



# BLOCK R

THE NEW CITY BLOCK FOR THE  
NEXT GENERATION(S) OF URBAN  
INHABITANTS

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FONTYS MASTER OF ARCHITECTURE  
TILBURG , THE NETHERLANDS



# BLOCK R

“COMPACT URBAN LIVING TO STIMULATE SOCIAL INTERACTIONS AND PROVIDE PLEASANT FUTURE PROOF LIVING & WORKING SCAPES FOR THE NEXT GENERATION(S)”

## PROJECT DETAILS

LOCATION : INNER CITY ROTTERDAM, HOOGSTRAAT

SPECIFICATIONS OF THE CITY BLOCK :

DWELLINGS DIFFERENT TYPES	:	215	UNITS
COMPACT BUSINESS UNITS	:	23	UNITS
SMALL BARS & FOOD COURTS	:	11	UNITS
LARGER OFFICE SPACES	:	1655	M <sup>2</sup>
LARGE SCALE RETAIL SPACES	:	4750	M <sup>2</sup>
ROOF PARK	:	3800	M <sup>2</sup>



LIVING



LEISURE



WORKING



COMMUNITIES

## USER EXPERIENCE

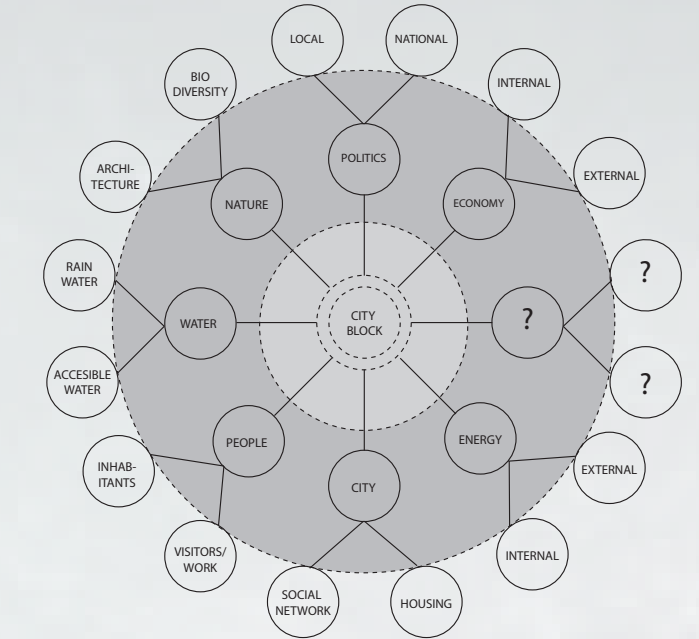
TARGET GROUPS :

FUTURE INHABITANTS OF THE INNER CITY :

- \* COMPLETE REPRESENTATION OF THE CITY FROM FAMILIES & STARTERS TO THE ELDERLY
- \* SMALL- TO LARGE SCALE BUSINESSES
- \* INNOVATIVE ENTREPRENEURS
- \* VISITORS / TOURIST IN ROTTERDAM
- \* SHOPPING CROWDS



STAKEHOLDERS :



## SITE IMPACT

EVERY DEVELOPMENT HAS A SPECIFIC IMPACT ON THE SITE THAT IS SITUATED ON, BUT THERE IS ALSO AN IMPACT ON THE BROADER CONTEXT. THE CITY BLOCK IS GOING TO SERVE AS AN EXAMPLE FOR NEW DEVELOPMENTS WITHIN THE NETHERLANDS AND MAYBE BEYOND, THEREFORE THE PRINCIPLES SHOULD NOT ONLY BE TAKEN FROM THE CONTEXT. THE PROBLEMS FOR THE NEXT GENERATIONS WILL IMPACT ALL CITIES IN THE NETHERLANDS AND THEREFORE THE CORE OF THE PROJECT CAN BE PROJECTED ON SITES THROUGHOUT THE NETHERLANDS. FURTHER DEVELOPMENT OF THE DESIGN CONCEPT CAN HAVE A POSITIVE IMPACT ON INNER CITY DEVELOPMENT AND THIS IS SOMETHING THAT HAS ALWAYS BEEN THE PURPOSE. THIS EXCHANGE OF CULTURE, KNOWLEDGE AND SOCIAL RELATIONS WILL EVENTUALLY SERVE SOCIETY IN A BROADER SENSE THAN THE CITY BLOCK.

CURRENT SITUATION



DOWNSIDES :

ALMOST ZERO ACTIVITY  
LACKS SOCIAL SAFETY (ALLEY FEELING)  
MOSTLY USED FOR PARKING AND CARS

INTERVENTIONS :

CREATING NEW URBAN CONNECTIONS (DIAGONAL)  
ACTIVATING THIS PART OF THE INNER CITY  
REPLACING PARKING WITH MIXED USE LIVING  
CREATING LINKS WITH THE CHURCH SQUARE & WATER  
CREATING MORE GREEN SPACES IN THE CITY CENTRE  
MORE SOCIAL SECURITY BY ADDING FUNCTIONS

## TRANSITION SPACE

THE CITY BLOCK ROOTS ITSELF INTO THE URBAN FABRIC OF THE CITY OF ROTTERDAM. THEREFORE THE TRANSITIONAL PASSAGE INTO THE BLOCK IS HAPPENING ON TWO LEVELS. THESE CONNECT THE CITY TO THE CITY FLOORS ABOVE. THE CITY FLOORS ON ITS PART ARE MADE UP OF SOCIAL BOULEVARDS, STREETS & ALLEYS THAT CONNECT ALL FUNCTIONS ON THIS FLOOR. THESE SOCIAL STREETS STIMULATE WALKING & SOCIAL ENCOUNTERS WITH VARIOUS PEOPLE, AND THE ADVENTURE PATHWAYS THAT CROSS THE ATRIUM STIMULATE THE VISUAL RELATION BETWEEN FUNCTIONS. THESE STREETS ARE DIVIDED NATURALLY BETWEEN PUBLIC AND PRIVATE AND UNDOUBTEDLY GUIDE VISITORS AND INHABITANTS. THIS PROVOKES INTERACTION AND WILL HELP TO SHAPE A COMMUNITY WITHIN THE BLOCK..

CURRENT SITUATION

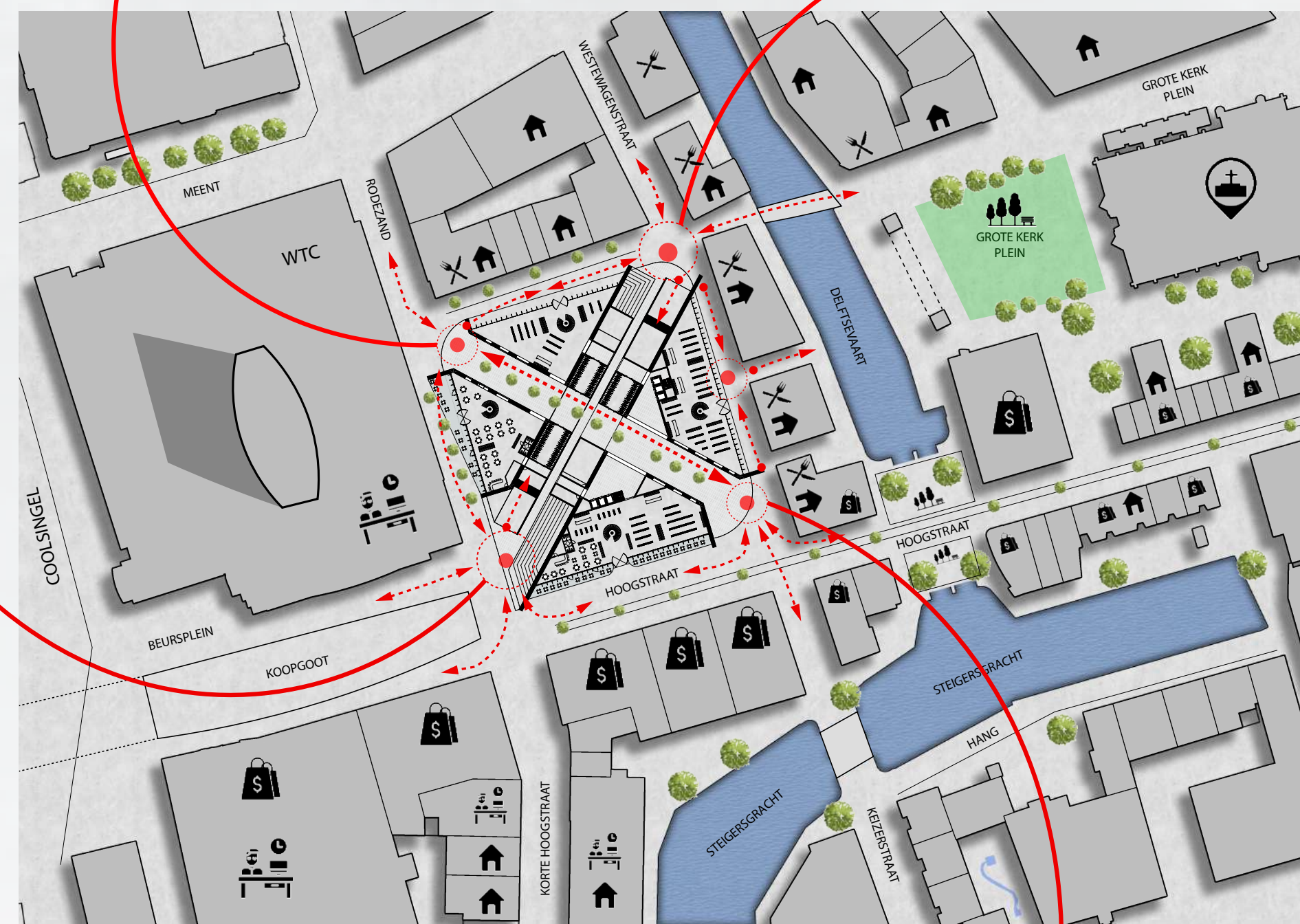


UPSIDES :

BUZZING INNER CITY AREA  
LOTS OF SOCIAL ACTIVITY & STREET LIFE  
PRIME LOCATION WITHIN ROTTERDAM  
CAR FREE & USED BY PEDESTRIANS ONLY

INTERVENTIONS :

DIAGONAL FACING ENTRANCE TO THE CITY BLOCK  
PROVIDING PUBLIC SPACE AT CITY LEVEL  
PROVIDING A NATURAL TRANSITION TO THE BLOCK  
PROVIDING SOCIAL SAFETY BY ADDING FUNCTIONS  
ADDING GREEN & PUBLIC SPACES IN THE STREETS  
VERTICAL ELEMENTS PROVIDE A CONTEXTUAL FIT  
GUIDING ELEMENTS IN THE STREET PAVEMENT



CURRENT SITUATION



DOWNSIDES :

NOT ACTIVATED BY CURRENT FUNCTIONS  
LACKS SOCIAL SAFETY AND ACTIVITY  
MAINLY USED FOR TRAFFIC & PARKING  
NOT CAPITALIZING ON THE PRIME LOCATION

INTERVENTIONS :

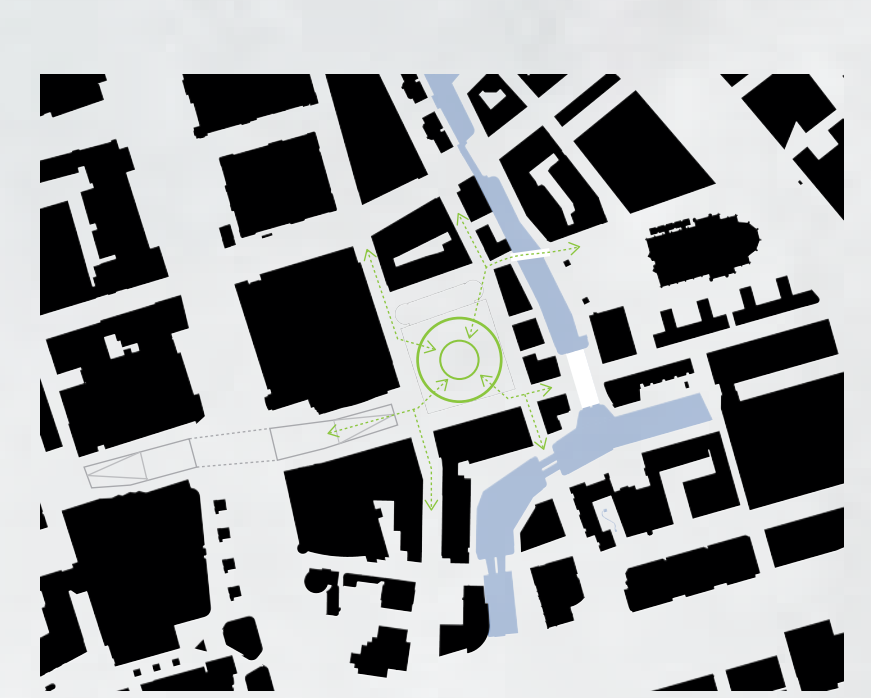
DIAGONAL FACING ENTRANCE TO THE CITY BLOCK  
PROVIDING PUBLIC SPACE AT CITY LEVEL  
CONNECTING WITH THE CHURCH SQUARE & WATER  
PROVIDING SOCIAL SAFETY BY ADDING FUNCTIONS  
REPLACING THE CAR BY PEDESTRIANS & CYCLIST  
ADDING GREEN IN THE URBAN ENVIRONMENT  
GUIDING ELEMENTS IN THE STREET PAVEMENT

INNER CITY OF ROTTERDAM



CAR DOMINATED PEDESTRIAN ONLY TRAFFIC NOT INTERSECTIONS PUBLIC TRANSPORT

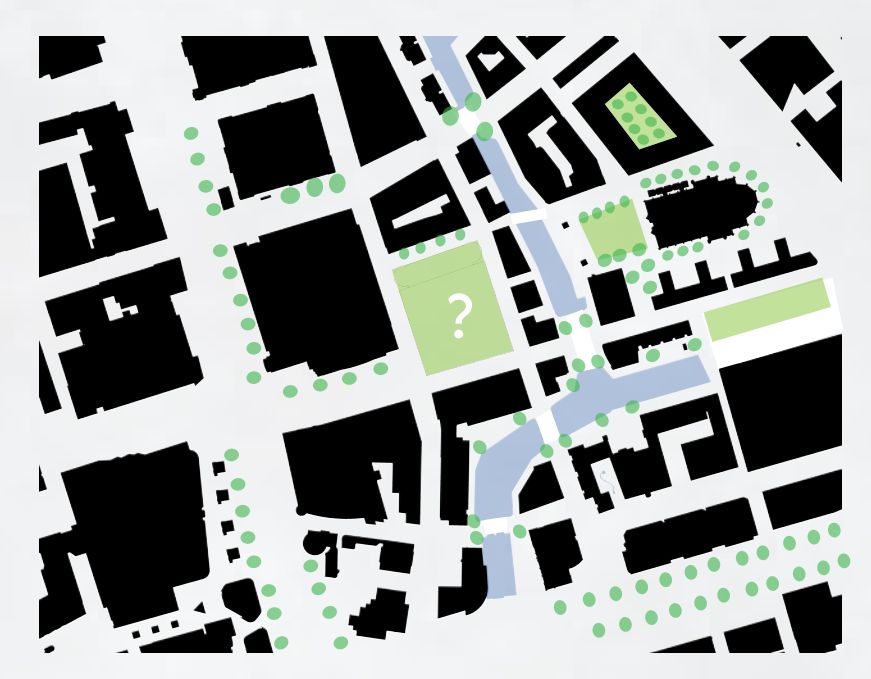
CENTRAL CONNECTOR



FUNCTIONS



GREEN & BLUE NETWORKS



ARCHITECTURAL HIGHLIGHTS



NATURAL INFLUENCES



## FUTURE URBAN LIVING

HIGH-DENSITY URBAN LIVING IS SOMETHING THAT IS BECOMING MORE RELEVANT IN THE FUTURE DUE TO POPULATION GROWTH AND THE TREND OF CENTRALISATION IN THE NETHERLANDS. THEREFORE THE DWELLINGS IN THE NEW CITY BLOCK ARE COMPACT YET FEEL SPACIOUS DUE TO THE CEILING HEIGHT AND THE PUBLIC SPACE AT THE DOORSTEP. PEOPLE CAN SHARE FACILITIES AND THIS SAVES SPACE IN THE PRIVATE REALM OF THE DWELLING. THE TARGET GROUP ARE PEOPLE THAT ENJOY LIVING IN A BUZZING AND CENTRAL SPACE, THIS CAN BE ALL AGE GROUPS.

