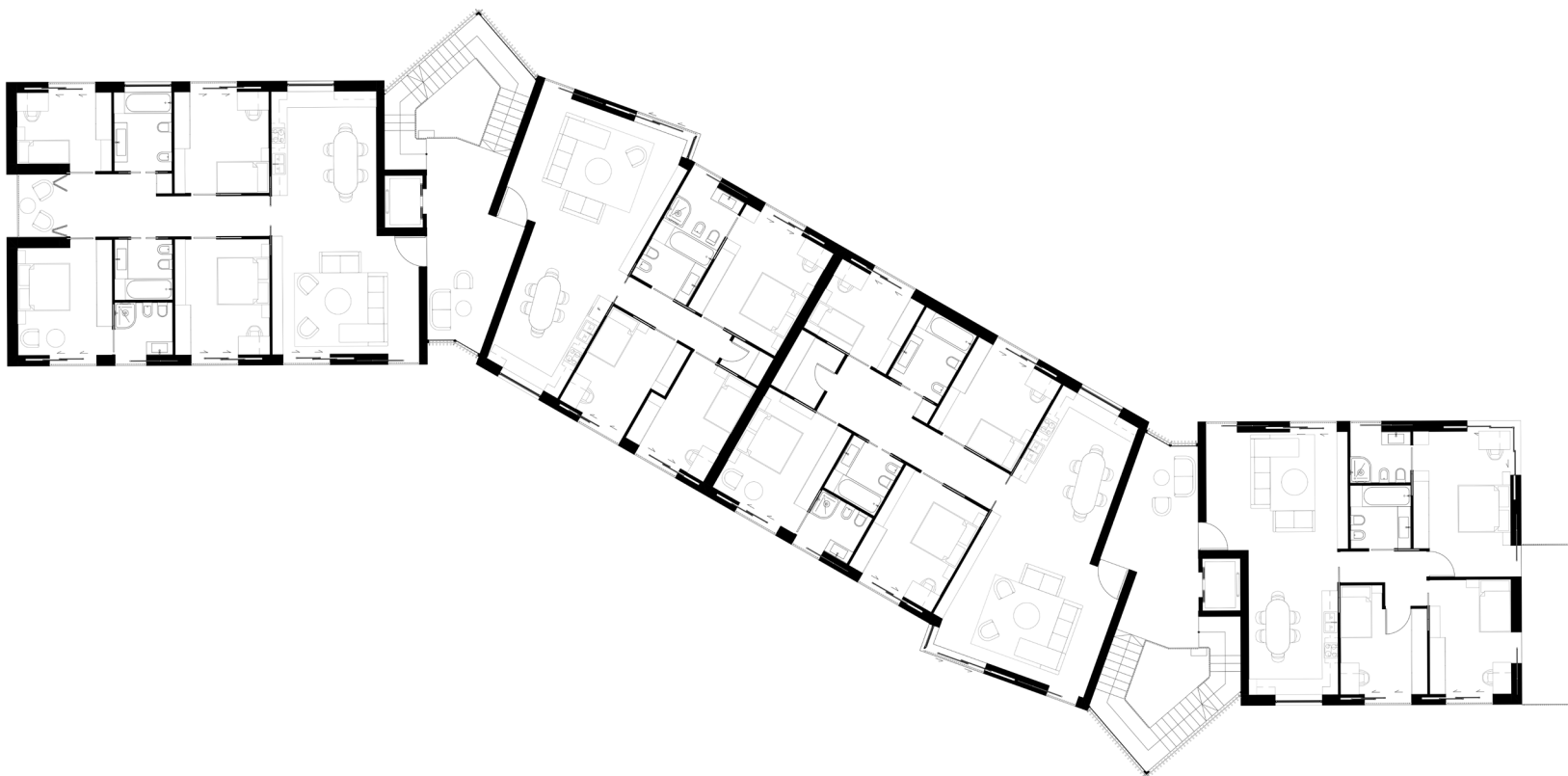


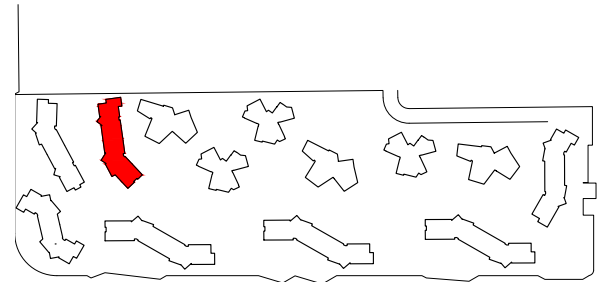


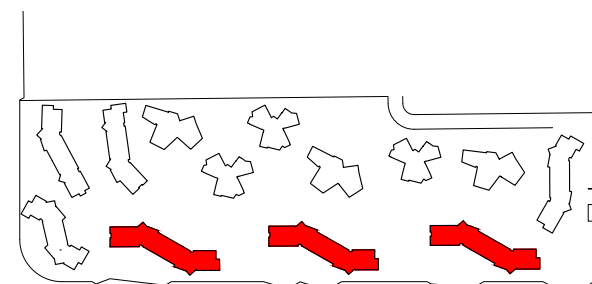
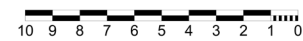
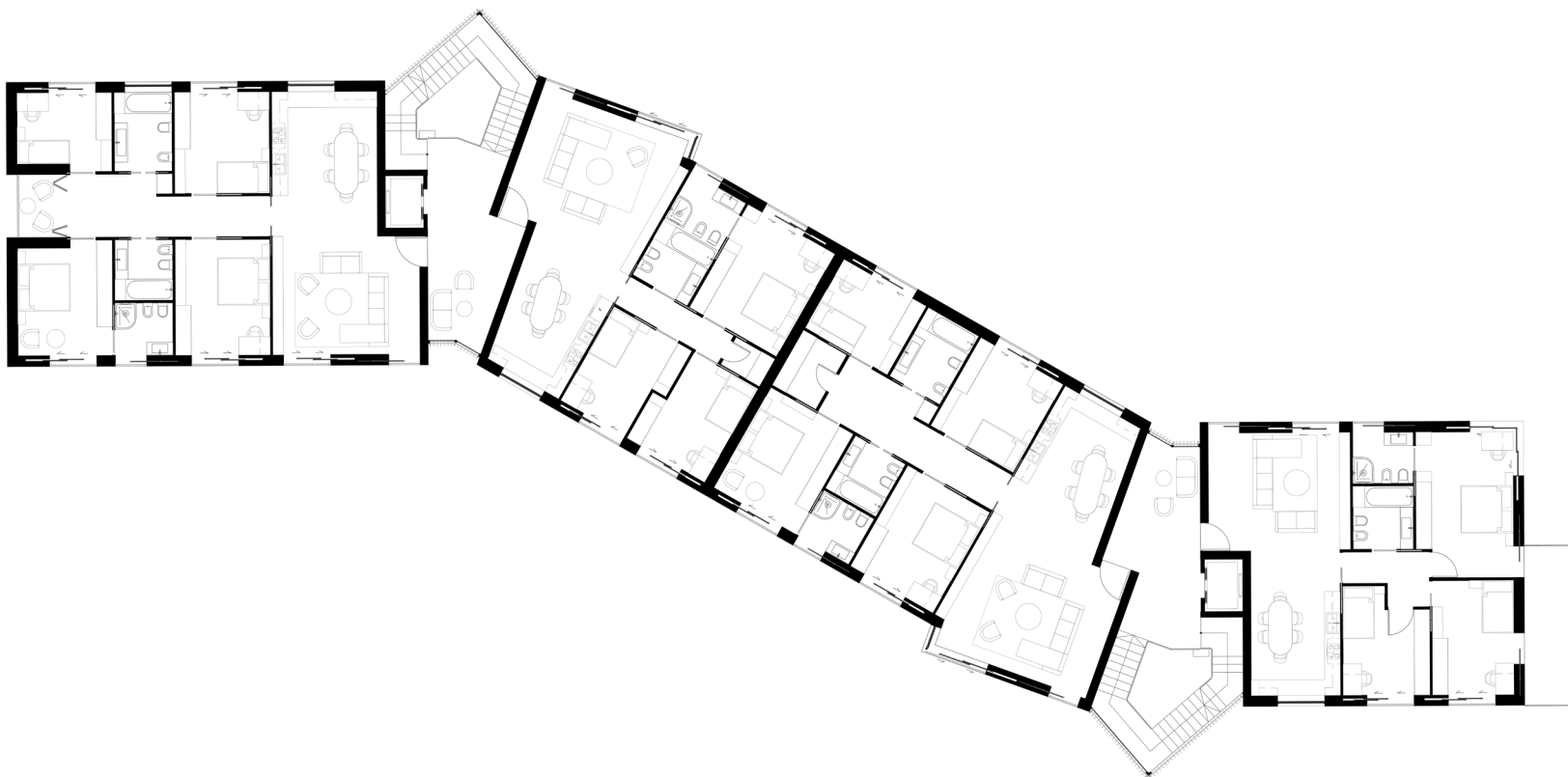


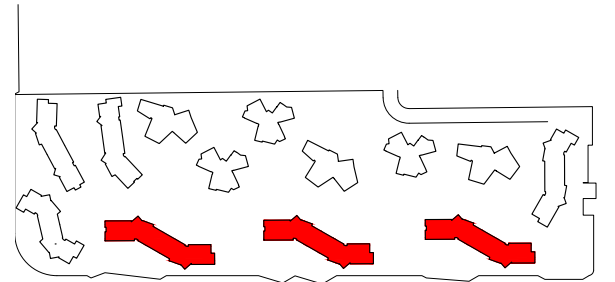




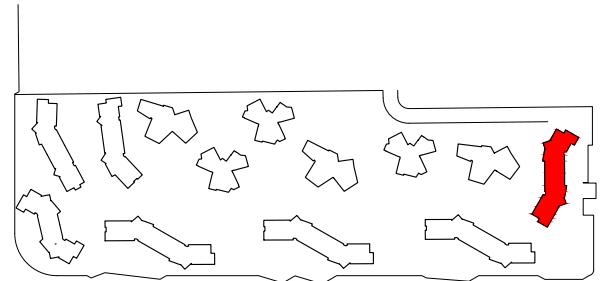
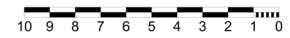


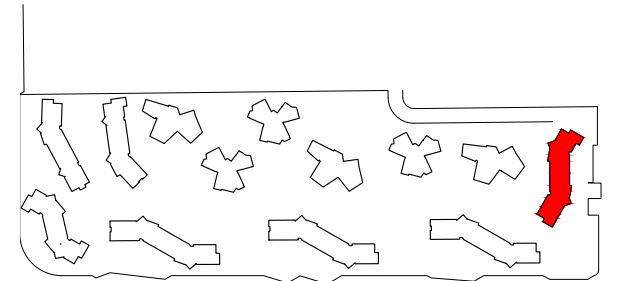


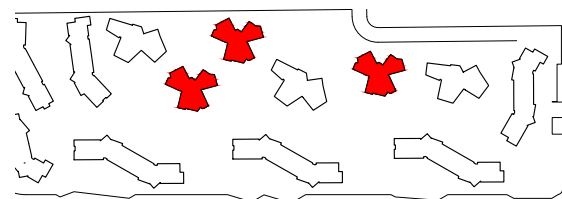
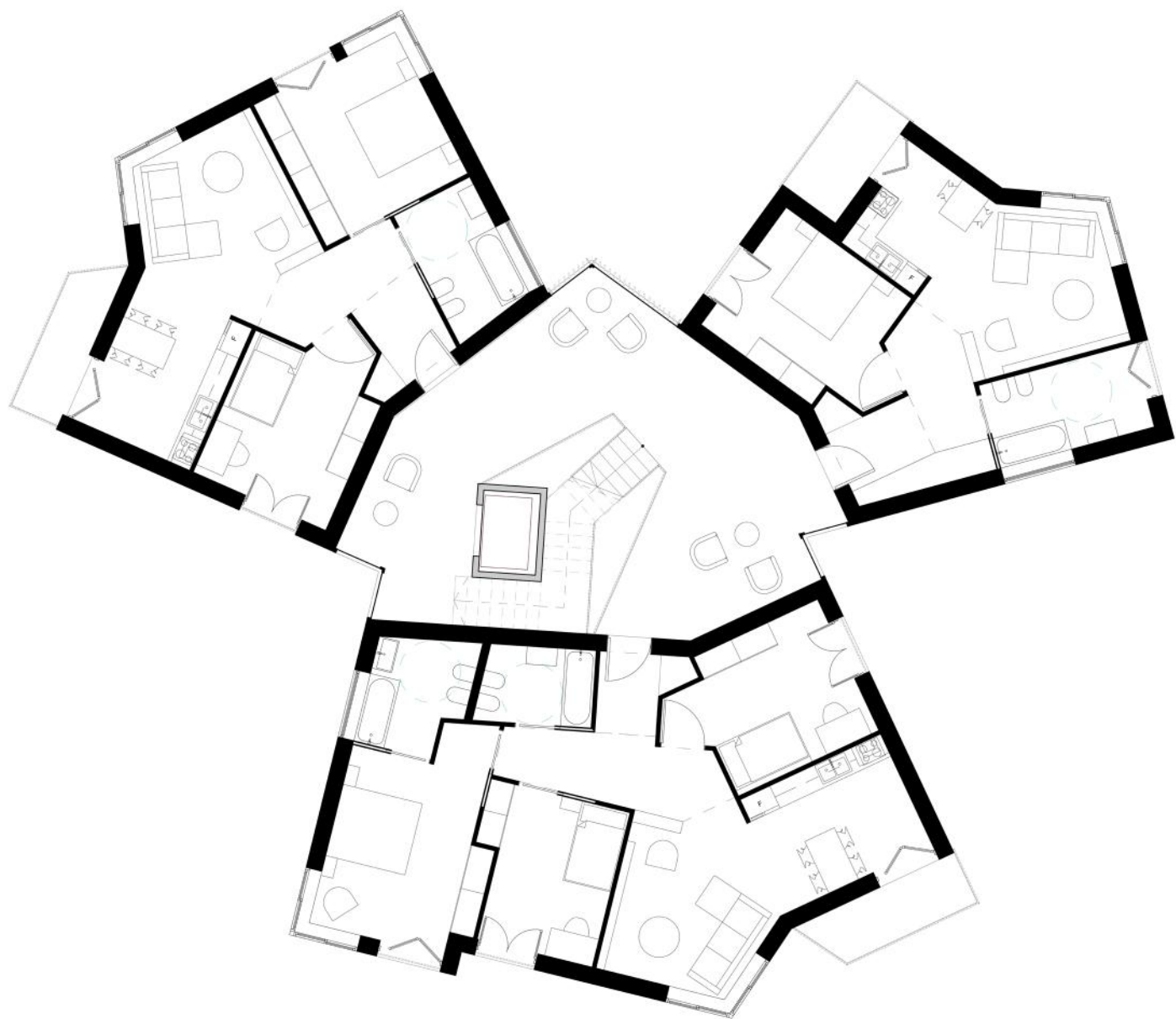


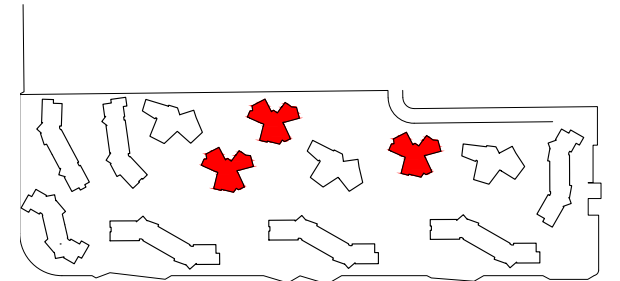
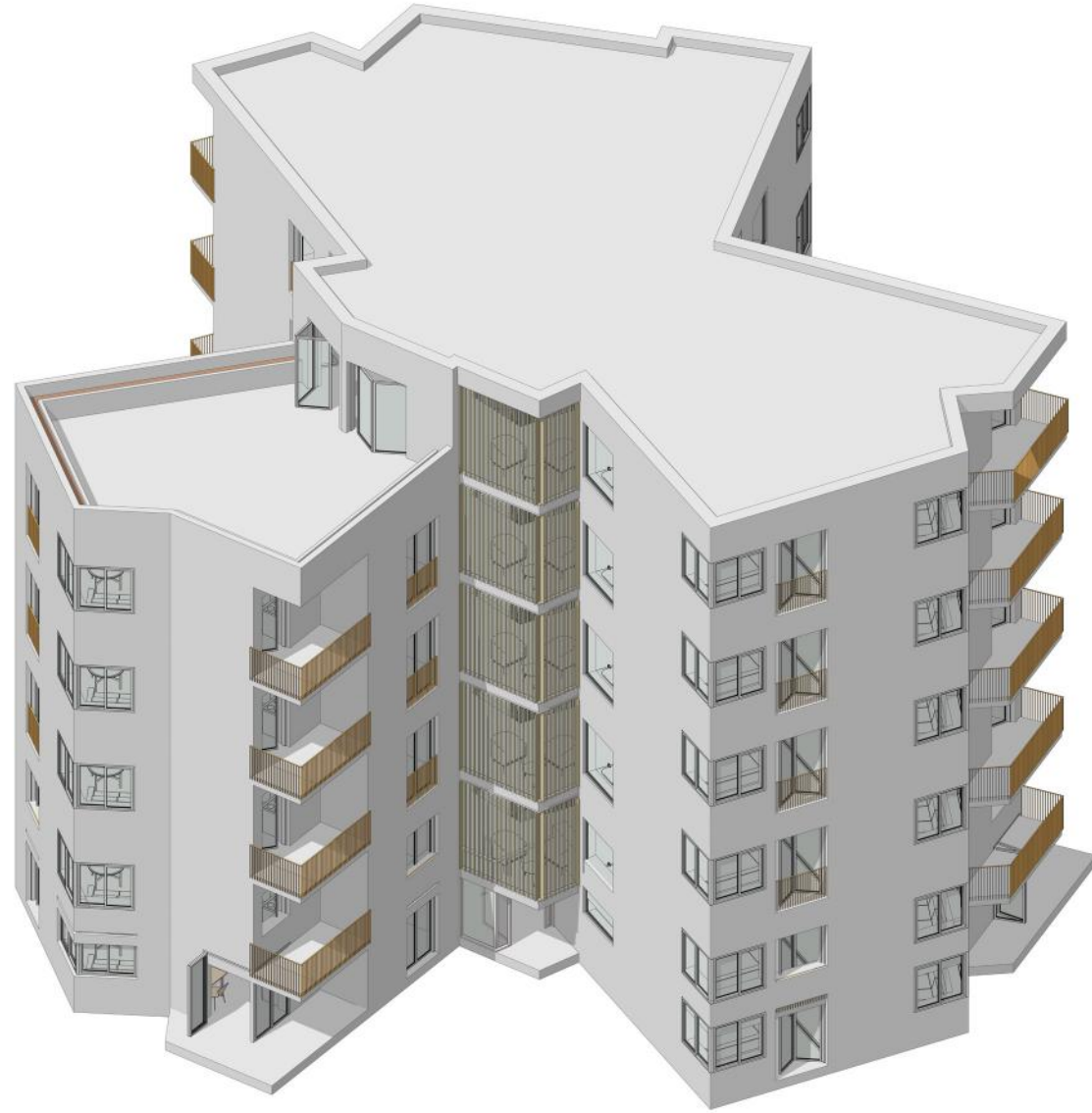