UPSIDES :

BUZZING INNER CITY AREA  
LOTS OF SOCIAL ACTIVITY & STREET LIFE  
PRIME LOCATION WITHIN ROTTERDAM  
CAR FREE & USED BY PEDESTRIANS ONLY

INTERVENTIONS :

CREATING NEW URBAN CONNECTIONS (DIAGONAL)  
PROVIDING A NATURAL TRANSITION INTO THE CITY BLOCK  
PROVIDING A NEW SENSE OF SOCIAL SECURITY  
ACTIVATING THE WESTEWAGENSTRAAT & CHURCH SQUARE  
CREATING MORE GREEN SPACES IN THE CITY CENTRE  
GUIDING A NEW EXPERIENCE FOR THE USERS OF THE CITY



## THE VOID

THE CENTRAL VOID IN THE PROJECT IS PERCEIVED AS A CONNECTIVE AND FLUENT BODY THAT COMMUNICATES INWARDS AND COMMUNICATES OUTWARDS THROUGH THE PICTURE FRAMES OF THE FACADE. THE NEGATIVE VOLUME OF THE BUILDING CAN BE PERCEIVED AS THE VOID, THESE SPACES HOUSE THE SOCIAL DOMAIN AND THE PUBLIC FUNCTIONS IN THE BUILDINGS. THE ATRIUM HOUSES THE ADVENTURE PATHWAYS THAT CREATE A DYNAMIC ROUTING IN THE BUILDING THAT HIGHLIGHTS CERTAIN VIEWS AND CONNECTS PUBLIC FUNCTIONS IN THE BUILDING. THE VOID AT THE TOP FLOOR OPENS UP INTO A ROOF GARDEN FOR INHABITANTS AND VISITORS TO ENJOY.



# BLOCK

# R A SOCIAL CITY BLOCK REQUIRES ARCHITECTURE THAT STIMULATES INTERACTION BETWEEN ALL USERS OF BLOCK-R

## SOCIAL NETWORKS

## PUBLIC VS PRIVATE DOMAIN

### PLACES TO MEET

THE MIXING OF COMMUNITIES IN THE CASE OF THE CITY BLOCK IS AIMED TO TAKE PLACE IN THE VOID SPACES AROUND THE PUBLIC DOMAIN OF THE CITY BLOCK. PROVIDING SPACES TO MEET CAN HELP TO FORM SOCIAL RELATIONS AND HELP TO CREATE A FOUNDATION FOR THE CITY BLOCK TO FUNCTION ON A SOCIAL ASPECT. THE STAKEHOLDERS IN THE CITY BLOCK VARY FROM VISITORS, INHABITANTS AND PROFESSIONALS THAT WORK IN THE CITY BLOCK. THIS VARIETY OF STAKEHOLDERS WILL CREATE A DEEPER CONNECTION THAT WILL RESEMBLE THE SOCIAL RELATIONS THAT CAN BE SEEN IN A NORMAL CITY CENTRE. THIS DEEPER CONNECTION WILL RESEMBLE NORMAL SOCIAL RELATIONS AND THEREFORE THE SOCIAL DOMAIN OF THE BLOCK WILL SPREAD FURTHER THAN THE BOUNDARIES OF THE CITY BLOCK.

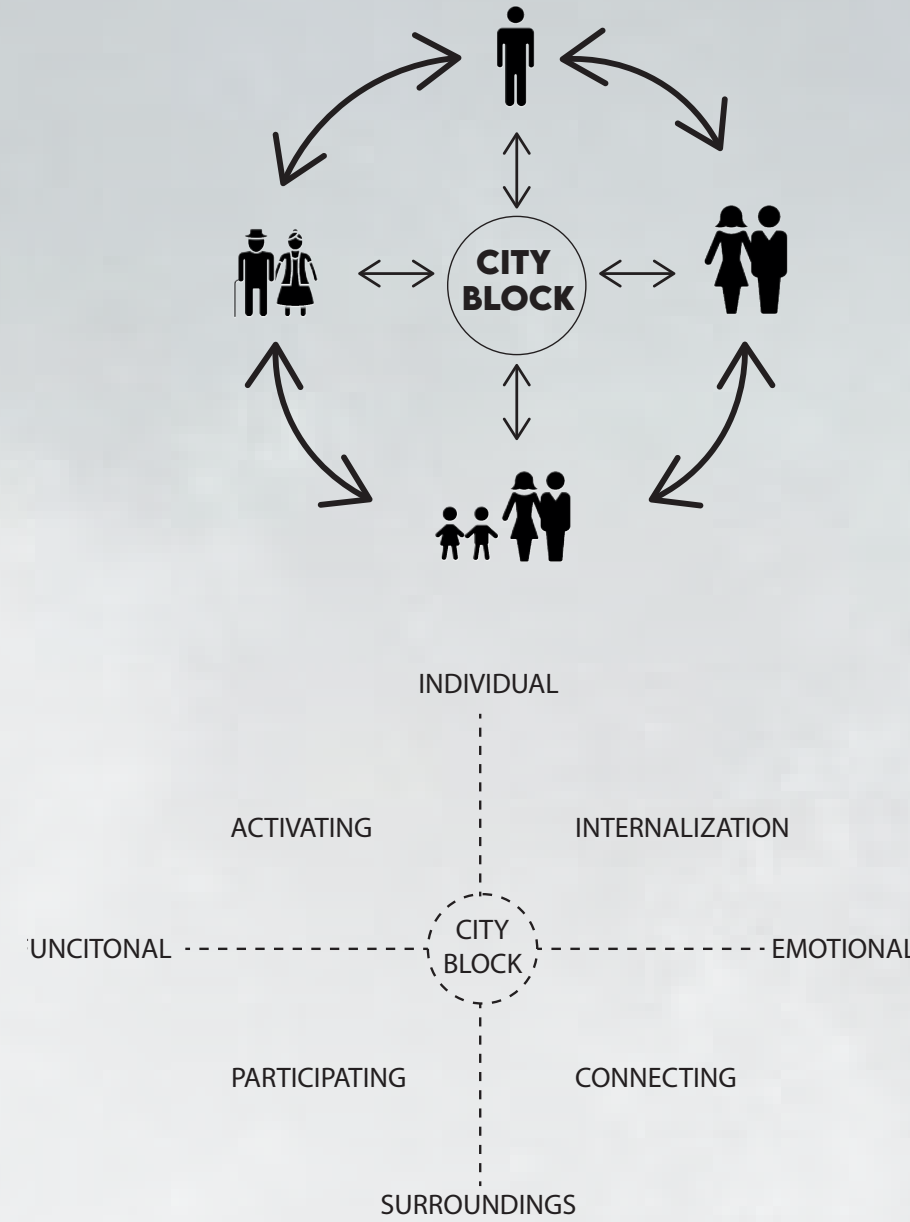
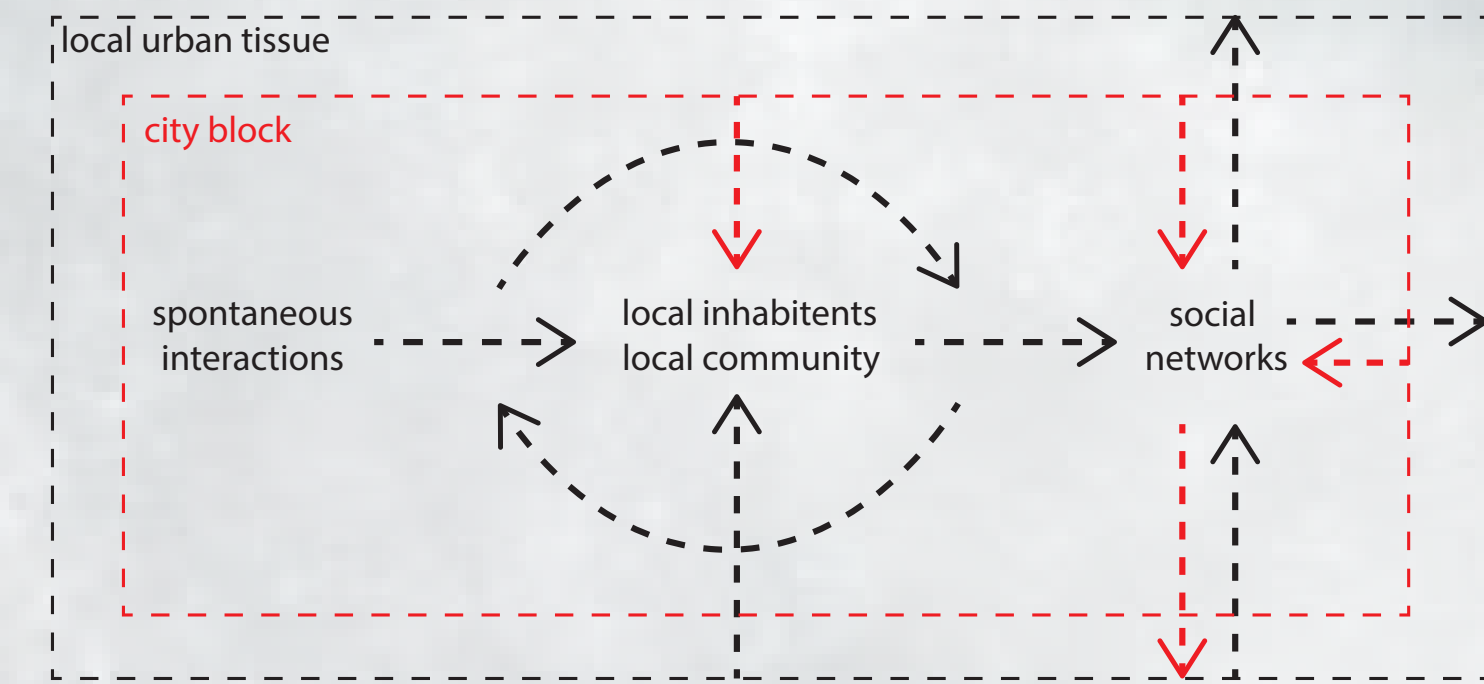
THE THEORY OF "FROM BRIEF CONTACTS TO SOCIAL RELATIONS" (NICOLA DEMPSEY) STATES THAT THE SOCIAL DOMAIN OF ONES SURROUNDING, EITHER WORK OR DOMESTICALLY RELATED FORMS A LARGE PART OF THE SOCIAL CONTACTS OF THESE INDIVIDUALS. THEREFORE PROVIDING A BASE FOR SOCIAL INTERACTION WITHIN THE PUBLIC SPACE CAN HELP TO IMPROVE SOCIAL INCLUSION WITHIN THE CITY BLOCK. THE FAMILIARITIES THAT BRIEF CONTACTS CREATE CAN FORM A BASE FOR FUTURE RELATIONSHIPS AND THIS POSITIVE DRIVE WILL HELP TO PUSH THE CITY BLOCK TO A NEW LEVEL.

### PEOPLE OF THE BLOCK

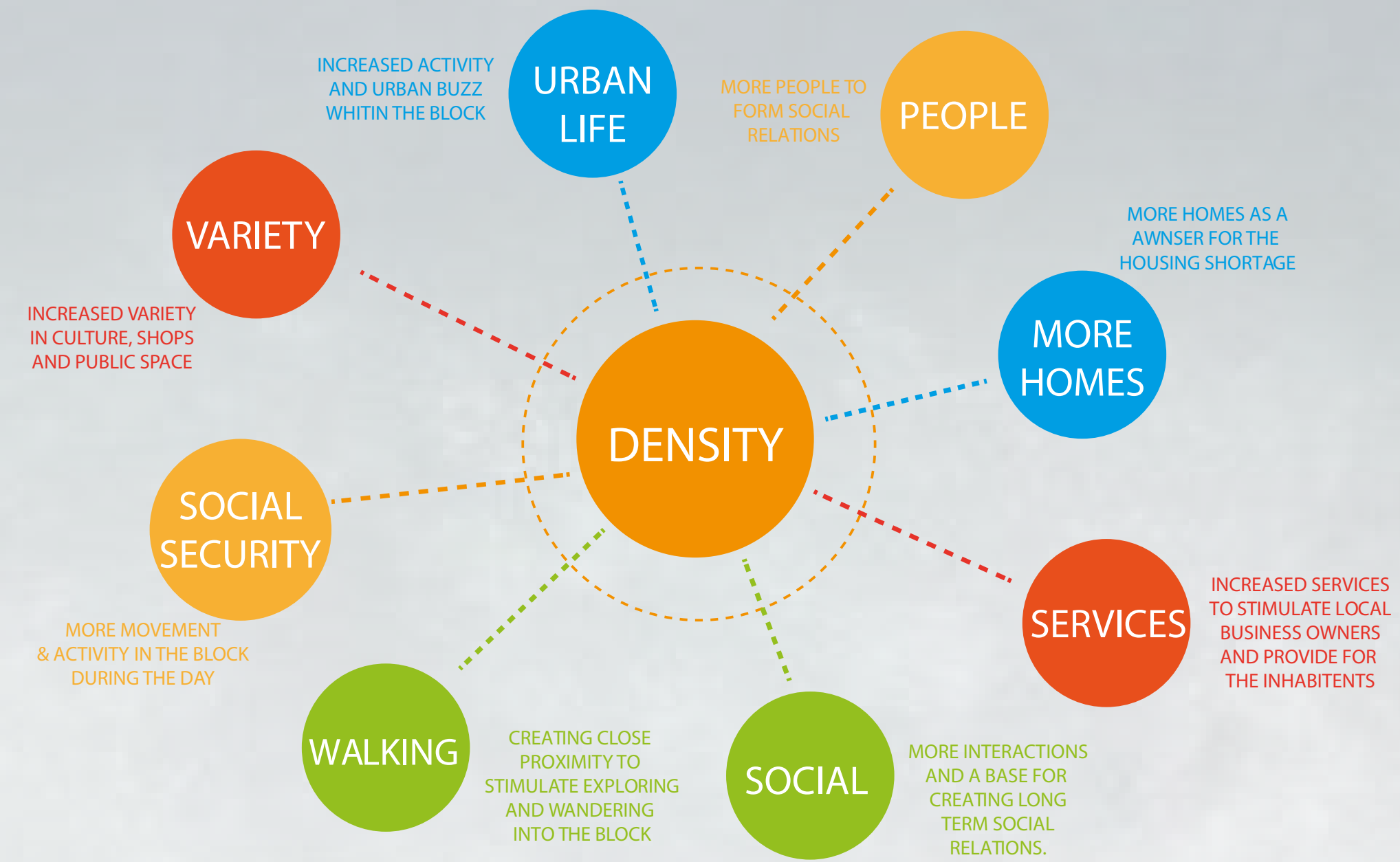
THE VIBRANT CITY BLOCK PROVIDES EXCELLENT URBAN LIVING ENVIRONMENTS FOR A MIX OF INHABITANTS THAT RESEMBLES THE FUTURE URBAN DEMOGRAPHY. BY CREATING A MIX OF DWELLINGS THE TARGET GROUPS CAN SPREAD AND THIS HAS A DIRECT POSITIVE INFLUENCE ON THE SOCIAL FUNCTIONING OF THE CITY BLOCK. THE MAIN USER OF THE BUILDING WILL CONSIST OF ONE TO TWO PEOPLE HOUSEHOLDS MIXED WITH 2-4 PERSON HOUSEHOLDS THAT ALL HAVE PRIVATE DOMAINS AND THE VOID DOMAIN WHICH WILL BE SHARED BY THE OTHER INHABITANTS OF THE CITY BLOCK. THE DEMOGRAPHIC MIX OF PEOPLE WILL VARY FROM ELDERLY WIDOWS TO SINGLE STARTERS AND PROVIDE A HOME FOR EVERY MIX OF PEOPLE IN BETWEEN. MIXING GENERATIONS WILL ALSO DYNAMICALLY SPREAD THE FUNCTIONAL ABILITIES BECAUSE THE NEEDS OF THE PEOPLE ARE WIDESPREAD AND THIS MEANS THE ECONOMIC POSSIBILITIES ARE BETTER. THE CITY FLOORS CAN BE PERCEIVED AS THE BREEDING GROUND FOR LIVING WORKING AND LEISURE WITHIN THIS INNOVATIVE CITY BLOCK. THE CHANGE FOR SOCIAL INCLUSION IS VERY LARGE WHEN THE PUBLIC DOMAIN WILL PROVOKE SOCIAL INTERACTION AND SPONTANEOUS INTERACTIONS.