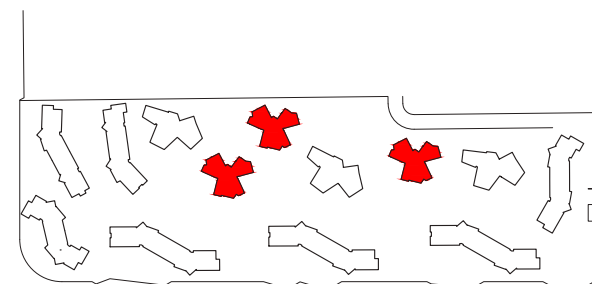
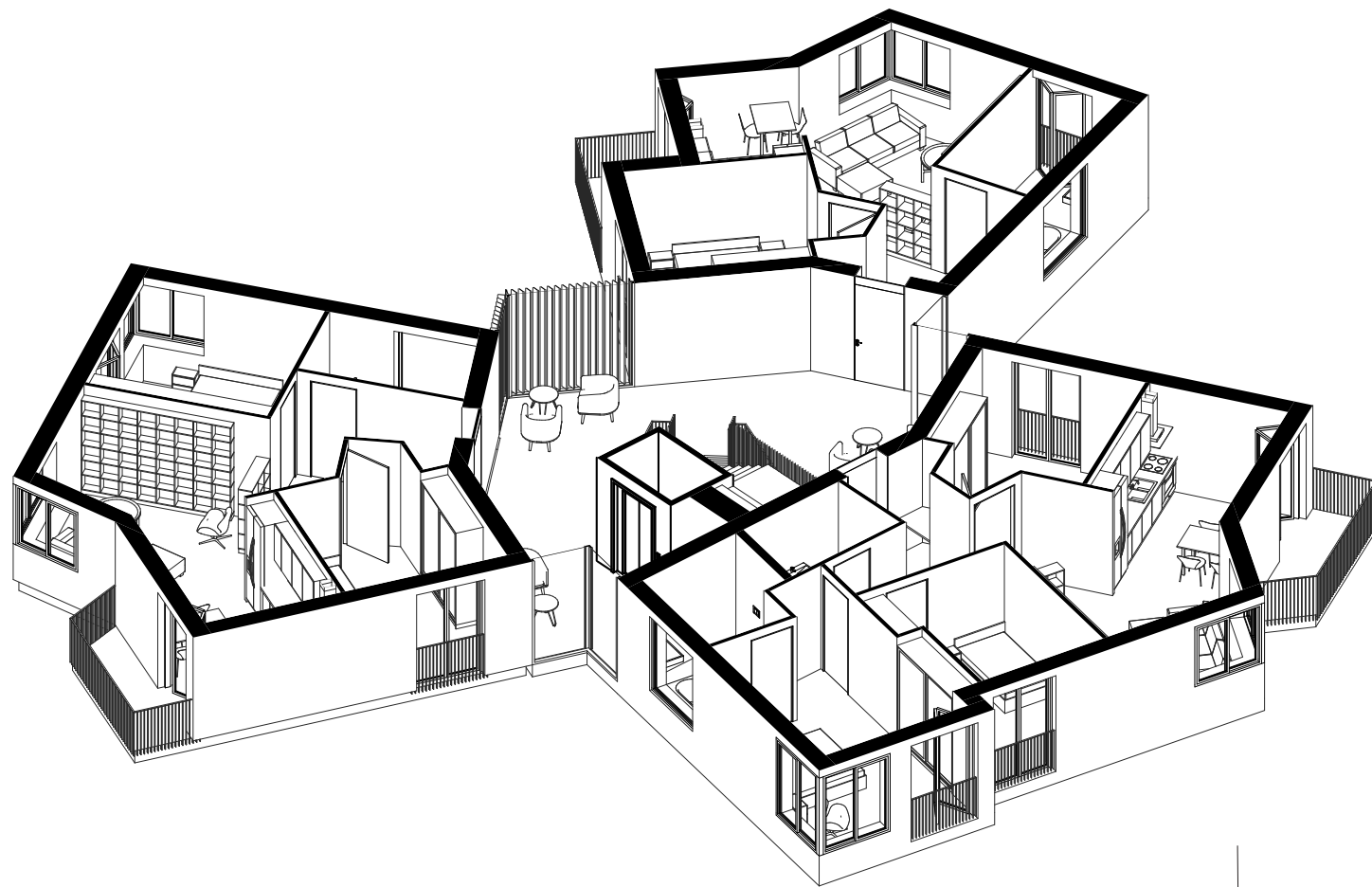


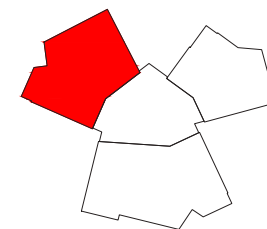
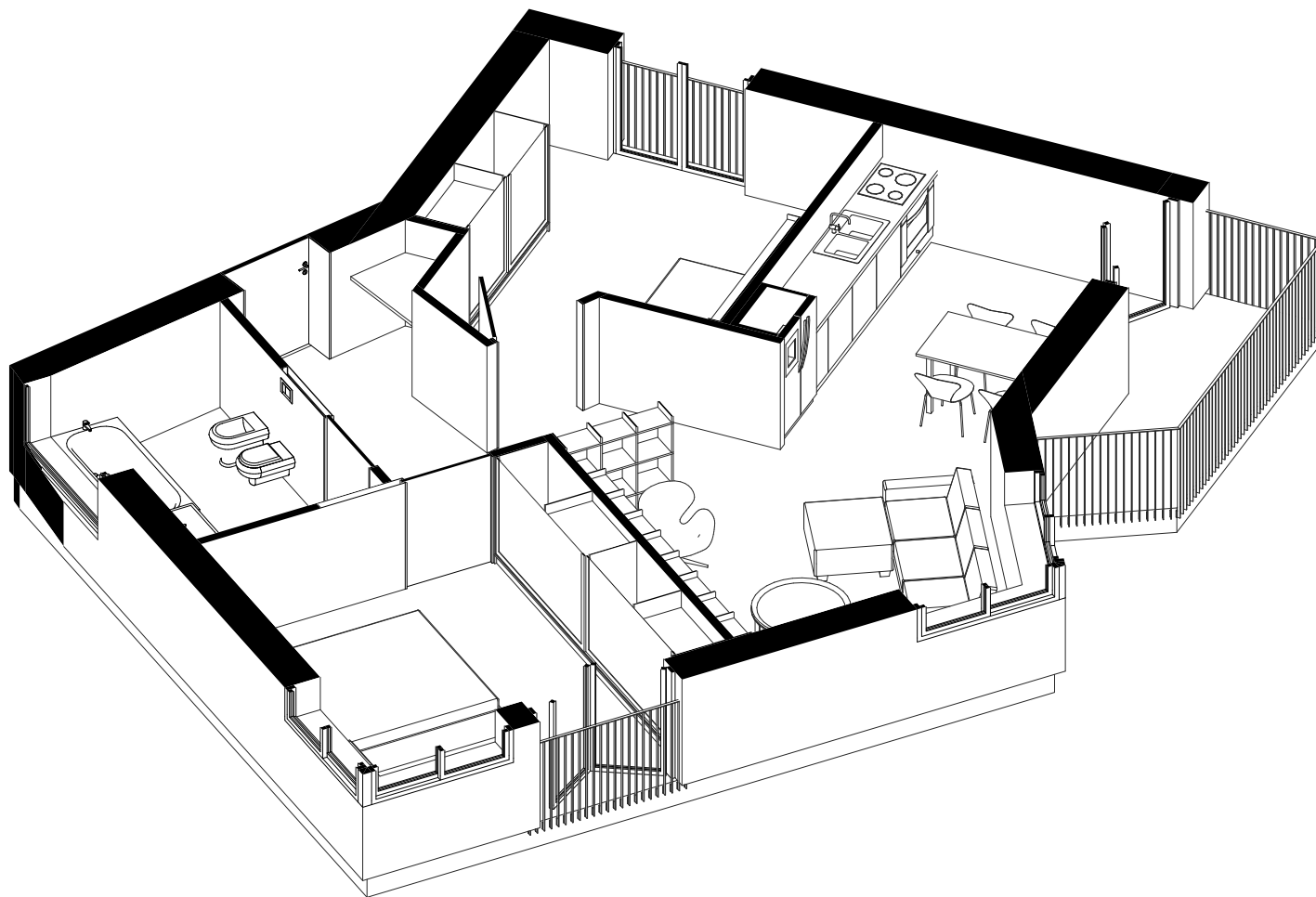