### CONNECTING COMMUNITIES

"from brief contacts to social networks"



## URBAN DENSITY



### SHARED SPACES

PROVIDING A BASE FOR PEOPLE TO ENCOUNTER EACH OTHER WITHIN THE CITY BLOCK IS ESSENTIAL FOR THE SUCCESS FACTOR OF THE PROJECT. THE ONLY WAY TO SUCCESSFULLY STIMULATE SOCIAL ENCOUNTERS IS TO PROVIDE SHARED SPACES WITHIN THE BUILDING VOLUME. THESE SHARED FUNCTIONS CAN VARY PER DWELLING TYPE AND DIFFER IN SIZE. DUE TO THE COMPACT NATURE OF THE DWELLING TYPOLOGIES, THIS MEANS THAT THE EXTENDED SPACE THAT PEOPLE LACK IN THE PRIVATE DOMAIN CAN BE SITUATED IN THE PUBLIC SPACE OF THE CITY BLOCK.

THE MIX OF FUNCTIONS CREATES A NECESSITY FOR USERS TO SHARE AND USE THE SAME FACILITIES WITHIN THE BLOCK. THESE COMMON FUNCTIONS CAN CONSIST OF A LAUNDRY ROOM, OUTDOOR SPACES, LIBRARIES AND LIVING ROOMS FOR EVERYDAY USE. THIS QUEST FOR COMPACT LIVING WILL PROVIDE A BASE FOR WILLINGNESS AND WILL STIMULATE PEOPLE TO SHARE MORE FACILITIES AND SPACE. THIS MEANS THAT IF PEOPLE PAY FOR THEIR APARTMENT THEY PAY 80% FOR THEIR PRIVATE DOMAIN AND THE OTHER 20% PROVIDES MORE SPACE THAT IS CO-FUNDED AND THEREFORE HAS A LARGER IMPACT ON EVERY INHABITANT.

### SOCIAL NETWORKS

THE NEED FOR HUMAN INTERACTIONS AND THE FEELING OF COMMUNITY IS SOMETHING ESSENTIAL TO THE MENTAL HEALTH AND WELL-BEING OF HUMAN BEINGS. THE SOCIAL ASPECT OF CITY BLOCKS IS SOMETHING THAT IS CURRENTLY BEING SEEN AS ESSENTIAL SINCE LARGE-SCALE HOUSING DEVELOPMENTS CAN ALSO CREATE A FEELING OF ALIENATION BETWEEN THE RESIDENTS AND THEIR SURROUNDINGS. THE CONCEPT OF LOW-RISE HIGH DENSITY CREATES A SMALLER-SCALE INTERACTION BETWEEN THE PEOPLE AND THEIR SURROUNDINGS. CREATING A SMALLER-SCALE ROUTING THAT STIMULATES INTERACTION AND FORMS NETWORKS WITHIN THE CITY BLOCK BUT ALSO OUTWARDS CAN SHAPE THE WAY WE DESIGN THE NEW CITY BLOCKS.

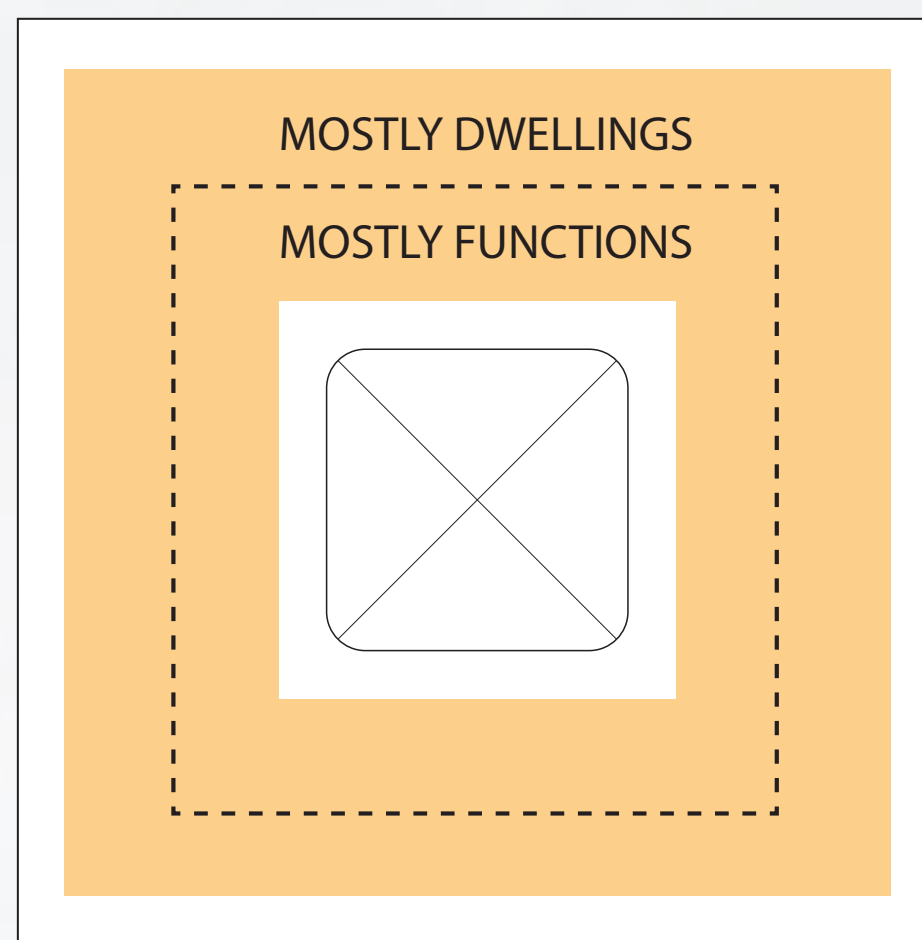
THE SHARING OF FACILITIES CREATES MORE POSSIBILITIES FOR USERS TO HAVE A PLEASANT LIVING AND WORKING ENVIRONMENT. ACCESSIBILITY IS SOMETHING THAT CONNECTS THE PUBLIC DOMAIN WITH THE PRIVATE DOMAIN. THE PRIVATE DOMAIN CAN THEREFORE BE EXTENDED INTO THE CITY BLOCK. THIS SHARING IS SOMETHING THAT WILL BECOME INEVITABLE IN THE FUTURE DUE TO DENSIFICATION AND CENTRALISATION SHORTLY. THE NEXT GENERATION WILL THEREFORE BECOME MORE EXPOSED TO THE NECESSITY OF SHARING FACILITIES AND FUNCTIONS.

### COMMUNITY

ALL CITY FLOORS CONSIST OF FUNCTIONS, DWELLINGS AND PUBLIC SPACES. THE FUNCTIONS AND THE PUBLIC DOMAIN CONTRIBUTE TO FACILITATING THE GROWTH OF COMMUNITIES WITHIN THE CITY BLOCK. THE SOCIAL STREETS AND ALLEYS WILL ENSURE THE PROVOKING OF ENCOUNTERS WITHIN THE CITY BLOCK. THE EXTENDED INDOOR AND OUTDOOR SPACES CAN BE CURATED BY THE USERS AND WILL BE USED TO HELP TO SHAPE A COMMUNITY. EXCHANGING AND INTERACTION BETWEEN DIFFERENT USERS OF THE CITY BLOCK CREATES A DYNAMIC RELATION THAT IS SIMILAR TO A NORMAL CITY CENTRE. FACILITIES WITHIN THE BLOCK CAN SUPPORT THE DAILY NEEDS OF INHABITANTS, THE NEEDS MAY VARY BUT THE CONCEPT OF SHARED FUNCTIONS AND FACILITIES HELPS TO CREATE THE RIGHT BALANCE.

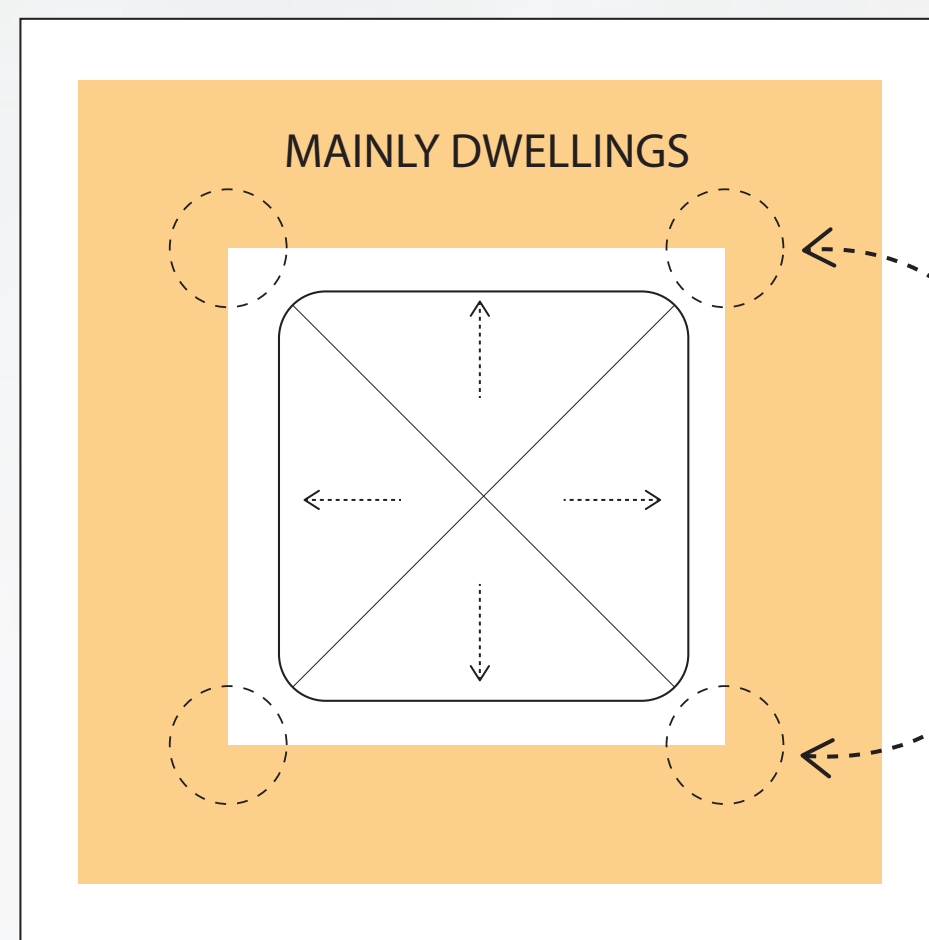
THE SOCIAL STREETS WILL STIMULATE INTERACTION AND SPONTANEOUS MEETINGS THAT WILL PROVIDE FAMILIARITY AMONG RESIDENTS. THIS FAMILIARITY WILL INCREASE THE WILL FOR PEOPLE TO INTERACT AND SPEND TIME WITH THEIR NEIGHBOURS. THE CASUAL MEETING SPOTS THROUGHOUT THE BLOCK WILL POSITIVELY FACILITATE THIS. THE VISUAL CONNECTIONS BETWEEN FLOORS AND GREEN AREAS WILL CREATE A SAFE ENVIRONMENT FOR ALL.