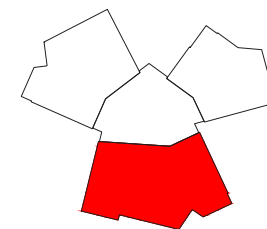
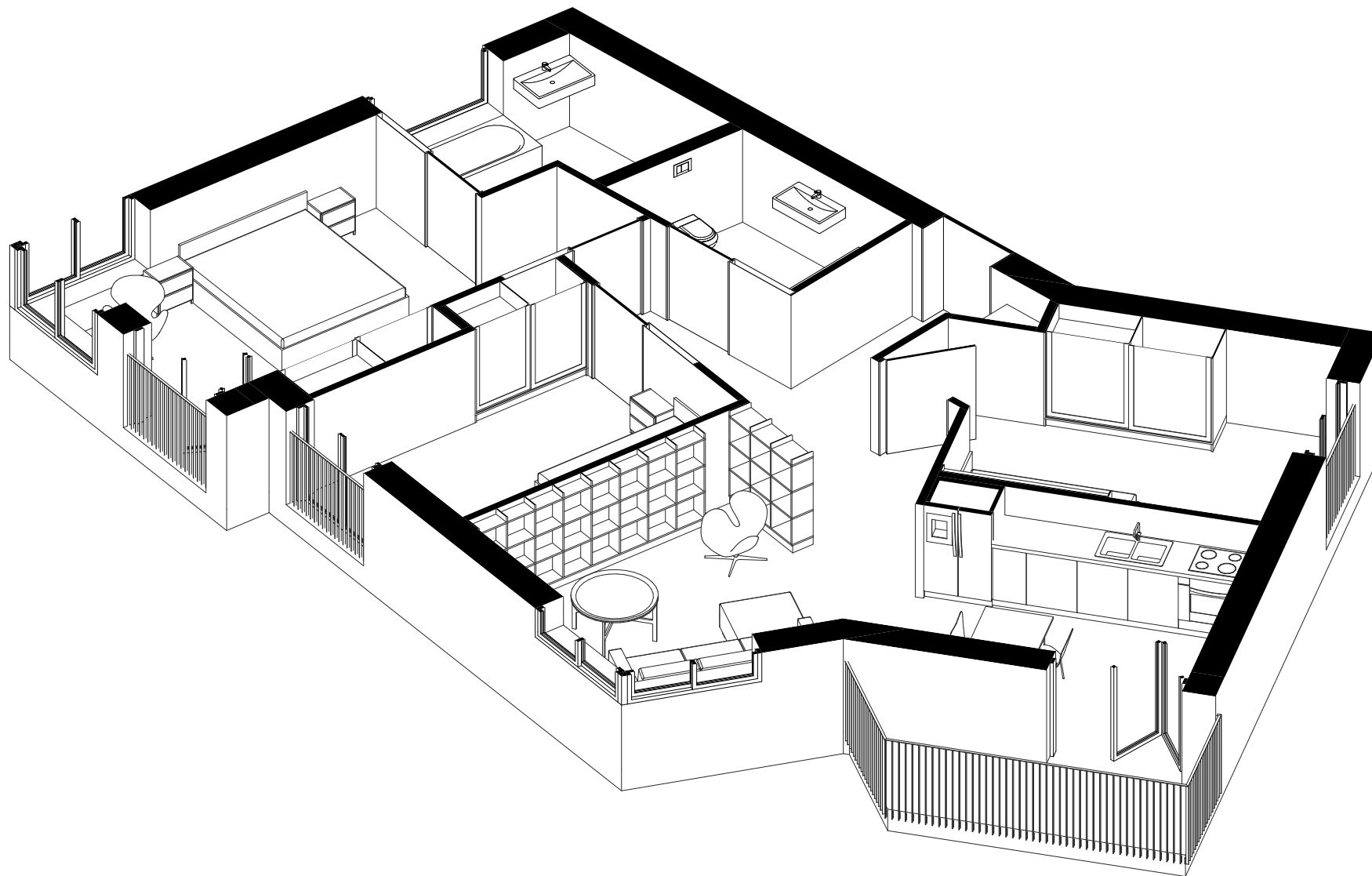


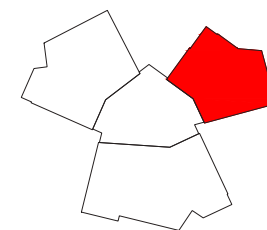
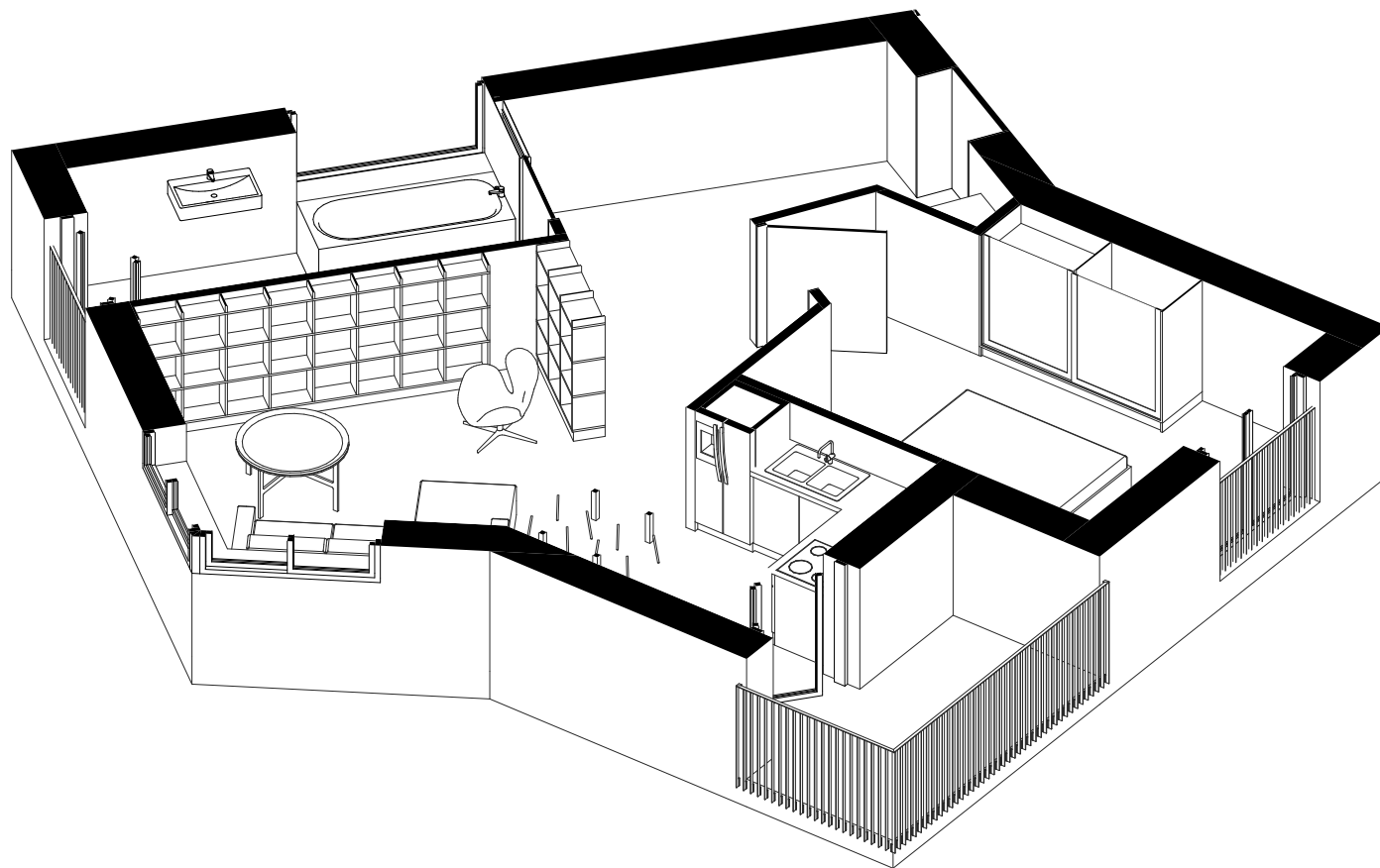


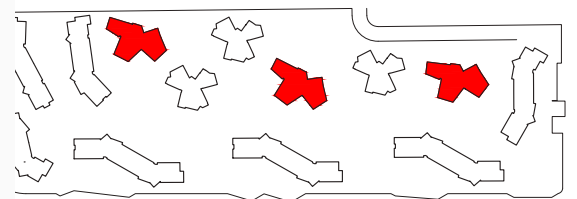
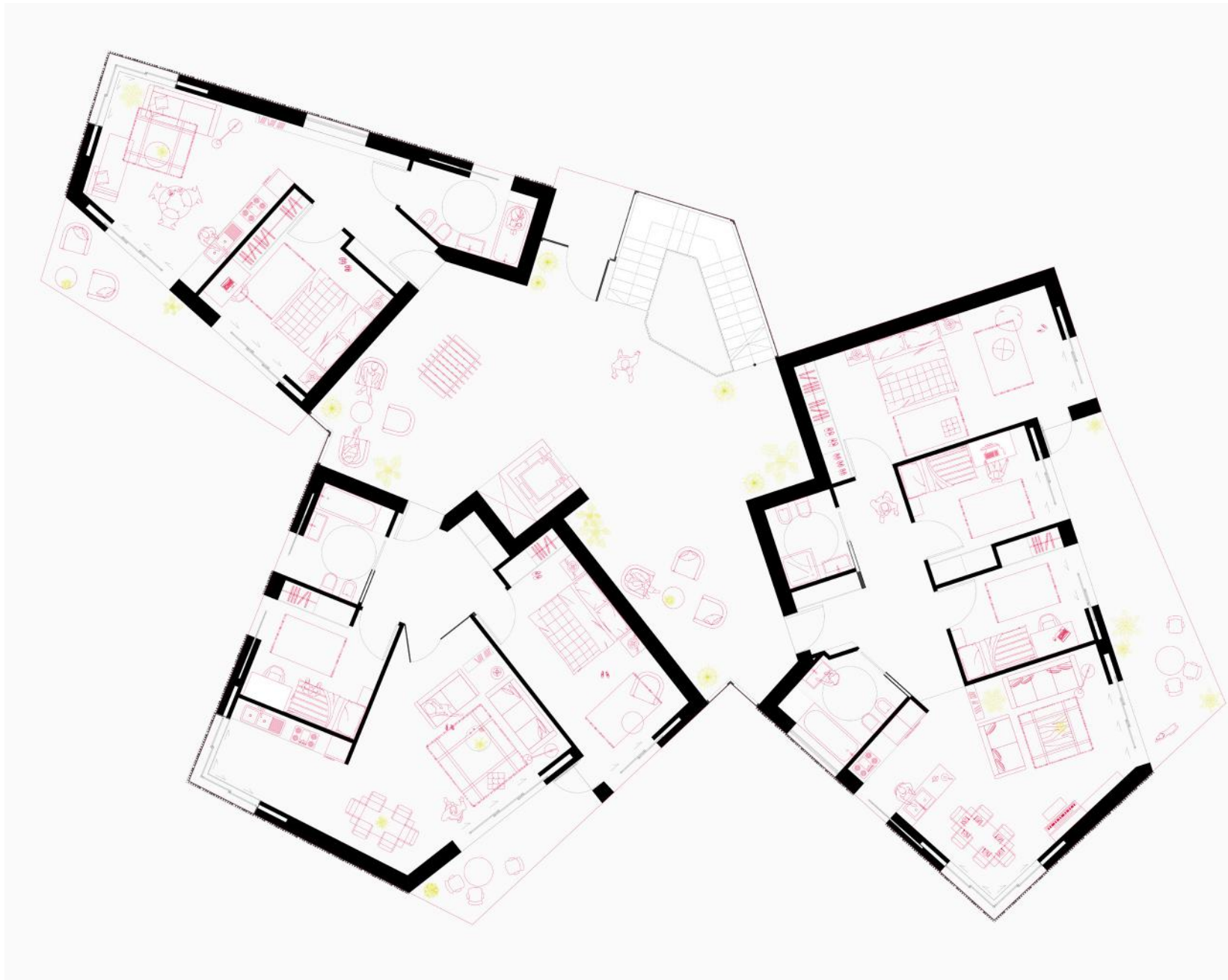