### LOWER LEVELS OF THE CITY BLOCK

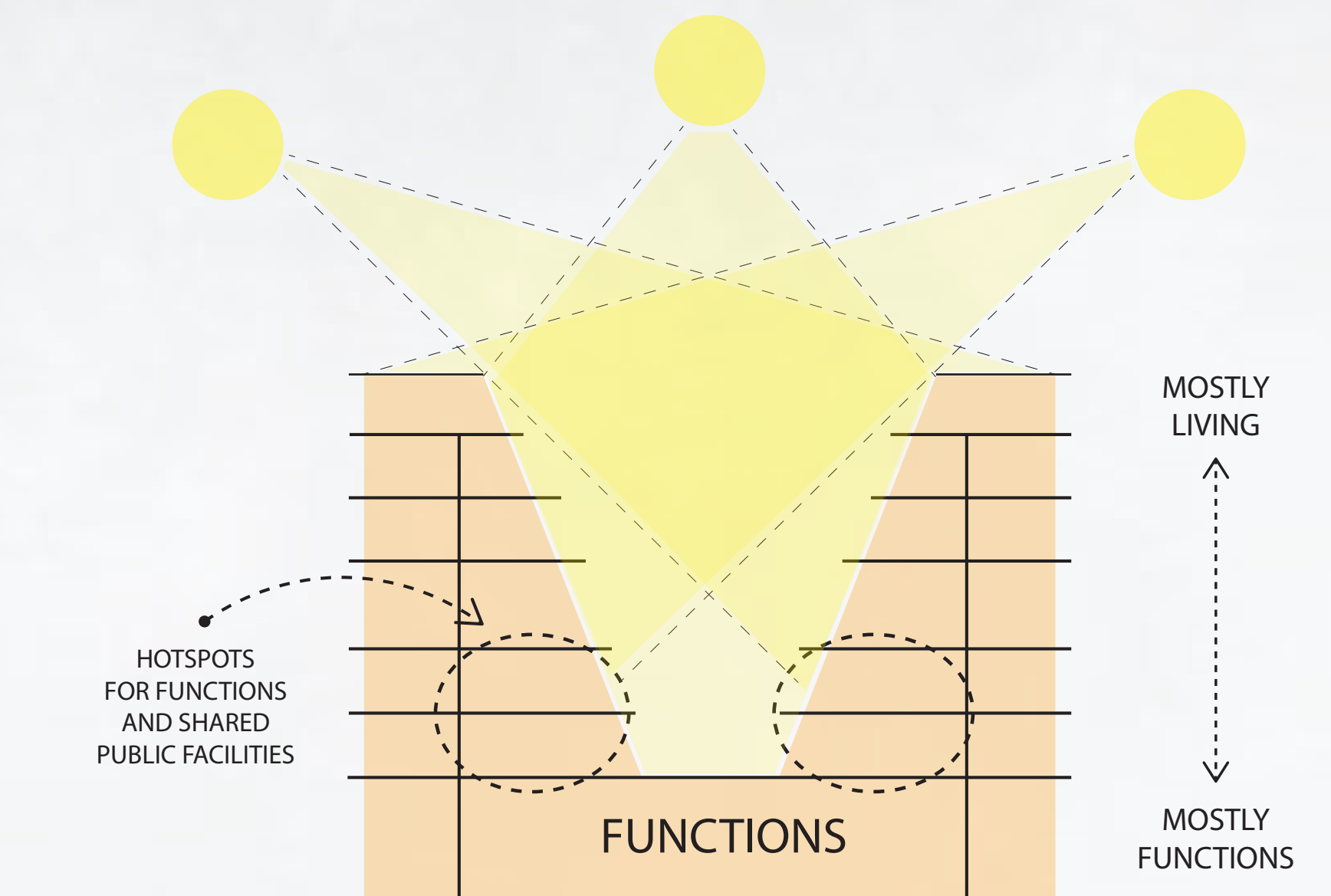


STRONGER REPRESENTATION OF THE PUBLIC DOMAIN

### HIGHER LEVELS OF THE CITY BLOCK



STRONGER REPRESENTATION OF THE PRIVATE DOMAIN



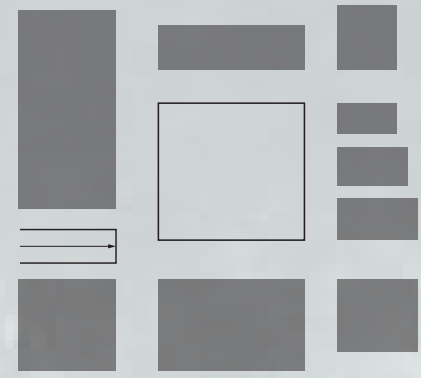


# BLOCK

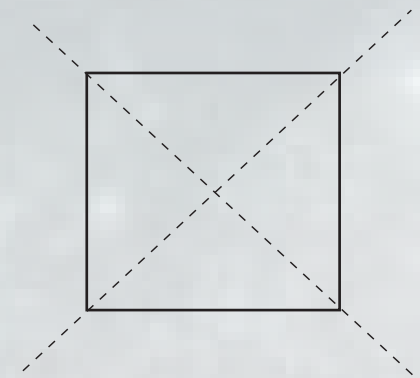
# R

## BREAKING DOWN THE DESIGN TO ITS CORE PRINCIPLES, EXPLAINING THE ARCHITECTURAL INTERVENTIONS

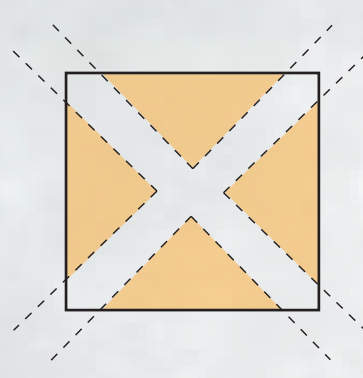
URBAN CONTEXT



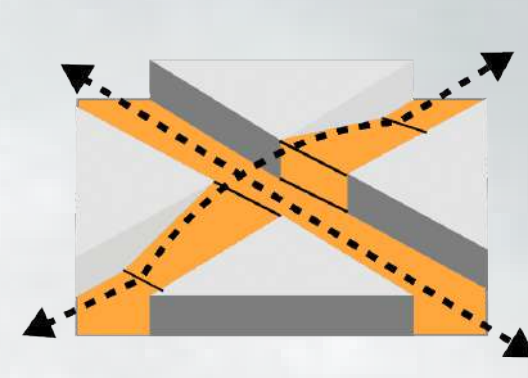
SUBTRACTION



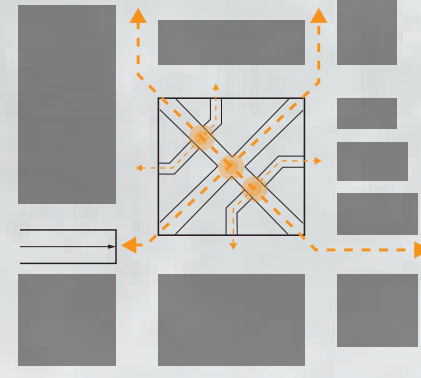
CITY FLOOR



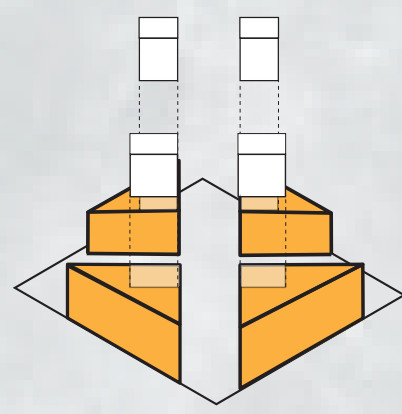
2 WAY CONNECTION



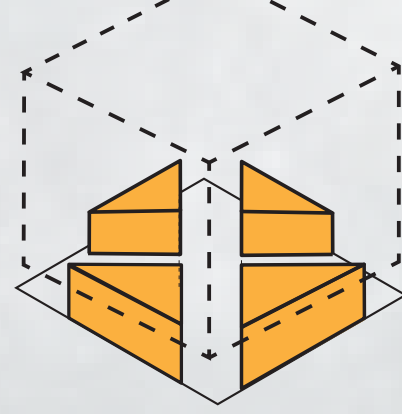
NEW CONNECTIONS



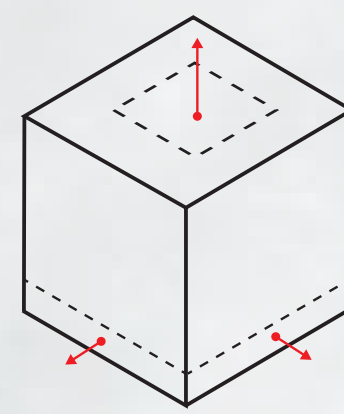
ADDING VOLUME



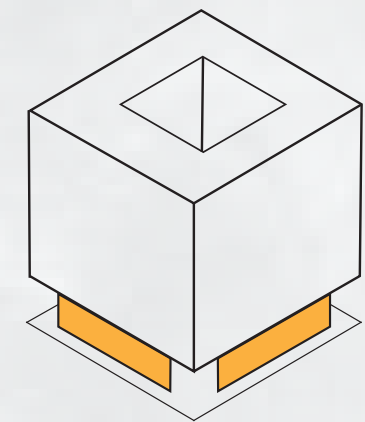
STACKED VOLUME



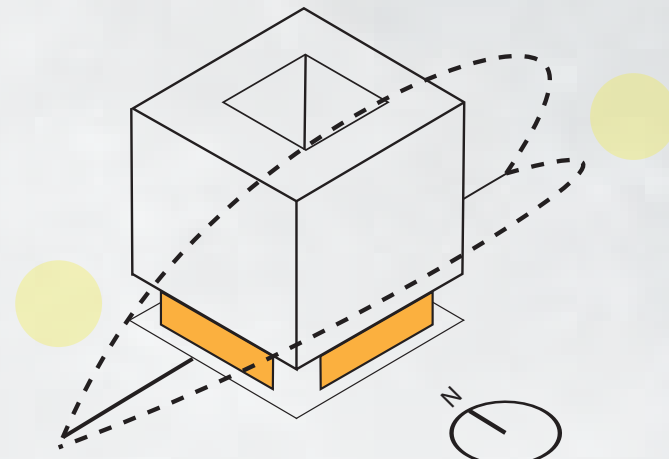
BASIC VOLUME



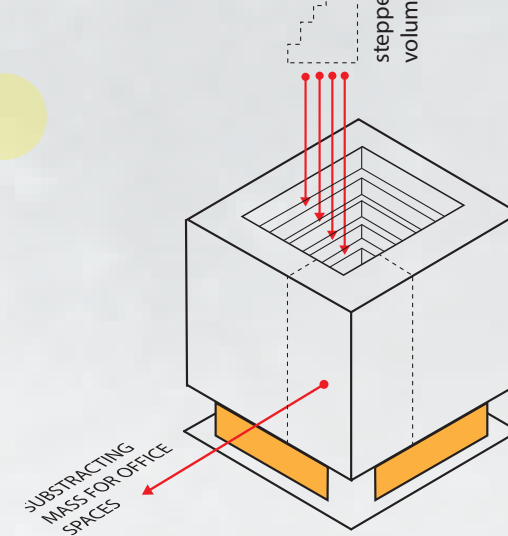
ELEVATED MASS



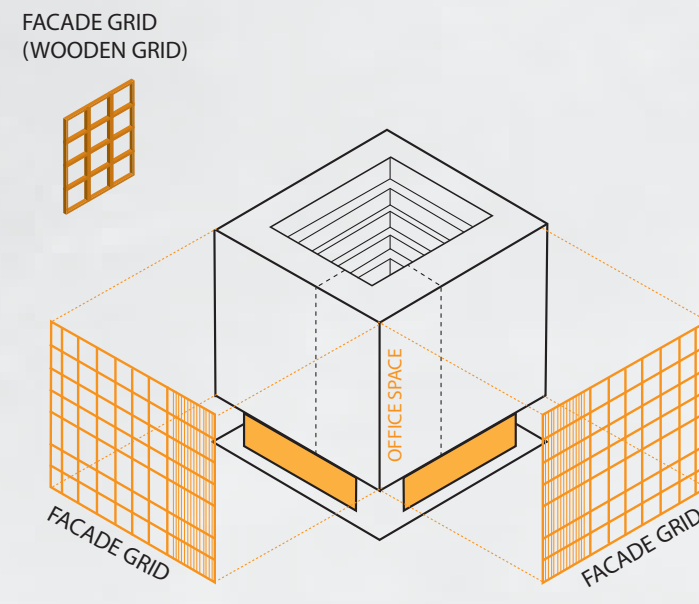
SOLAR IMPACT



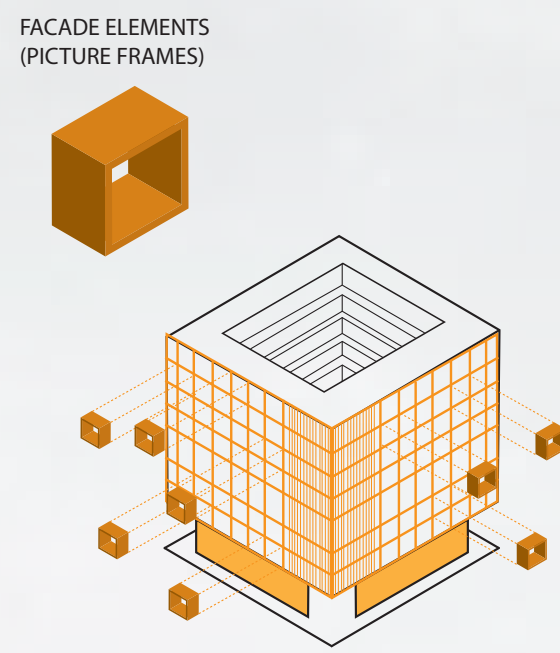
CUTTING VOLUME



FACADE GRID



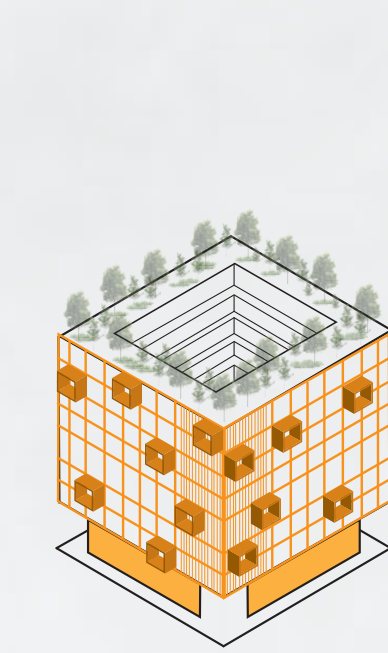
PICTURE FRAMES



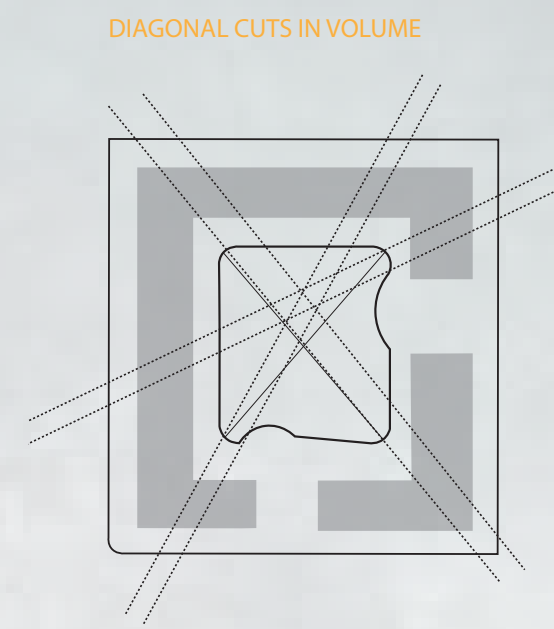
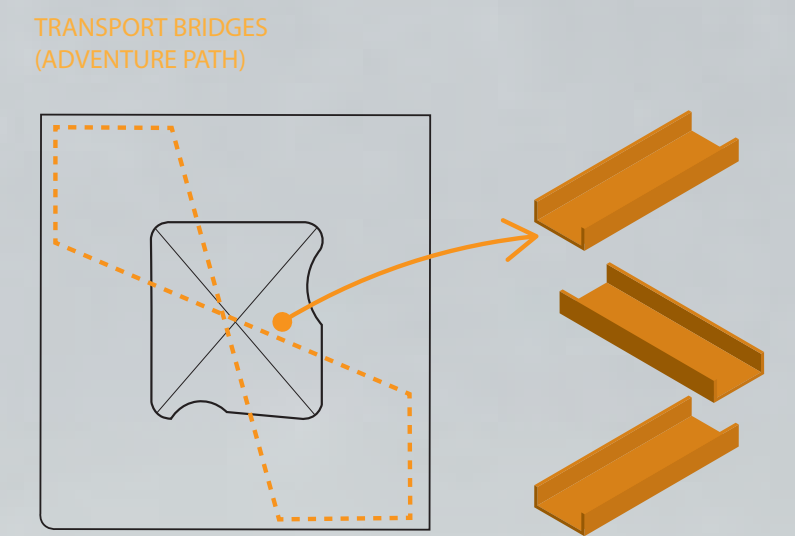
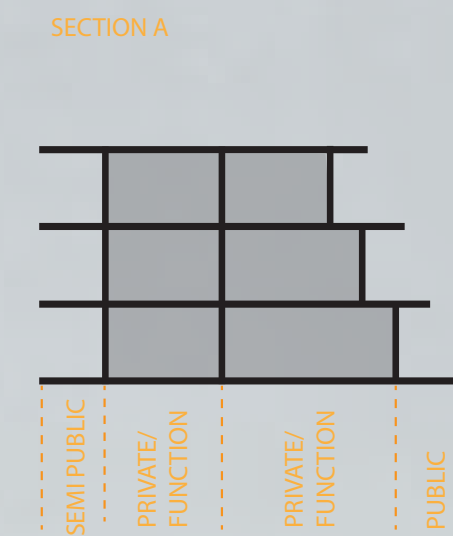
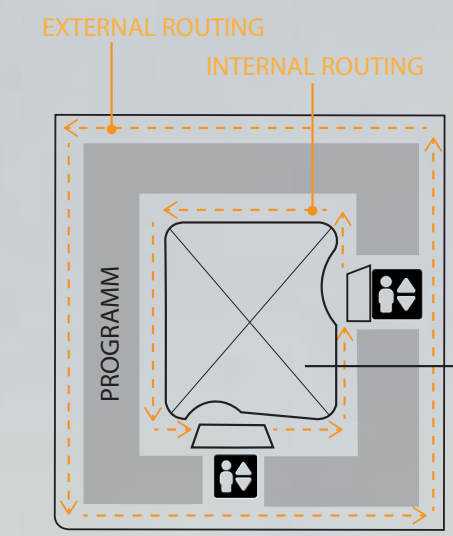
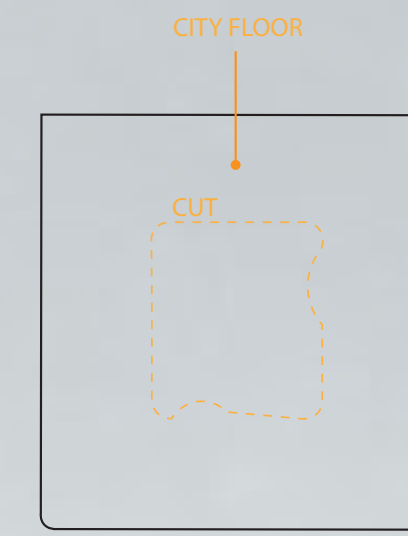
ADDING GREEN



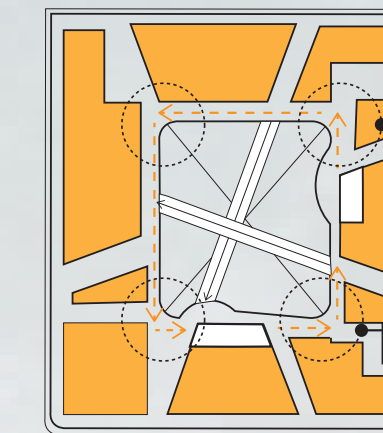
ROOF PARK (URBAN GREEN)



## ROUTING CONCEPT



FLOOR PLAN PRINCIPLES



PUBLIC HOTSPOTS BORDERING ADVENTURE PATHWAY



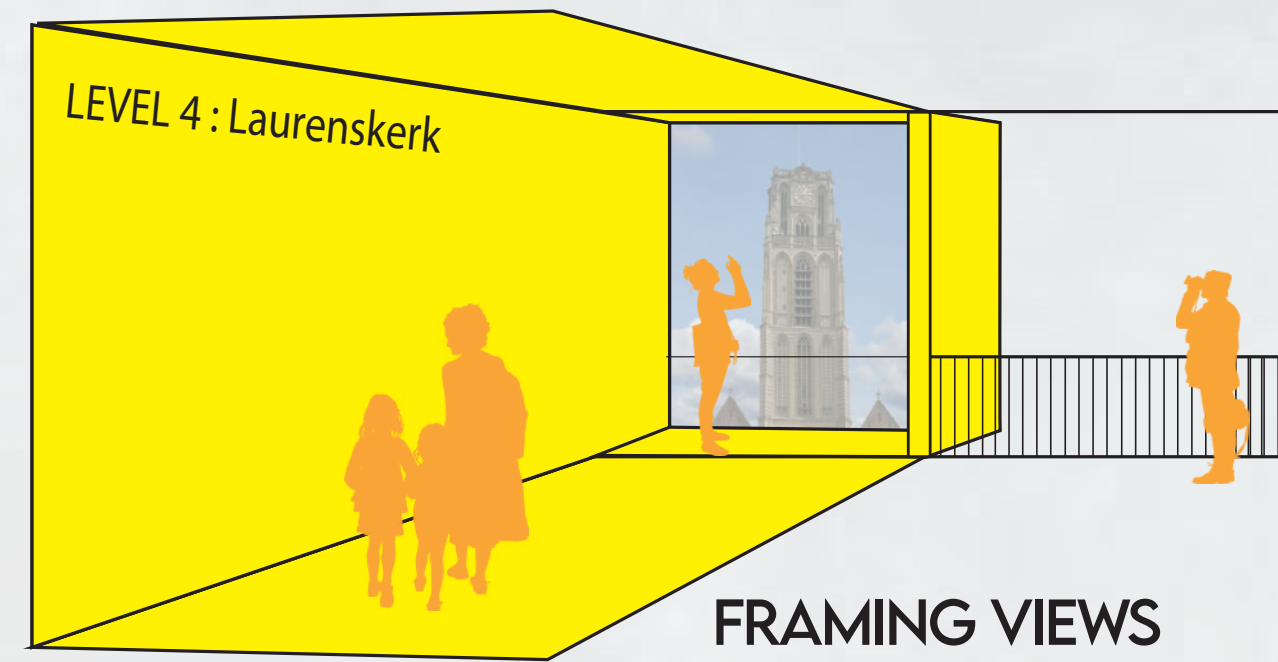
RESULT



ARCHITECTURE



## PICTURE FRAMES



FRAMING VIEWS



## ARCHITECTURE

THE FLOOR PLANS ARE CUTOUT FROM THE CENTRAL PART IN AN ORGANIC WAY THAT ENSURES A SENSE OF FLUENCY WHEN VISITING THE BUILDING. THIS CONTRAST TO THE STRUCTURED OUTER FACADE. THE OUTER FACADE OF THE BUILDING IS DETERMINING THE BORDER BETWEEN THE CITY BLOCK AND THE CITY. THE FACADE CONCEPTS PLAY WITH LAYERS AND VERTICALITY, THE FLOOR REPRESENTS THE HORIZONTAL ELEMENT AND THE FACADE REPRESENTS THE VERTICAL ELEMENT. THE COMBINATION CREATES A PLAYFULL INNER WORLD THAT FORMS THE CONNECTION.