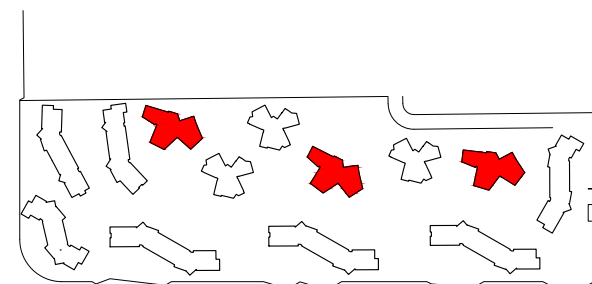




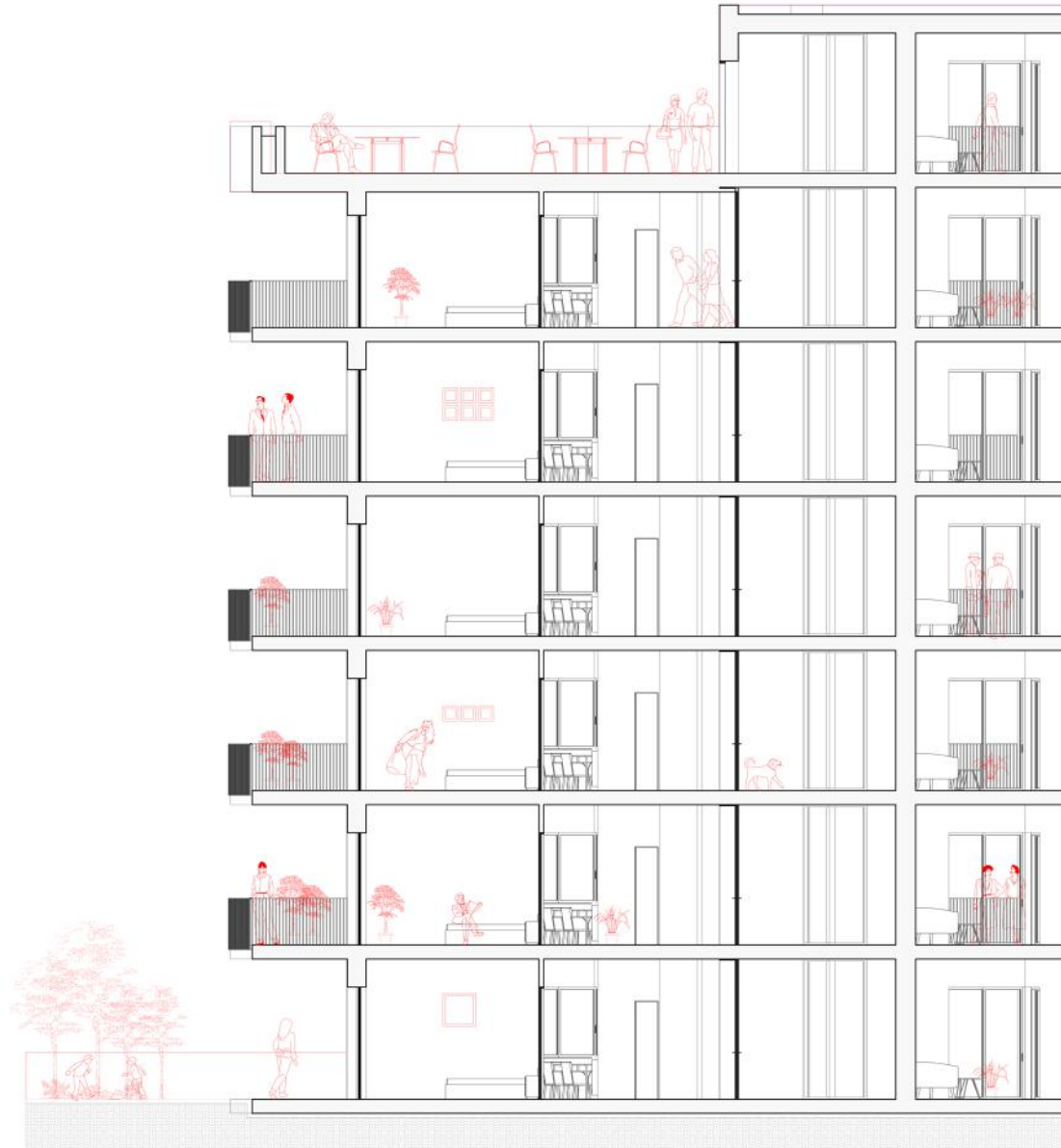


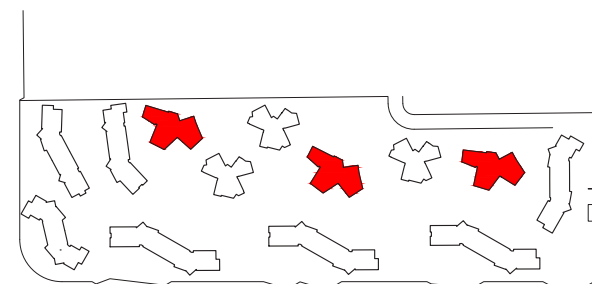
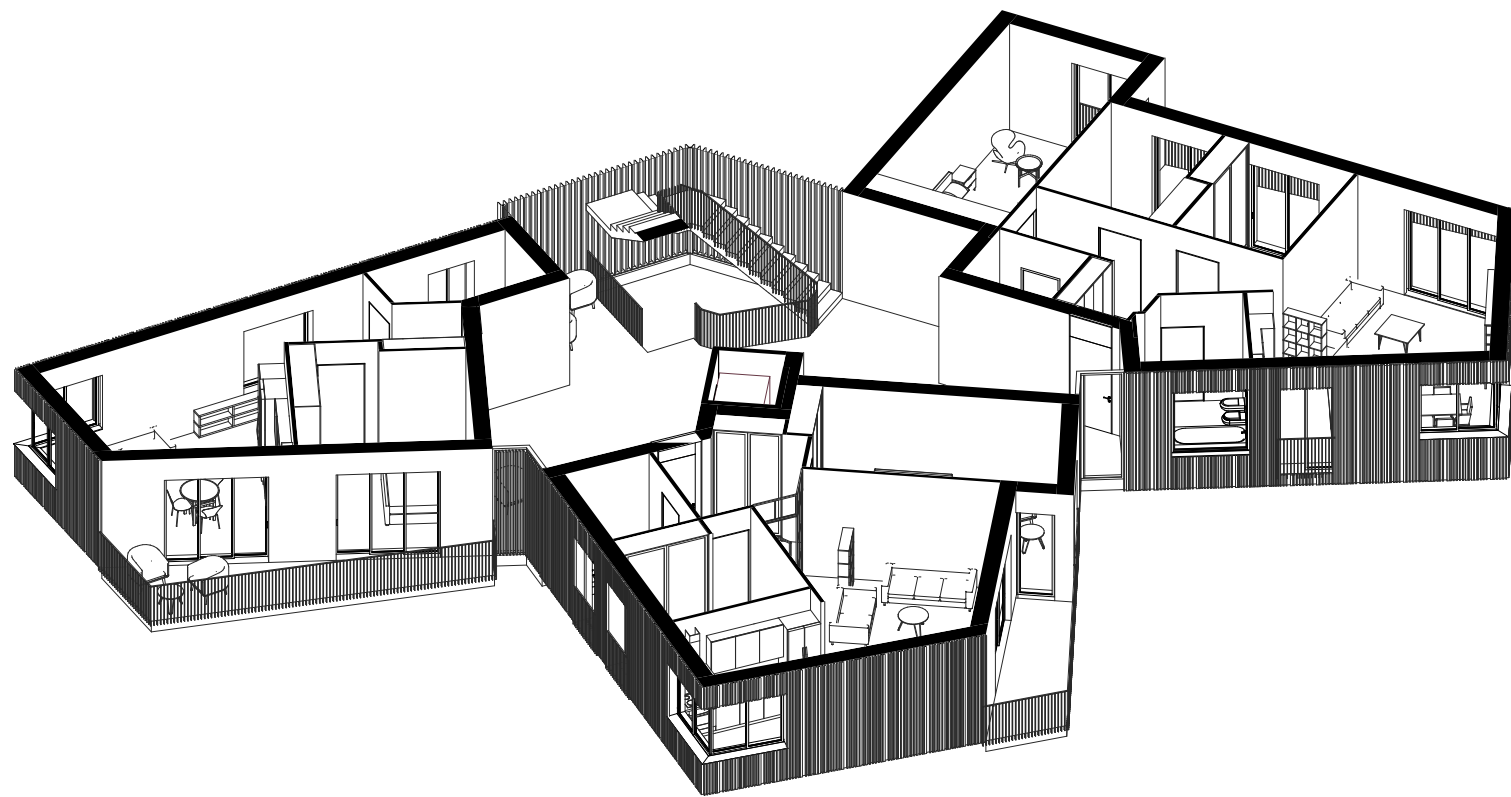