## FACADE

THE FACADE DESIGN CONCEPT IS MORE INTRACATE THEN FIRST GLANCE WOULD SUGGEST, THE FACADE IS MADE UP OUT OF MULTIPLE LAYERS. THESE LAYERS MAKE IT POSSIBLE TO CREATE DIFFERENT ATMOSPHERES IN THE SAME FACADE CONFIGURATION. THE FLOORSCAPES CREATE THE HORIZONTAL ELEMENT OF THE GRID LIKE FACADE STRUCTURE. THESE LONG HORIZONTAL LINES WILL BE PUT BEHIND TE VERTICAL ELEMENTS. THIS WILL EMPHASISE THE FLOORSCAPES.

THE VERTICAL ELEMENTS ARE PLACED IN FRONT OF THE FLOOR TO STIMULATE THE VERTICALITY IN THE FACADES AND CREATE A BALANCE BETWEEN THE HORIZONTAL ELEMENTS. AROUND THE BUILDING ON DIFFERENT FLOORS THE PICTURE FRAMES HIGHLIGHT DIFFERENT VIEWS. THESE VIEWS ARE "FRAMED" TO ENHANCE TE EXPERIENCE FOR VISITORS OF THE CITY BLOCK. THE PICTURE FRAMES ARE PLACED THROUGHOUT THE PUBLIC DOMAIN OF THE CITY BLOCK. THIS FLEXIBILITY IN THE FACADE HELPED TO BE AS FLEXIBLE AS POSSIBLE

## PICTURE FRAMES

WHEN TRANSITIONING THROUGH THE CITY BLOCK THE CONTEXT OF THE SITE IS KEY. THE PICTURE FRAMES ARE ATTACHED TO THE BUILDING AND HIGHLIGHT VARIOUS SPACES AND BUILDINGS IN THE SURROUNDINGS. THE SOCIAL STREETS CONNECT CITY FLOORS AND SOCIAL STREETS THAT GUIDE VISITORS AND USERS TOWARDS THESE DIFFERENT HIGHLIGHTS. THE PICTURE FRAMES GU-IDE VIEWS AND OFFER AN EXPERIENCE ON THE POINT WERE THE VOID BLURS INTO THE SURROUNDINGS. THE VOID CONNECTS THE BUILT ENVIRONMENT TO DIFFERENT SPACES AND ATMOSPHERES.

## DESIGN CONCEPT

## FACADE CONCEPT

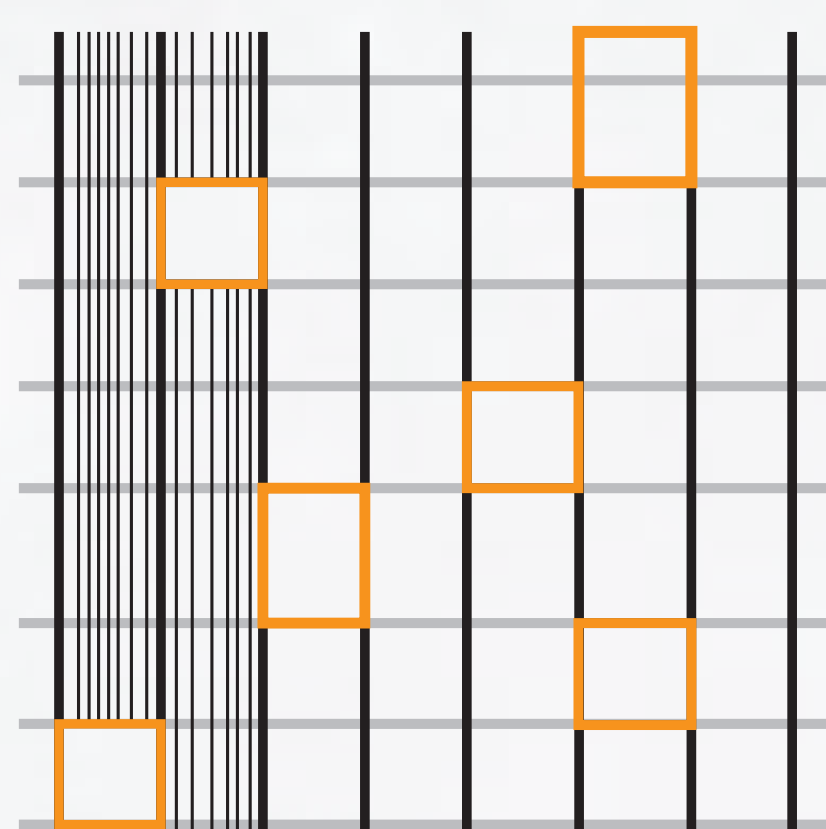
HORIZONTAL ELEMENTS :  
FLOOR SCAPES



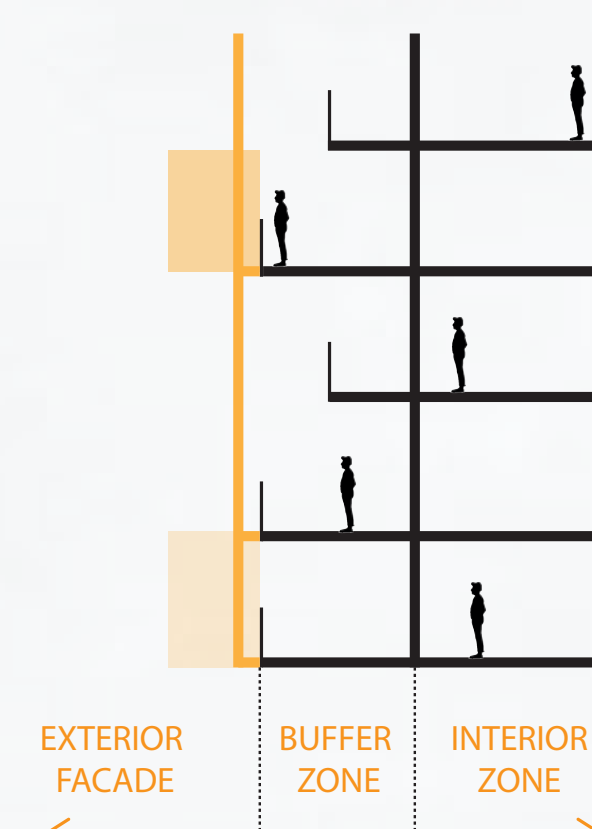
VERTICAL ELEMENTS :  
LINEAR FACADE



FACADE E GRID SYSTEM :  
PICTURE FRAMES



LAYERED FACADE :  
INTERACTING WITH THE CITY



LAYERED FACADE



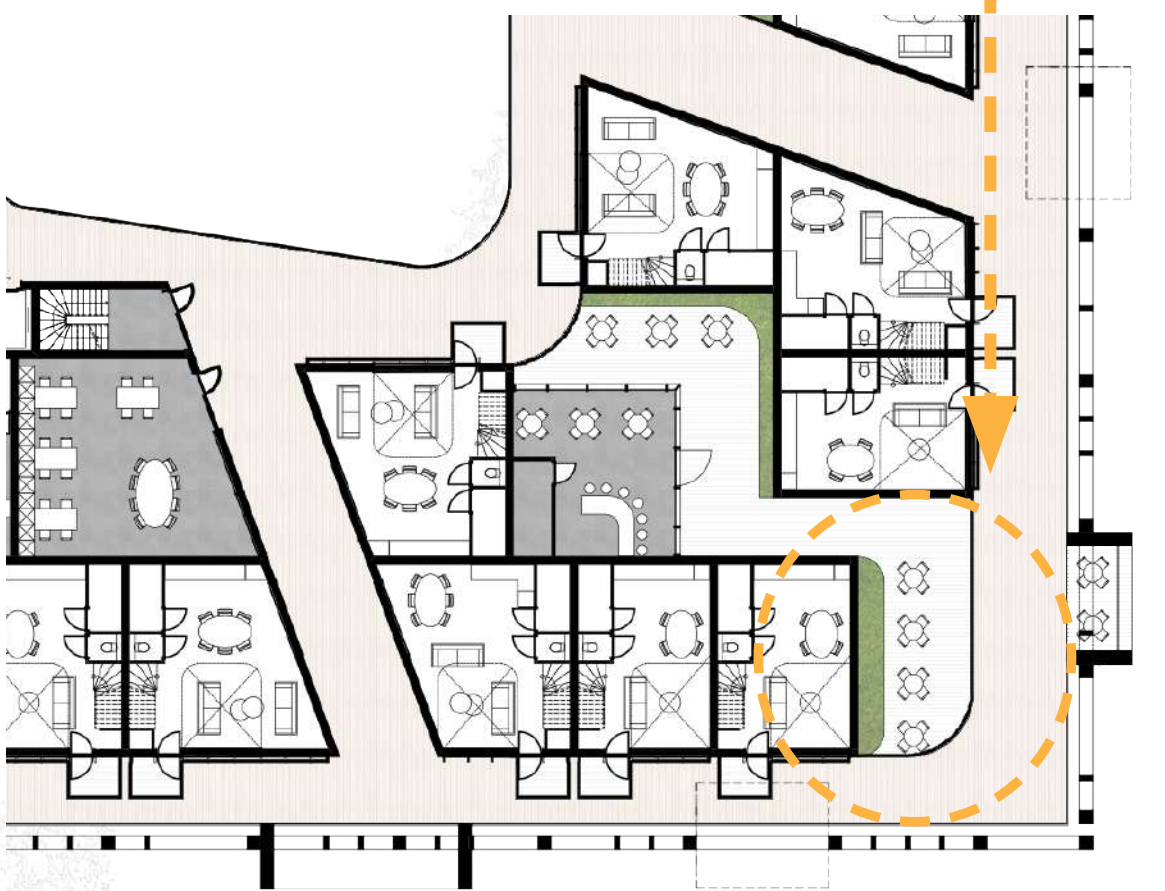


# HORIZONTAL SECTION

## PLAESNT PUBLIC SPACES



STIMULATING INTERACTION IS THE CORE ELEMENT OF THE CITY BLOCK. THE PUBLIC SPACES IN THE CITY BLOCK PROVIDE PLACES FOR PEOPLE TO INTERACT. THESE SHARED FACILITIES AND PUBLIC SPACES ARE GREEN & TRANQUIL.



## MIXING FUNCTIONS

CONFIGURING THE FLOOR PLANS GOES HAND IN HAND WITH THE SCULPTING OF THE VOID, THE FUNCTION IS PLACED IN THE MOST SUITABLE SPOT. THIS CREATES A NATURAL CITYSCAPE THAT FEELS NATURAL. THE DWELLINGS AND FUNCTIONS CREATE THE BUFFER ZONE BETWEEN THE PUBLIC DOMAIN, THE SEMI-PUBLIC DOMAIN AND THE PRIVATE DOMAIN. THE CITYSCAPES ARE CONFIGURED IN A WAY THAT GETS THE MOST NATURAL DAYLIGHT, THE BALANCE BETWEEN PUBLIC AND PRIVATE AND OVERALL FUNCTIONALITY. THE SPACES IN THE CITY BLOCK THAT ARE NOT SUITABLE FOR LIVING WILL FORM THE SITES FOR FUNCTIONS AND SHARED FACILITIES. THE OVERALL POWER OF THE CITY BLOCK IS THE CAPACITY TO FACILITATE LIVING FUNCTIONS AND PUBLIC FUNCTIONS IN A SYMBIOTIC WAY THAT LIFTS THE OVERALL QUALITY OF THE CITY BLOCK. THE SAME GRID THAT FACILITATES LIVING ENVIRONMENTS IS ALSO SUITABLE FOR SMALL BUSINESSES AND OTHER FUNCTIONS TO THRIVE IN, THIS FACTOR OF FLEXIBILITY HELPS TO CREATE A STABLE INCOME FOR THE LANDLORD AND INVESTORS.

THE CITYSCAPES CAN BE CHANGED IN A DYNAMIC WAY THAT SHIFTS BETWEEN THE SPECIFIC NEEDS OF ITS TIMEFRAME. THE DWELLINGS HAVE A SPECIFIC MEASUREMENT BETWEEN THE CLT LOAD-BEARING ELEMENTS THAT ENABLE THE PRACTICAL USE OF THE LIVING ACTIVITIES. THIS SAME MEASUREMENT CAN BE ADOPTED FOR DIFFERENT FUNCTIONS, ALSO THE COMBINATION OF MULTIPLE DWELLINGS CAN BE ADOPTED TO CREATE MORE SPACE WHEN DEMANDS REQUIRE IT.

## LEGEND



DWELLINGS



OFFICE SPACES & SMALL BUSINESSES



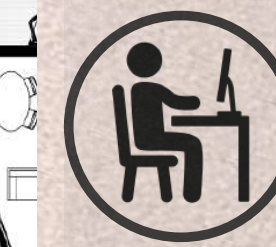
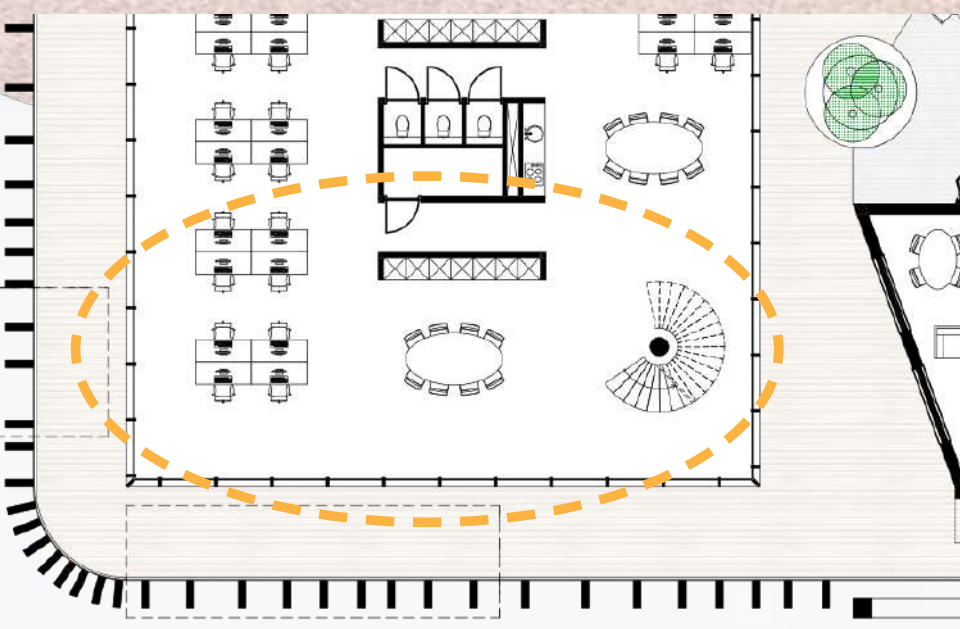
FOOD & DRINKS  
SMALL SHOPS

## ATRIUM : VISUAL CONNECTION



FLUID VOID

## LARGE OFFICE SPACES : WORKING WITH A VIEW



THE LARGE VOLUME OF OFFICE SPACES ARE CONNECTED VIA INTERNAL STAIRCASES. THE INTERNAL VIEWS ARE CHANGING ON EVERY LEVEL DUE TO THE CONFIGURATION OF THE FACADE. THE OFFICES CAN BE RENTED IN WHOLE FLOORS, IF A COMPANY NEEDS TWO FLOORS OR MORE THIS CAN BE ARRANGED