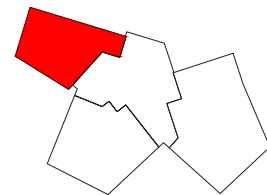
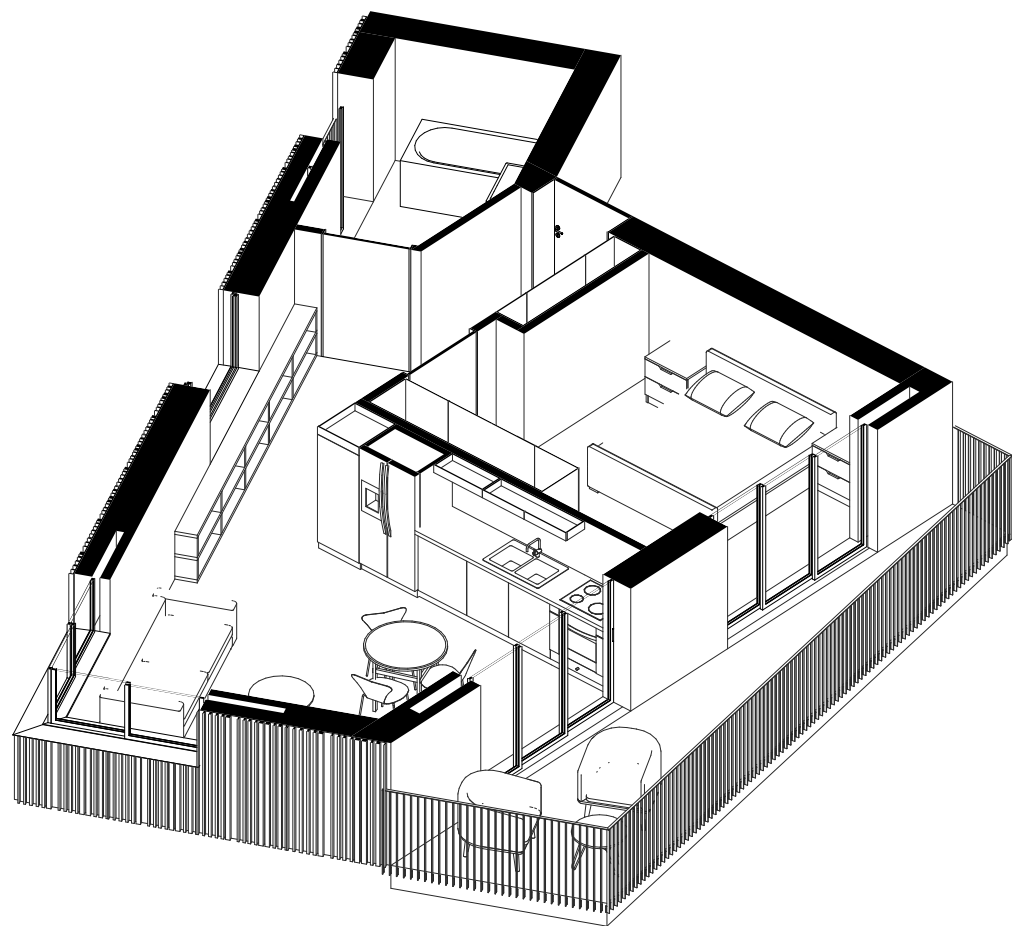


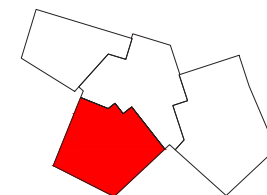
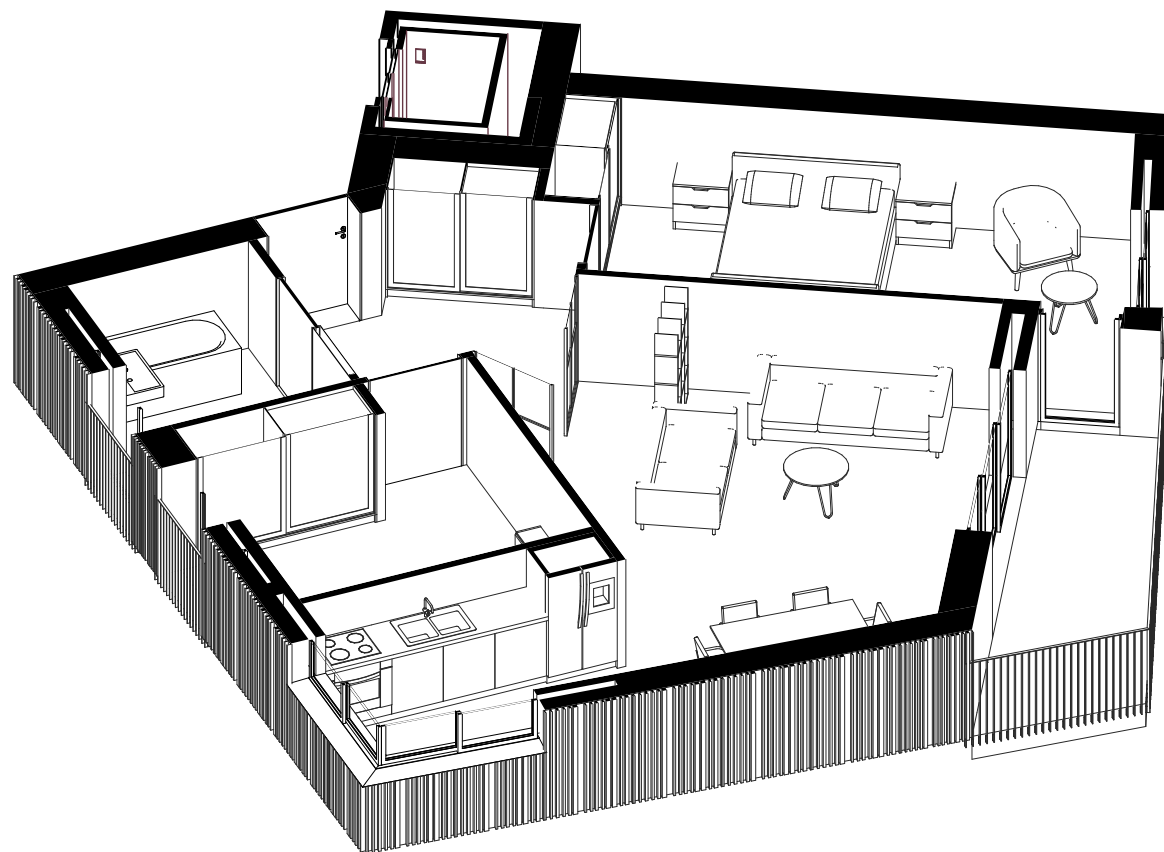


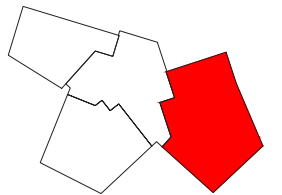
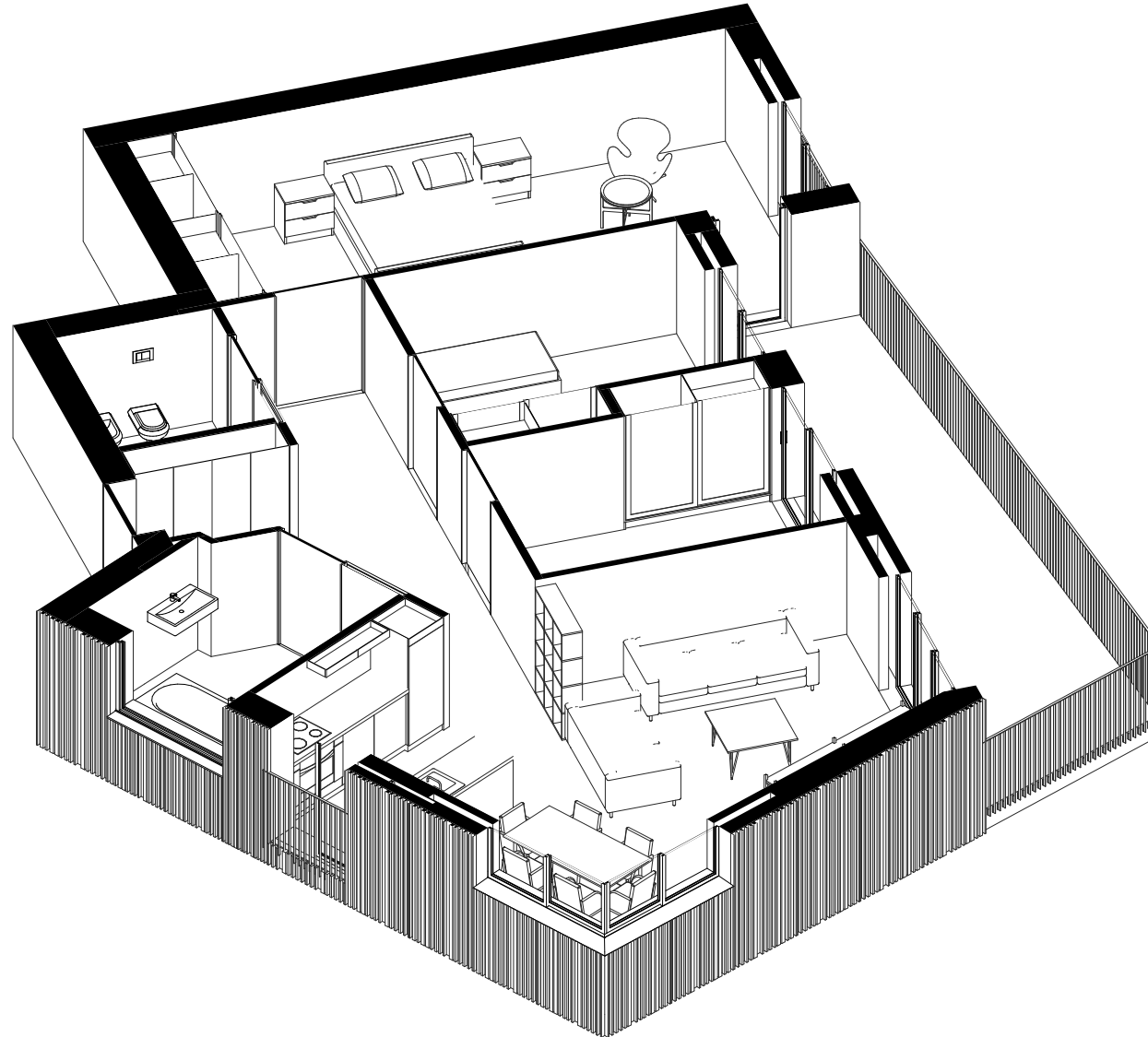


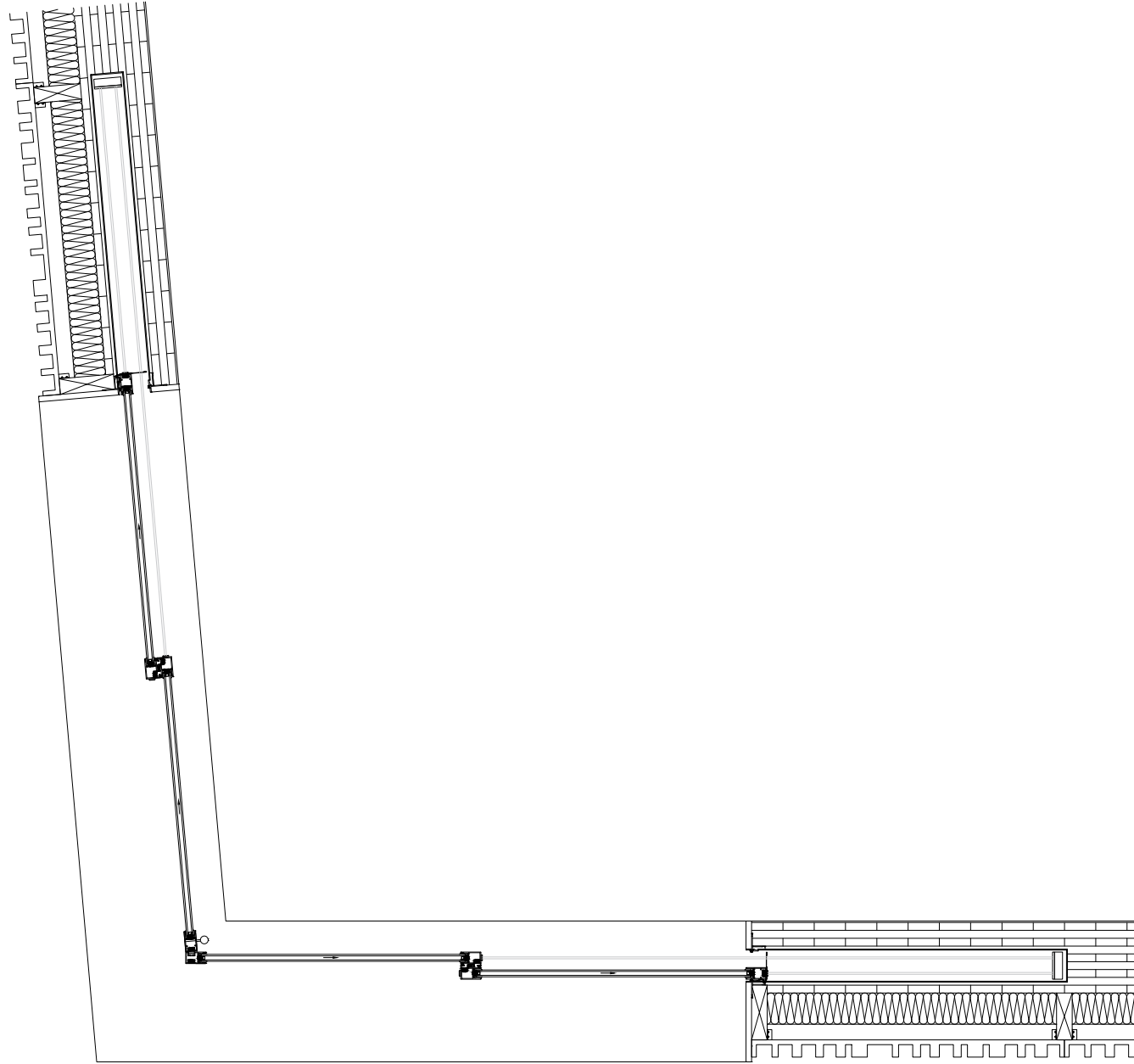


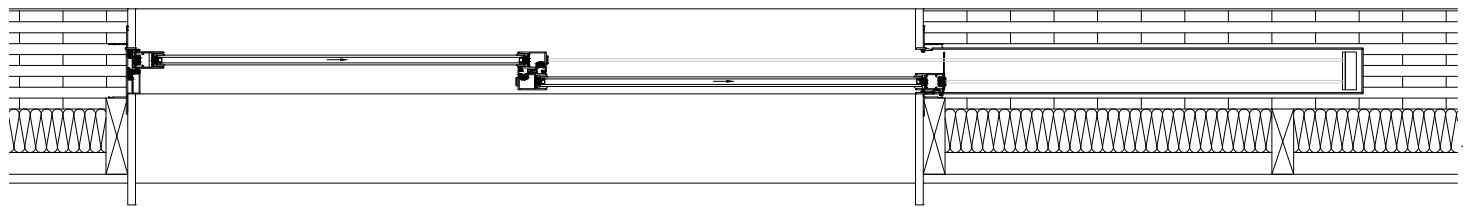


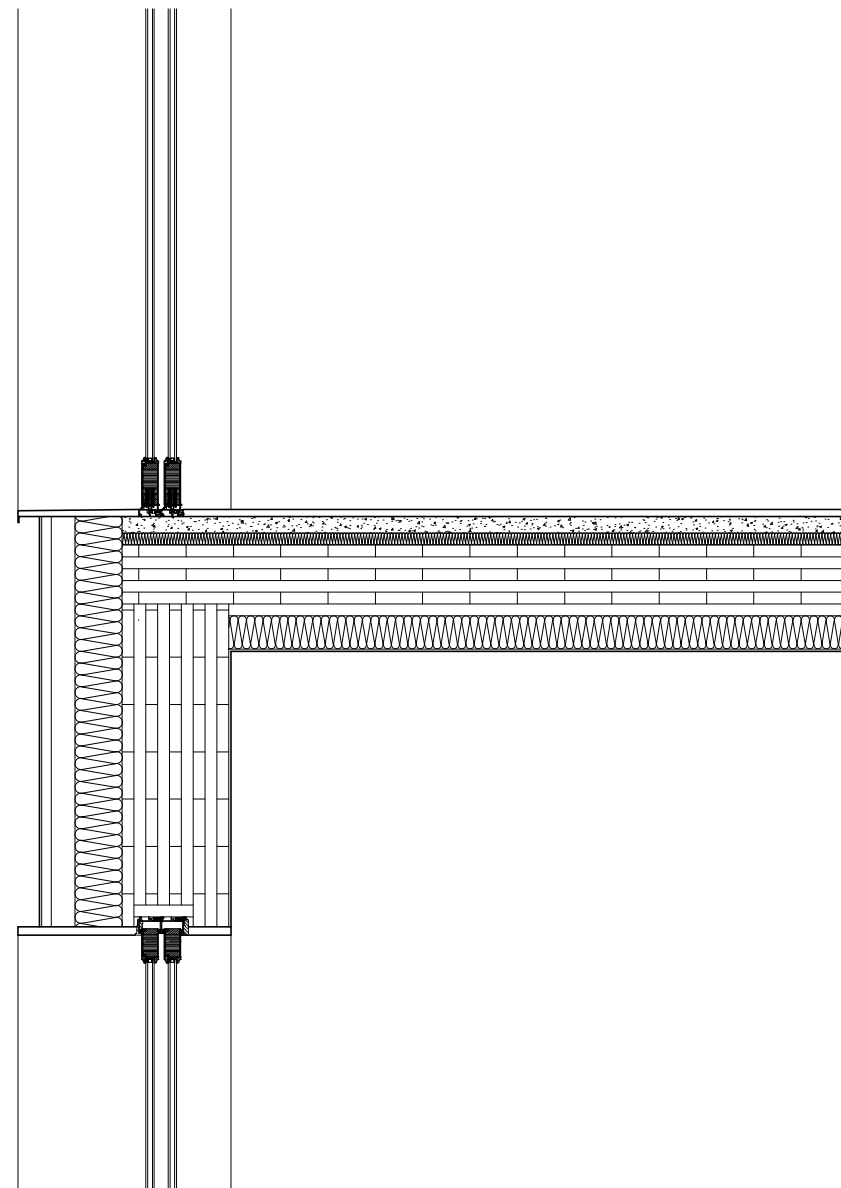
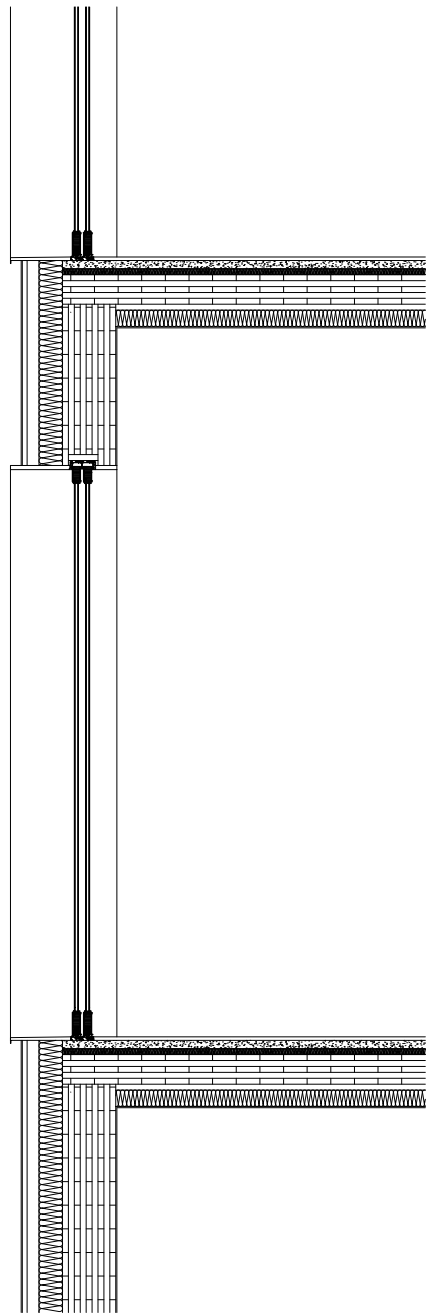