## SMALL SCALE BUSINESS





# BLOCK R

## VERTICAL SECTION

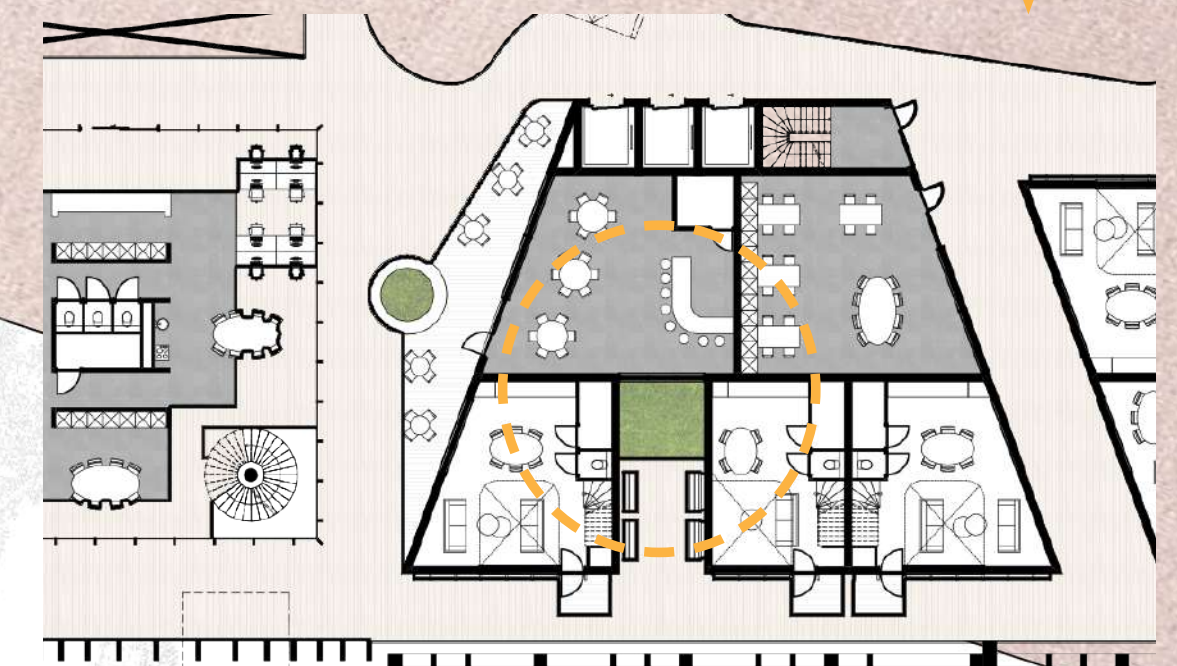
### VOID AS THE CONNECTIVE ELEMENT

THE VOID WILL FUNCTION AS THE GENERAL CONNECTOR BETWEEN THE PEOPLE IN THE CITY BLOCK, THE FUNCTIONS AND THE SURROUNDING CITY. THE QUALITY OF THE ARCHITECTURE CONTRIBUTES TO THE QUALITY OF THE VOID AND VICE VERSA. THEREFORE THE VOID IS NOT CONFINED TO BORDERS BUT IS GUIDED BY ARCHITECTURE IN A WAY THAT SHAPES THIS FLUENT CONNECTIVE SPACE THAT CREATES THIS EXTRA QUALITY FOR INHABITANTS AND VISITORS OF THE CITY BLOCK. THE VOID HAS MULTIPLE SHAPES AND APPEARANCES THROUGHOUT THE CITY BLOCK, THE LARGER SCALE VOID SPACES CAN BE PERCEIVED AS PUBLIC SPACES SUCH AS PARKS AND THE SMALLER VOID CAN BE SHARED SPACES IN BETWEEN FUNCTIONS.

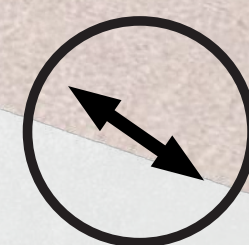
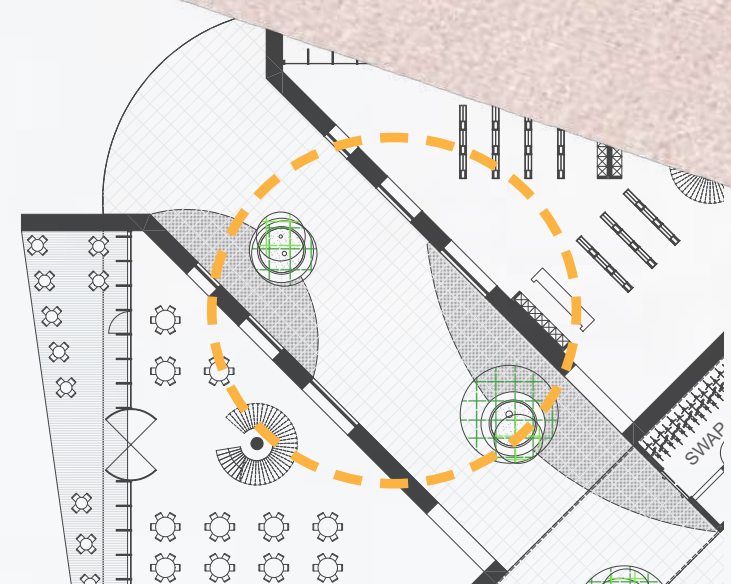
### UTILISING THE INBETWEEN SPACES



STIMULATING INTERACTION IS THE CORE ELEMENT OF THE CITY BLOCK. THE PUBLIC SPACES IN THE CITY BLOCK PROVIDE PLACES FOR PEOPLE TO INTERACT. THESE SHARED FACILITIES AND PUBLIC SPACES ARE GREEN & TRANQUIL.



### URBAN CONNECTION : PROVIDING A URBAN EXPERIENCE



THE URBAN CONNECTION THAT IS HORIZONTALLY FORMED WILL CREATE A SUBTLE TRANSITION UNDER THE CITY BLOCK. THE LARGE ATRIUM WILL ENLIGHTEN THE PEOPLE PASSING THROUGH AND THIS WILL LURE PEOPLE INTO THE CITY BLOCK. THE TRANSITION SPACE HAS DIRECT LINKS BETWEEN THE COMMERCIAL SPACES AND CONNECTS THE CITY BLOCK BY ELEVATORS.



### LEGEND



DWELLINGS



OFFICE SPACES & SMALL BUSINESSES



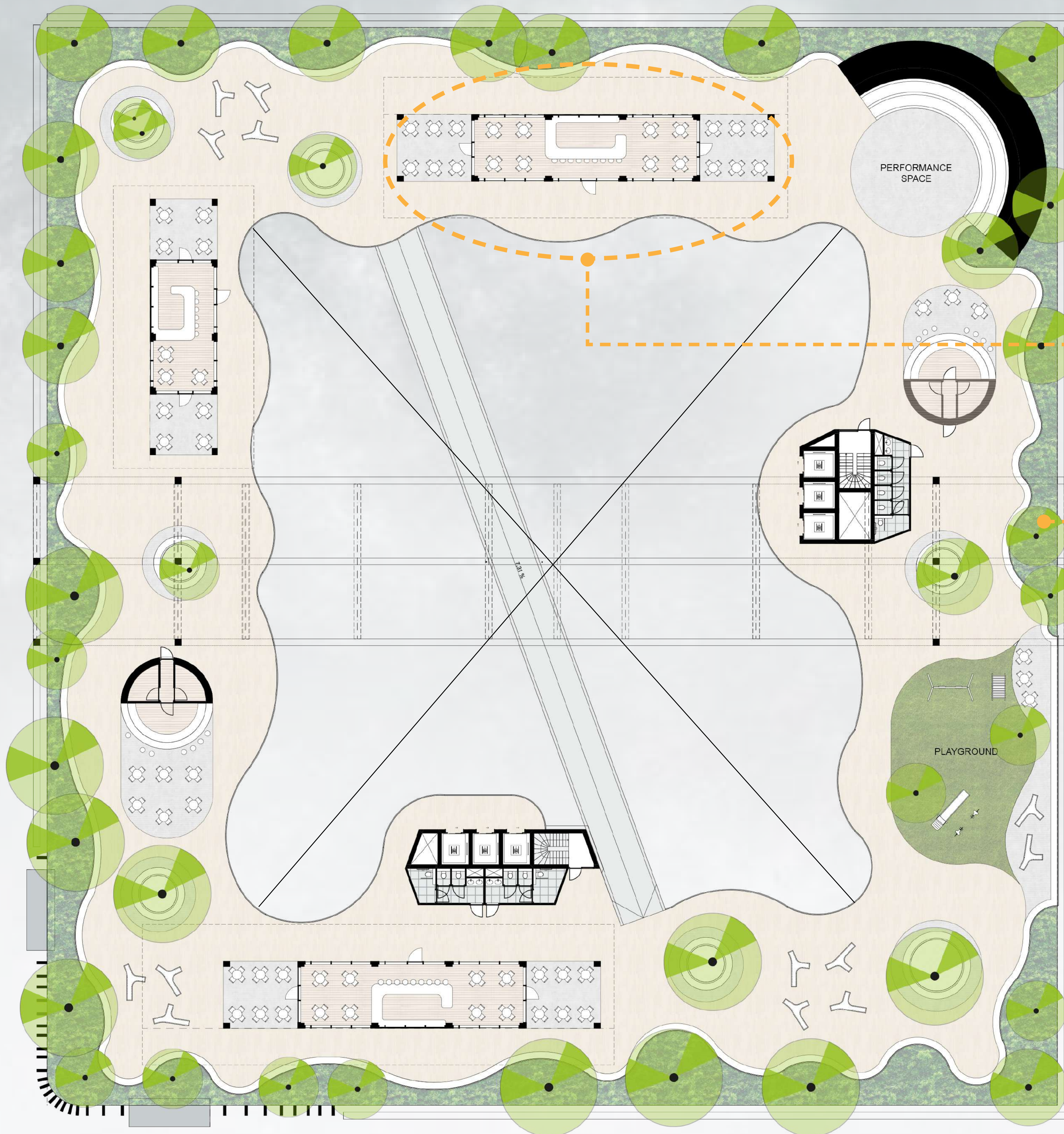
FOOD & DRINKS SMALL SHOPS



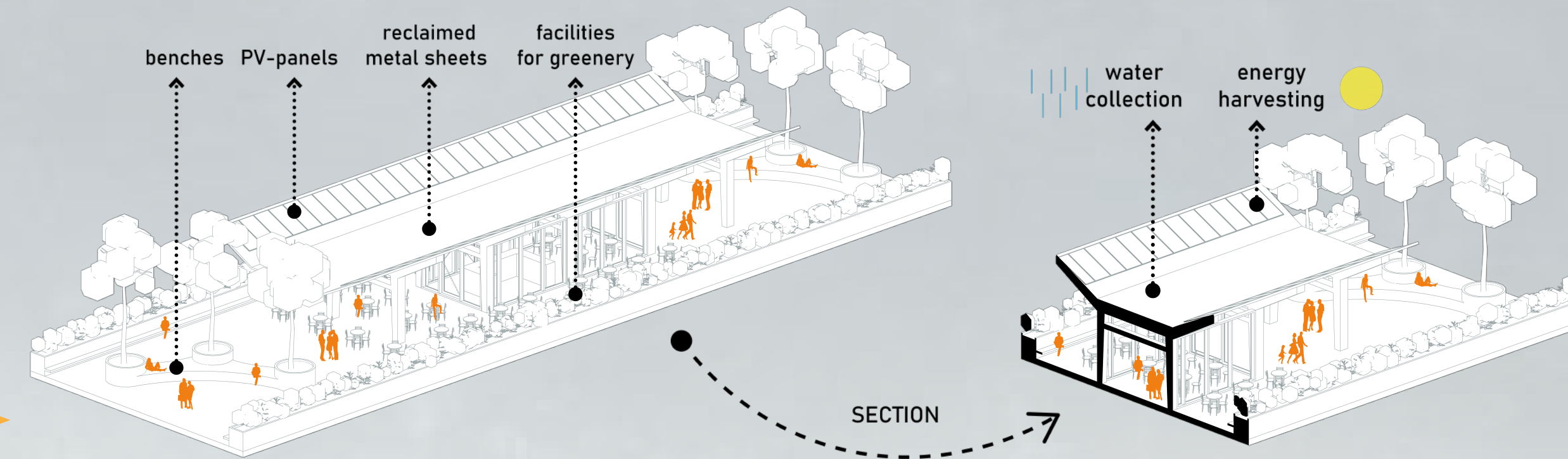
# BLOCK

# R

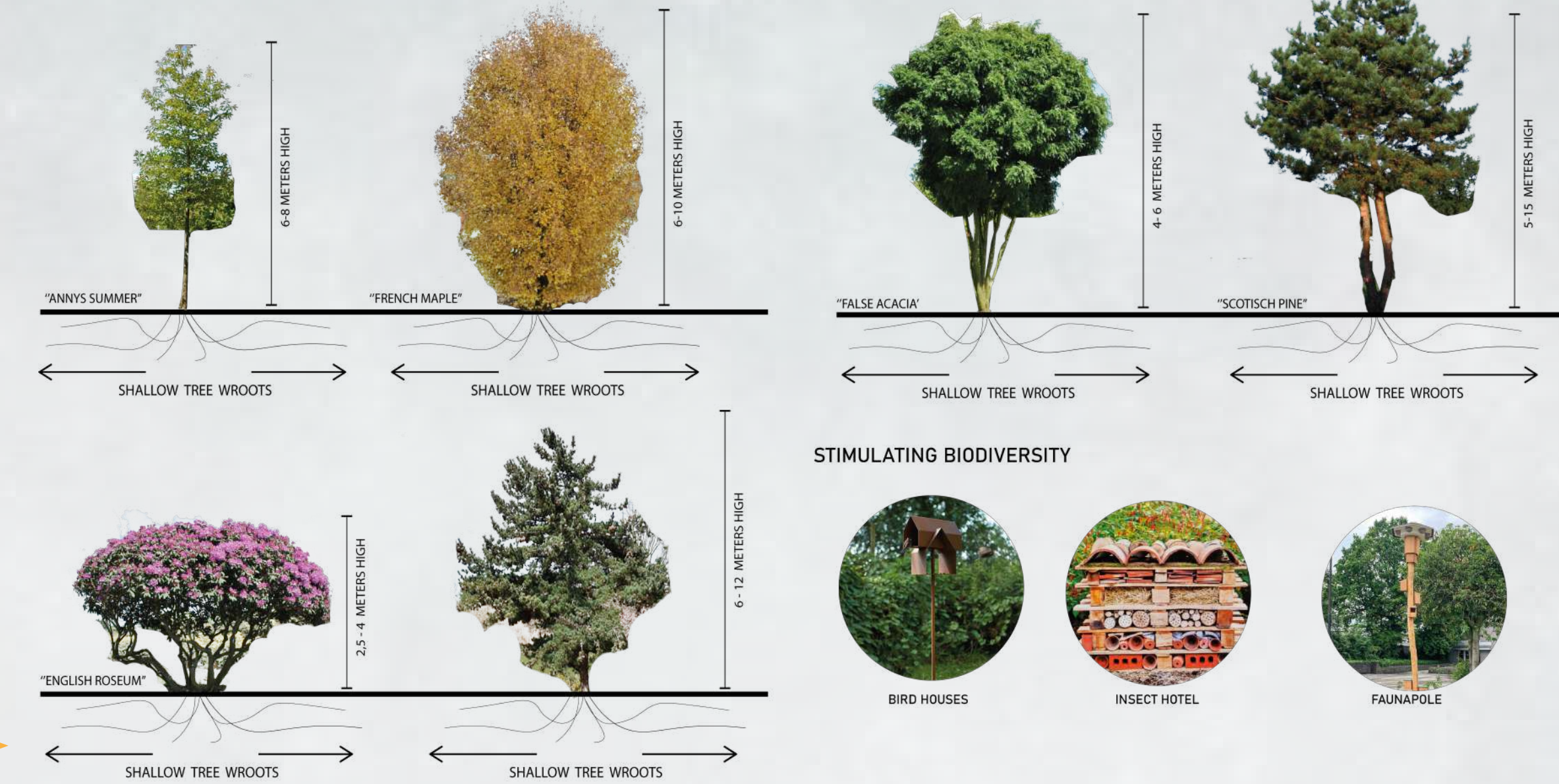
THE ROOF PARK OFFERS A GREEN OASE WITH PANORAMIC VIEWS ACROSS THE CITY OF ROTTERDAM TO BE ENJOYED BY ALL