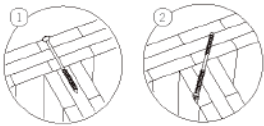
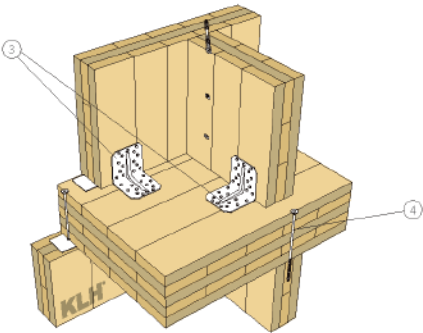




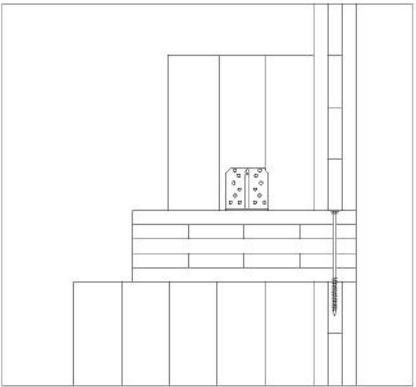


WALL-WALL CONNECTION, CEILING-WALL CONNECTION

EXTERIOR WALL - INTERIOR WALL - CEILING

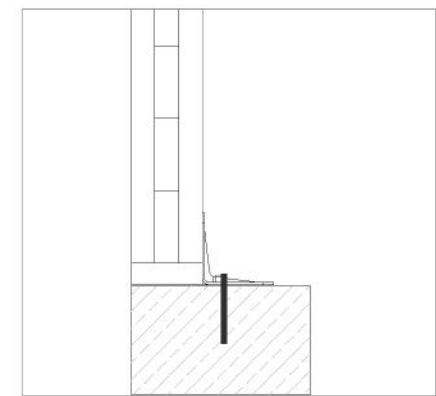
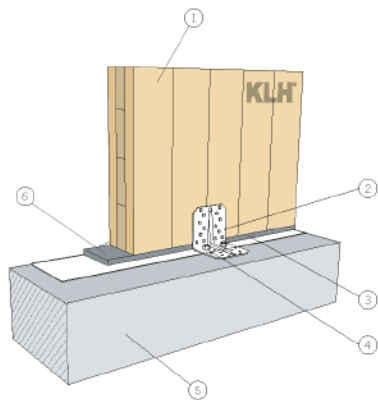


- ① Cross wall connection – screw connection from the outside
- ② Cross wall connection – screw connection from the inside
- ③ Shear force transmission along the joint and tension anchorage of walls – e.g. BMF angle bracket – type, distance according to static requirements
- ④ Screw connection of ceiling with walls according to static requirements



WALL-CONCRETE CONNECTION

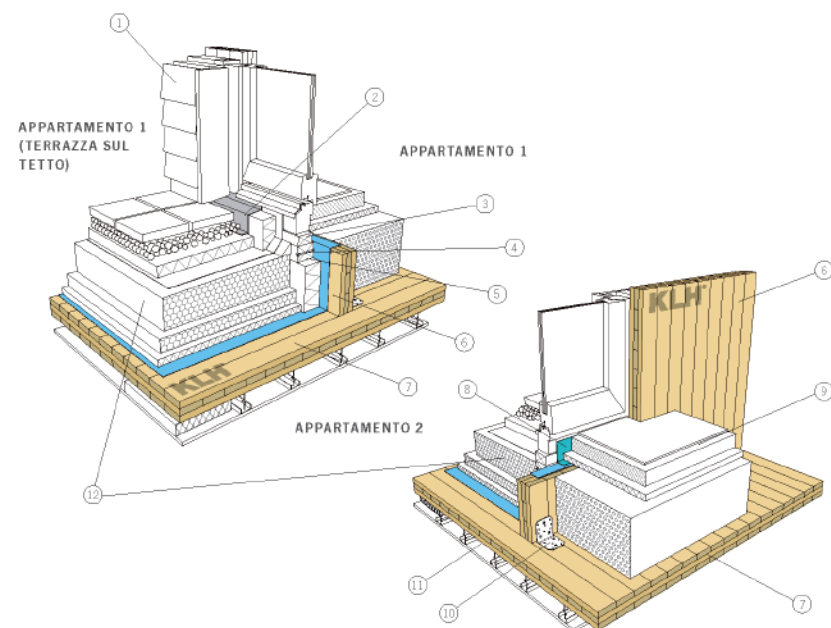
WITHOUT ADDITIONAL SILL PLATE



- ① KLH wall panel according to static requirements
- ② E.g. BMF angle bracket
Shear transmission and tension anchorage for the walls according to static requirements
- ③ The walls must rest on the base over their entire length – if the walls only rest on the base in some places, static verification is required
- ④ Caution: At least 2 dowels must be installed for each BMF angle bracket; otherwise the effect of the angle bracket is highly reduced (preferably use the two holes directly next to the wall or the sill plate)
- ⑤ Concrete component (wall, ceiling, concrete slab)
- ⑥ Low-shrink mortar bed

DETTAGLIO KLH – BS 01-5

STRUTTURA DEL PAVIMENTO, TERRAZZA SUL TETTO
CON COLLEGAMENTO PORTAFINESTRA



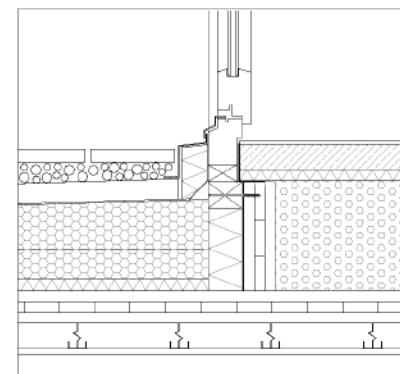
- | | |
|---|-----------------------------------|
| ① Facciata retroventilata | ⑨ Struttura interna del pavimento |
| ② Lamiera di copertura | ⑩ Staffa BMF |
| ③ Raddoppio del telaio finestra | ⑪ Controsoffitto |
| ④ Controtelaio | ⑫ Struttura esterna tetto piano |
| ⑤ Fissaggio con viti conforme ai principi della statica (peso proprio dei serramenti) | |
| ⑥ Pannello KLH per parete | |
| ⑦ Pannello KLH per solai | |
| ⑧ Chiudere il rivestimento di tenuta | |

Struttura interna del pavimento

Rivestimento
Massetto su pellicola per massetto
Pannello di isolamento anticallpestio
Riparto livellante di perlite per consentire l'accesso dei disabili alla terrazza sul tetto

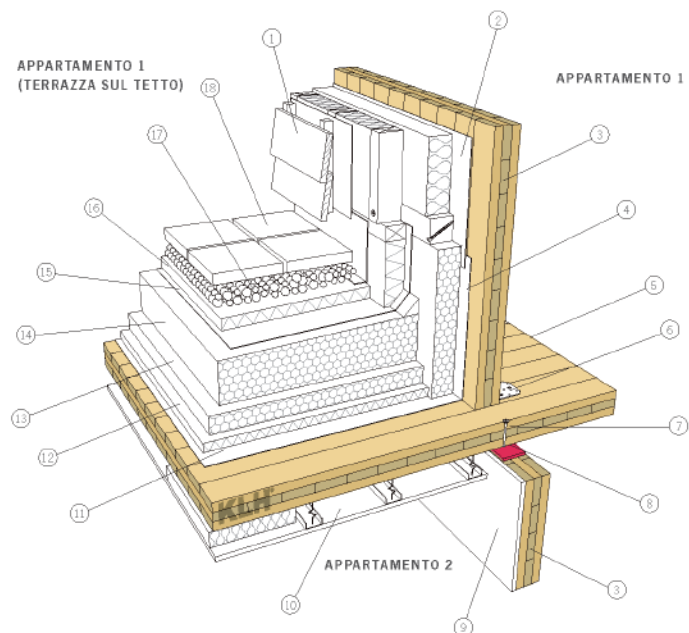
Struttura esterna del tetto piano

Piastrella
Riparto di ghiaia
Pannelli isolanti (protezione dello strato di impermeabilizzazione)
Strato di impermeabilizzazione
Coltentazione a piano inclinato per formazione delle pendenze
Isolamento termico
Pannello di isolamento anticallpestio
Barriera al vapore
Pannello KLH per solai
Controsoffitto



DETTAGLIO KLH – BS 01-4

COLLEGAMENTO PARETE ESTERNA – SOLAIO CON
ESECUZIONE DI TERRAZZA SUL TETTO



- ① Facciata retroventilata
- ② Barriera contro la dispersione di calore per convezione
- ③ Pannello KLH per parete
- ④ Prolungare la barriera al vapore lungo la parete
- ⑤ Pannello KLH per solaio
- ⑥ Staffa BMF per la trasmissione dello sforzo di taglio
- ⑦ Fissaggio con viti conforme ai principi della statica
- ⑧ Supporto elastico
- ⑨ Rivestimento in cartongesso
- ⑩ Controsoffitto (ca. 7 cm di spazio sovrastante con isolamento dell'intercapedine)

- ⑪ Barriera al vapore (e strato di impermeabilizzazione di emergenza durante i lavori di costruzione)
- ⑫ Pannello di isolamento anticalpestio
- ⑬ Isolamento termico
- ⑭ Coibentazione a piano inclinato per formazione delle pendenze
- ⑮ Copertura anti-umidità (strato acquifero)
- ⑯ Pannello isolante di protezione dello strato di impermeabilizzazione
- ⑰ Riporto di ghiaia
- ⑱ Piastrella

Parete esterna: AW 03

$R'_{s} = 51(-2;-7) \text{ dB}$

Struttura parete

Facciata – legno
[Pannello, tavole – a tenuta d'aria]
Strato di retroventilazione
[Listellatura in KLH fissato con viti]
2 x 80 mm lana di roccia disposta su tutta la superficie [Heralan FP]
Pannello KLH a 3 strati 94 mm
Cartongesso autoestinguente 15mm