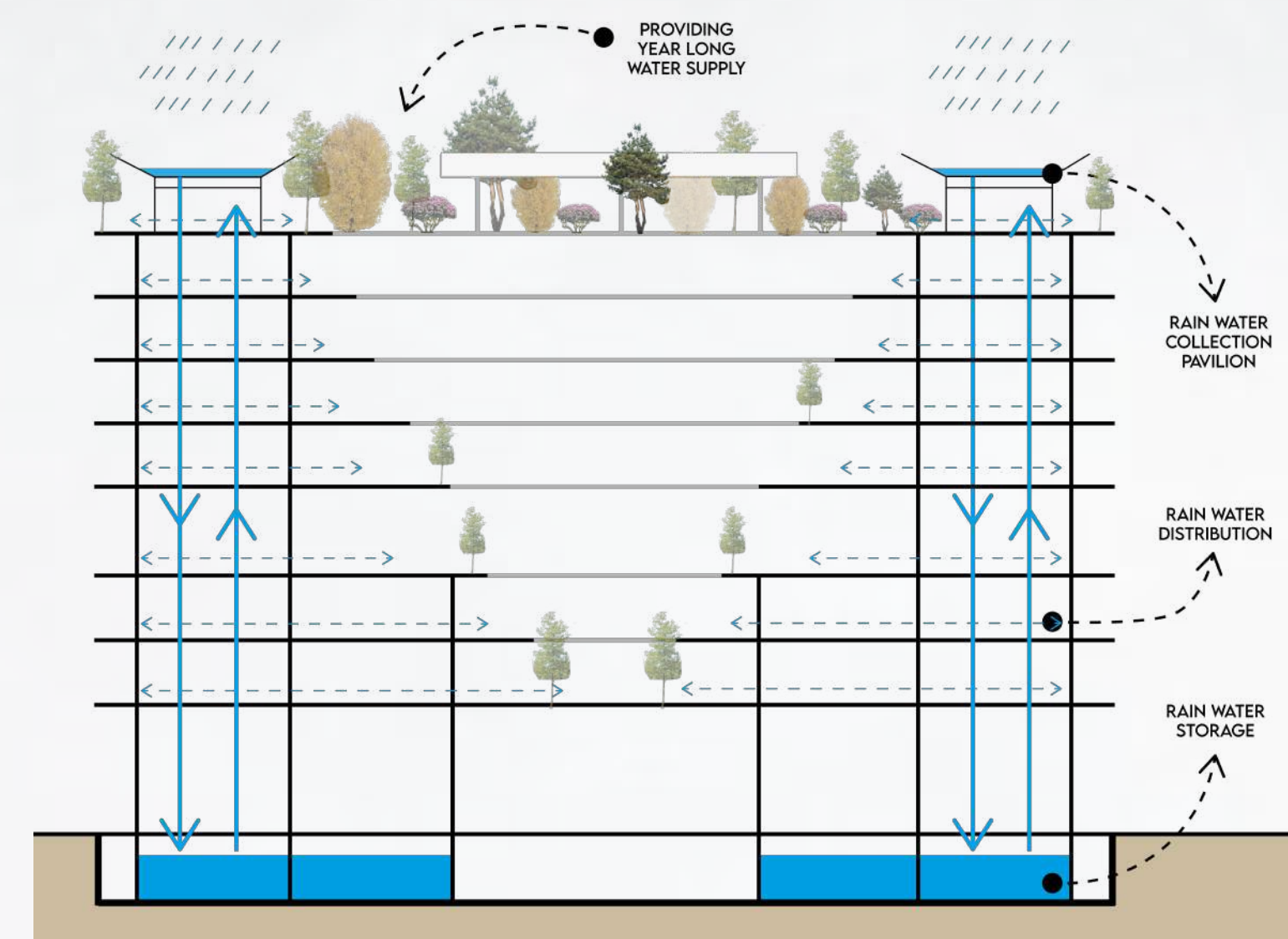
## ROOF PAVILION



## STIMULATING BIODIVERSITY



## WATER MANAGEMENT



DUE TO RAPID URBANIZATION, THE NEED FOR URBAN WATER BUFFERS BECOMES INCREASINGLY IMPORTANT AS A SOLUTION FOR HEAT ISLANDS THAT START TO FORM AND WILL BECOME EVEN STRONGER SOON. COLLECTING WATER AND EFFECTIVELY USING IT FOR DIFFERENT PURPOSES WILL HELP TO STIMULATE THE RESILIENCE OF THE CITY BLOCK AND PREPARES THE BUILDING FOR EXTREMELY WET TIMES BUT ALSO FOR EXTREME DRAUGHTS.

THE UNPREDICTABILITY OF THE CLIMATE CREATES A NEED FOR PREPARING FOR THE MOST EXTREME CIRCUMSTANCES AND THEREFORE THE WATER MANAGEMENT SHOULD BE PARTLY BASED ON THE CAPACITY OF THE SEWER SYSTEM BUT SHOULD ALSO CONSIST OF NATURAL WATER BUFFERS SUCH AS URBAN GREENERY AND PARKS.

THE ROOF PARK OFFERS A BIG OPPORTUNITY TO TACKLE THESE PROBLEMS AND ALSO CONTRIBUTE TO THE ARCHITECTURAL QUALITY OF THE CITY BLOCK. THE MAIN CHALLENGE IS TO BE PREPARED FOR THE EXTREMES AND KEEP THE NEWLY FORMED BIOTOPE INTACT. THEREFORE A HYBRID SYSTEM IS DESIGNED THAT STORES WATER DURING THE WET TIMES AND CAN FEED THIS BACK INTO THE SYSTEM WHEN THERE ARE TIMES OF EXTREME DROUGHT. THE ROOF PARK WILL BE ABLE TO SURVIVE DURING THE HARSH TIMES AND FLOURISH THROUGHOUT THE REST OF THE YEAR. THE MAIN BODY OF WATER STORAGE WILL BE HOUSED IN THE BASEMENT AND CAN PROVIDE ENOUGH WATER FOR THE SUMMERS IN THE NETHERLANDS.

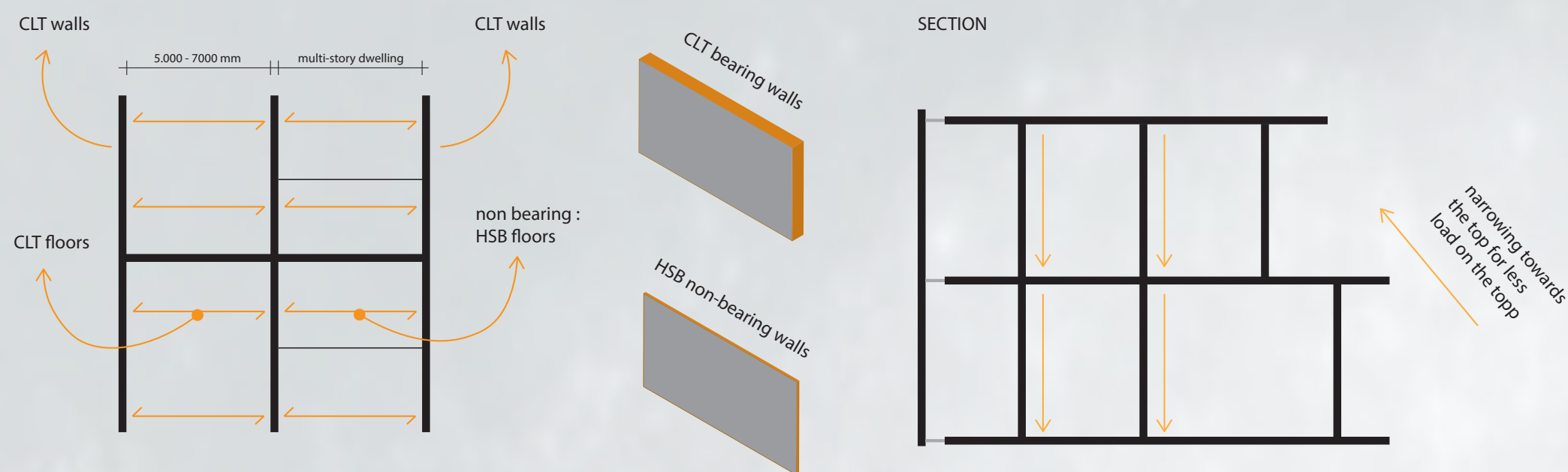


# BLACK R

COMBINING DESIGN INTERVENTIONS AND PROVIDING A TECHNICAL SOLUTION CREATES A FEASIBLE PROJECT THAT IS ALSO BUILDABLE AND SAFE.

CLT BUILDING

WOOD & MORE

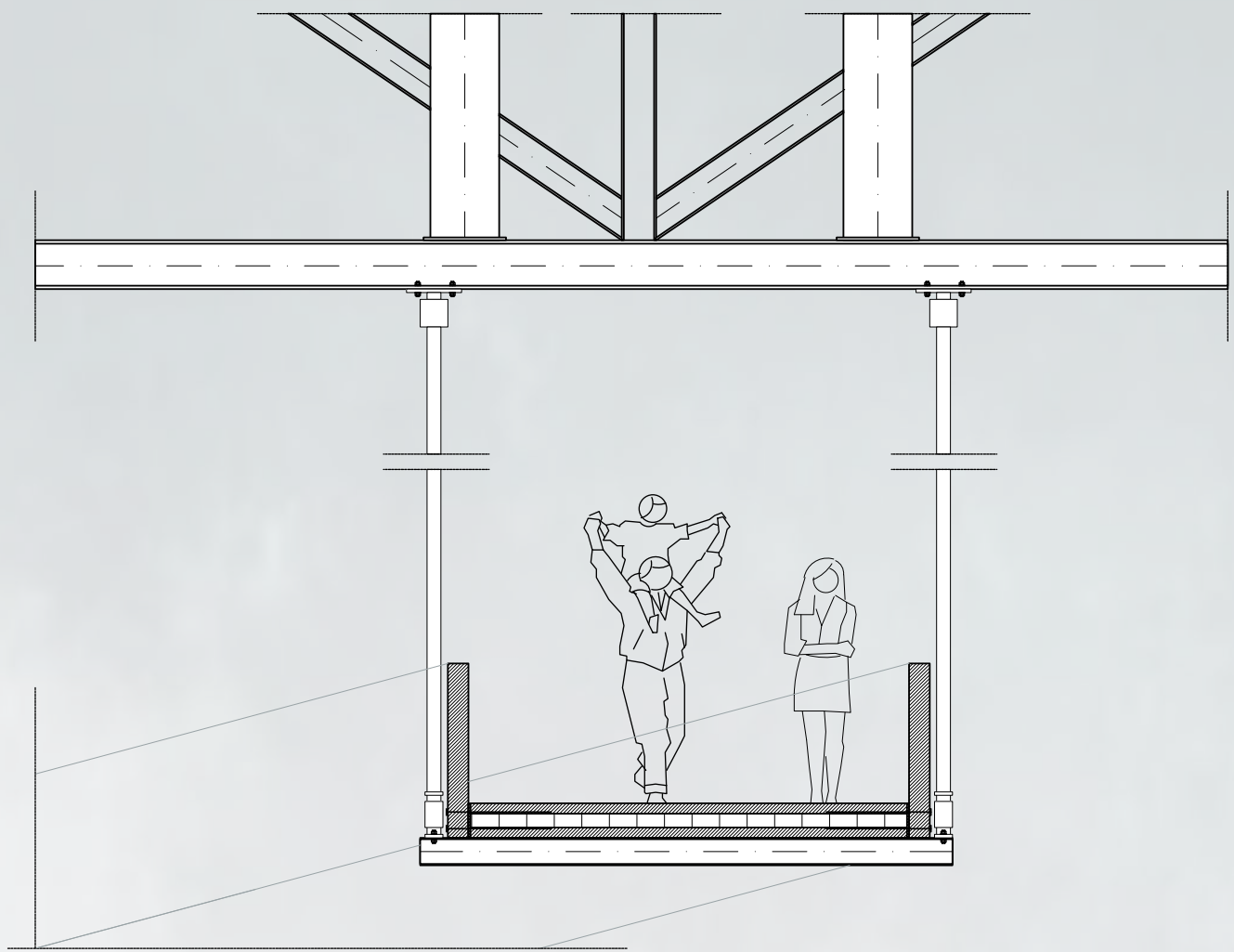


## BENEFITS

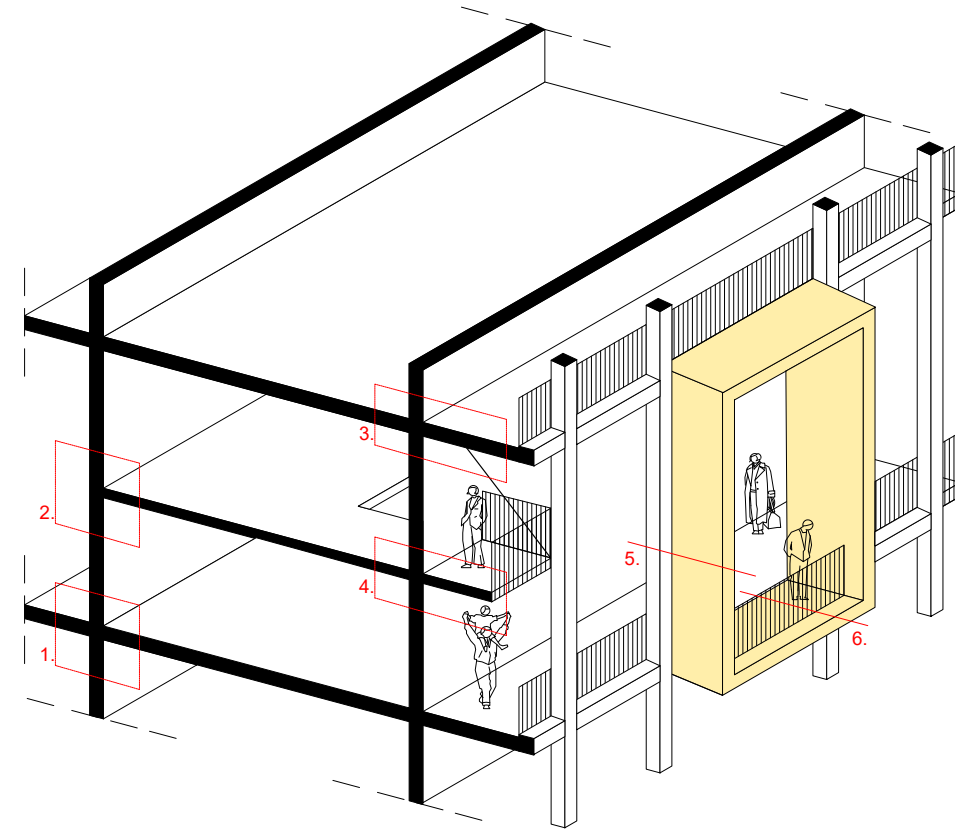
THE MAIN BUILDING MATERIAL AND METHOD THAT HAS BEEN CHOSEN IS CLT, (CROSS-LAMINATED TIMBER), THE LOOK AND FEEL AND ENVIRONMENTAL BENEFITS SHAPED THIS DECISION. THE PRODUCTION OF BUILDING MATERIALS ACCOUNTS FOR 11% OF GLOBAL GREENHOUSE GAS EMISSIONS. BECAUSE CLT IS MADE OF WOOD, IT CAN STORE AND SEQUESTER CARBON OVER THE LIFE OF THE BUILDING. RECENT STUDY ALSO SHOWS THAT CLT STRUCTURES DUE TO THEIR HIGH DENSITY CAN WITHSTAND FIRE FOR OVER 90 MINUTES BEFORE COLLAPSING.

UNLIKE CONCRETE AND OTHER CONVENTIONAL BUILDING MATERIALS, CLT PANELS CAN BE PREFABRICATED IN AN EXTERNAL PRODUCTION FACILITY AND THEN INSTALLED IN A SHORTER TIME BECAUSE FEWER JOINTS ARE REQUIRED BETWEEN THE INNER SUPPORT ELEMENTS. WITH CLT, A CONSTRUCTION CREW CAN LIFT THE PREFABRICATED PANELS INTO PLACE, APPLY CONNECTORS AND THEN JOIN THE COMPONENTS TOGETHER, WHICH ALSO MAKES THEM EASIER TO DISMANTLE AND INCREASES THE FLEXIBILITY OF A BUILDING.

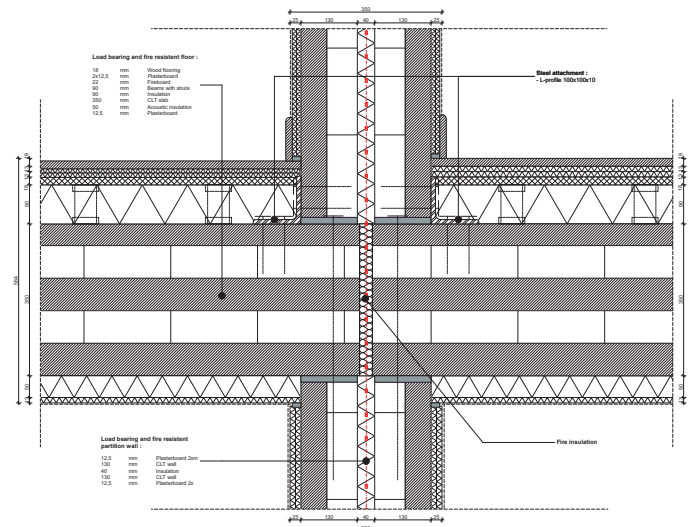
## KEY DETAILS



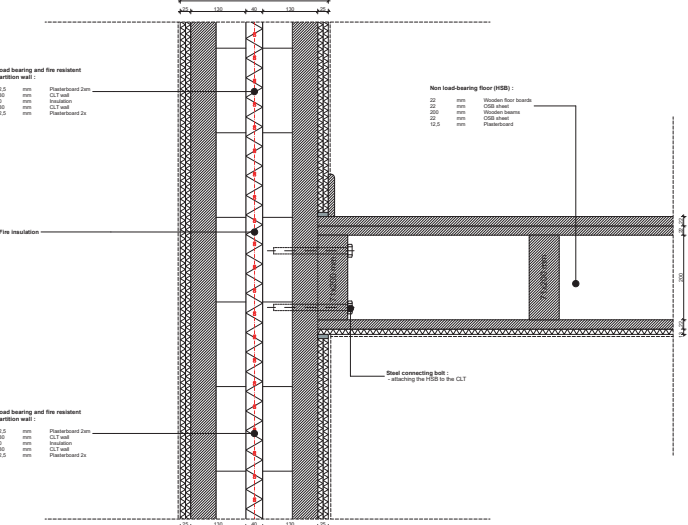
LIGHTWEIGHT STEEL CABLE SYSTEM TO SUSPEND THE PATHWAYS



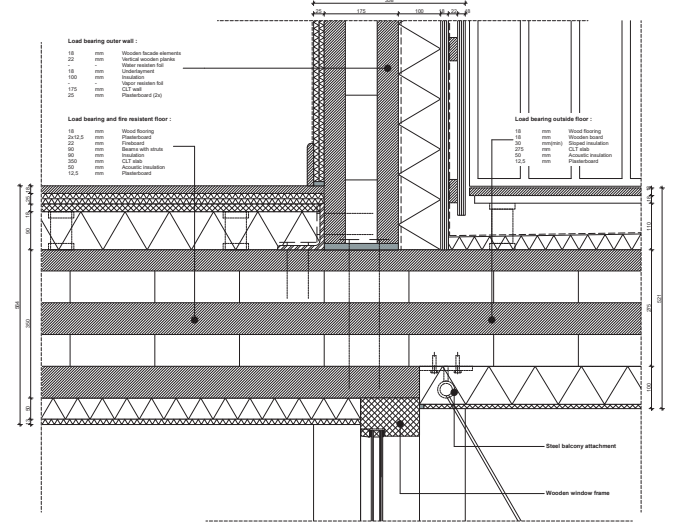
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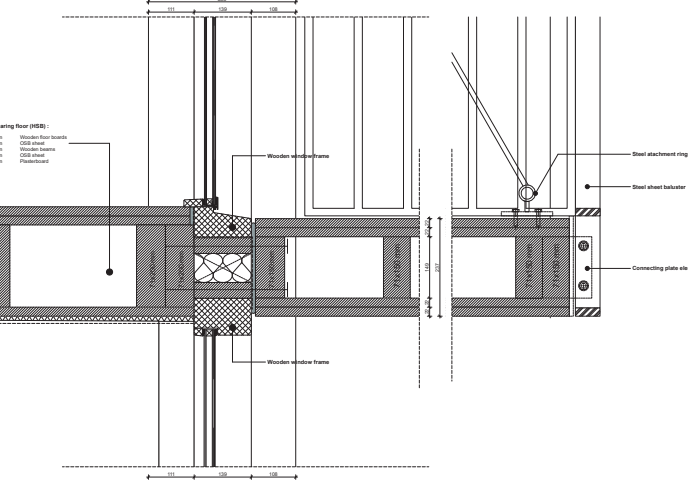
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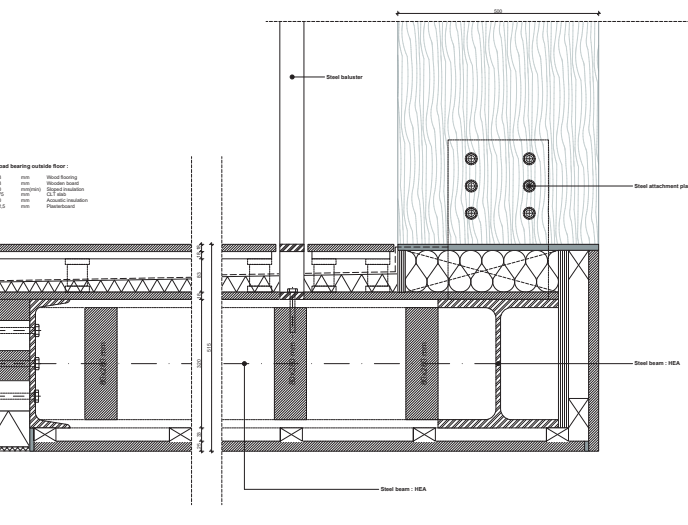
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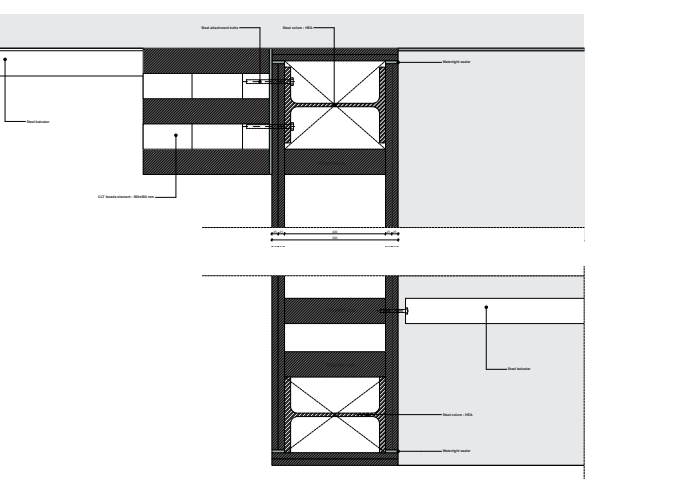
4.



5.



6.



BRIGHT YELLOW

MARMOLEUM

RECLAIMED METAL

WOOD

CLT WOOD

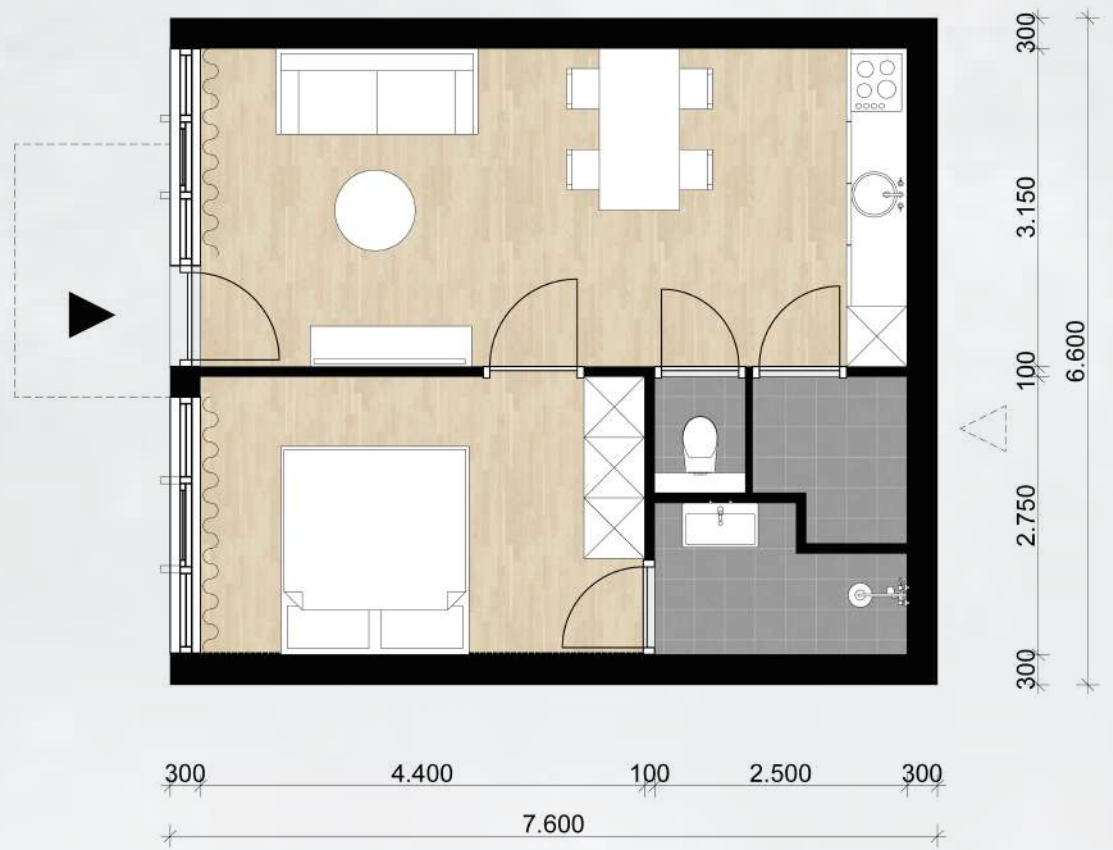


# BLOCK

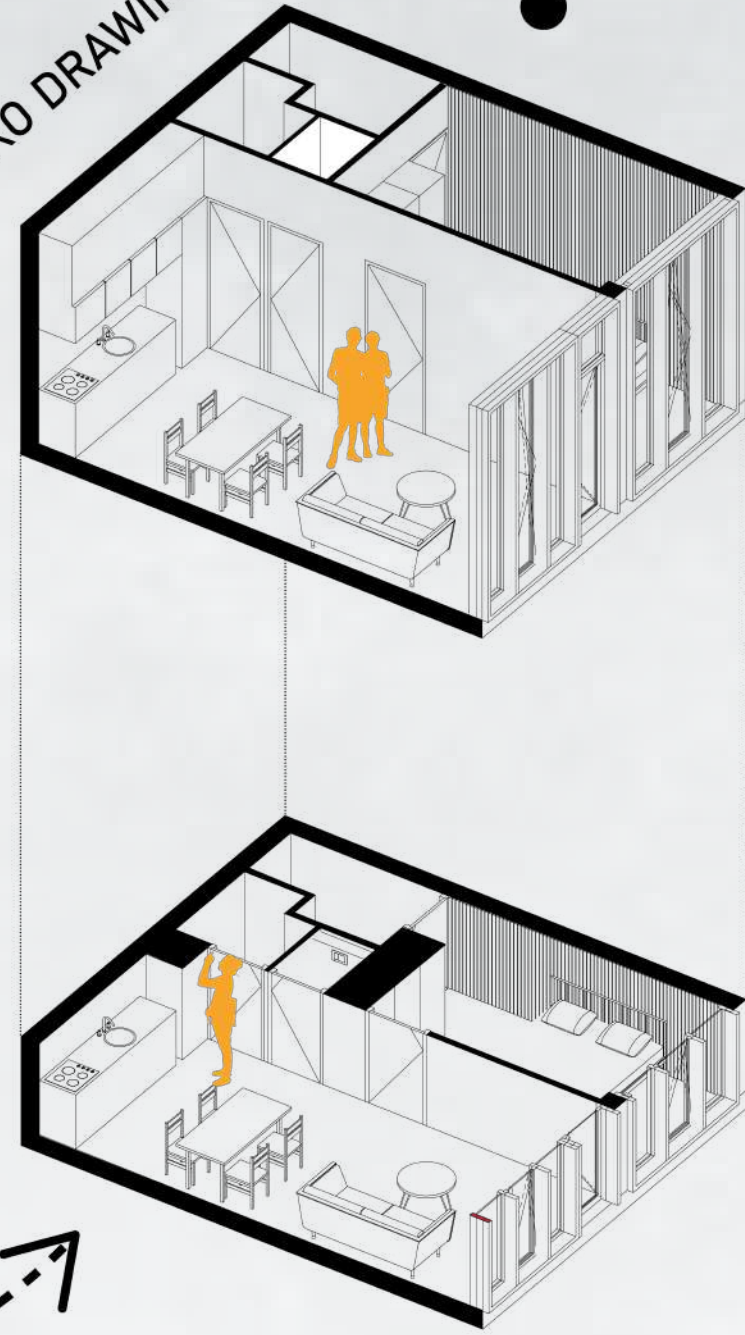
# R

COMPACT DWELLINGS REACT TO THE NEEDS CAUSED BY POPULATION GROWTH AND CENTRALISATION. THESE APARTMENTS CREATE PLEASANT DWELLINGS FOR ALL.

GROUND FLOOR



AXO DRAWINGS



RENDER



## ONE STOREY STUDIO APARTMENT

TARGET GROUP : DETAILS :



FLOOR AREA : 42 M<sup>2</sup>  
VOLUME : 147 M<sup>3</sup>  
BEDROOMS : 1  
HEIGHT : 3,5 M

SPECIAL FEATURES :

- COMPACT HOUSING
- INTERNAL HEIGHT
- POSSIBILITY FOR ENTRANCE AT THE BACK & BALCONY

## COMPACT LIVING

COMPACT LIVING IN THE CITY BLOCK MEANS COMPACT APARTMENTS, THE APARTMENTS IN THE CITY BLOCK VARY IN SIZE FROM 40 TO 75 SQUARE METERS. THE DIFFERENCE IN SIZE CAN BE EITHER DEFINED BY LOCATION IN THE CITY BLOCK OR CAN DIFFER BY HEIGHT. THE SMALLEST APARTMENTS ARE ONE-STOREY STUDIOS AND THE BIGGEST APARTMENTS COUNT THREE FLOORS.

THE ONE-STUDIO APARTMENTS CONTAIN ALL THE NECESSARY FACILITIES AND PROVIDE PLEASANT LIVING EXPERIENCES. THE CEILING HEIGHTS CONTRIBUTE TO A SPACIOUS FEELING IN THE INTERIOR. THIS APARTMENT IS A EXCELLENT AND AFFORDABLE DWELLING FOR STARTERS, SINGLES AND ELDERLY COUPLES THAT VALEUA A CENTRAL SURROUNDING.

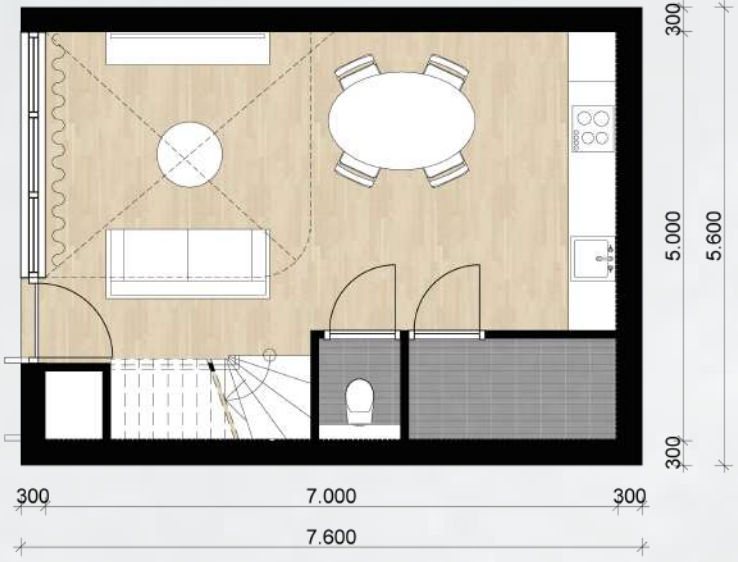
THE TREE-STOREY STUDIO MAKES USE OF THE HEIGHT TO PROVIDE AN EXTRA TWO SETS OF FLOORS. THE MAIN BENEFIT IS THAT THE ENTIRE GROUND FLOOR CAN BE USED FOR LIVING AND TWO TOP FLOORS CAN BE USED FOR BEDROOMS. THE LARGE ATRIUM IN THE FRONT PROVIDES SPECTACULAR VIEWS OVER THE CITY OF ROTTERDAM AND GENERATES A LOT OF NATURAL LIGHT.

IN TOTAL THERE ARE MOR THAN SEVEN DIFFERENT APARTMENT TYPES HOUSED IN BLOCK R, ALL DWELLINGS HAVE THEIR SPECIFIC QUALITY AND THEREFORE THE MAIN PARAMETER FOR CHOOSING A TYPOLOGY IS THE LOCATION WITHIN THE CITY BLOCK ITSELF.

FLOOR PLANS

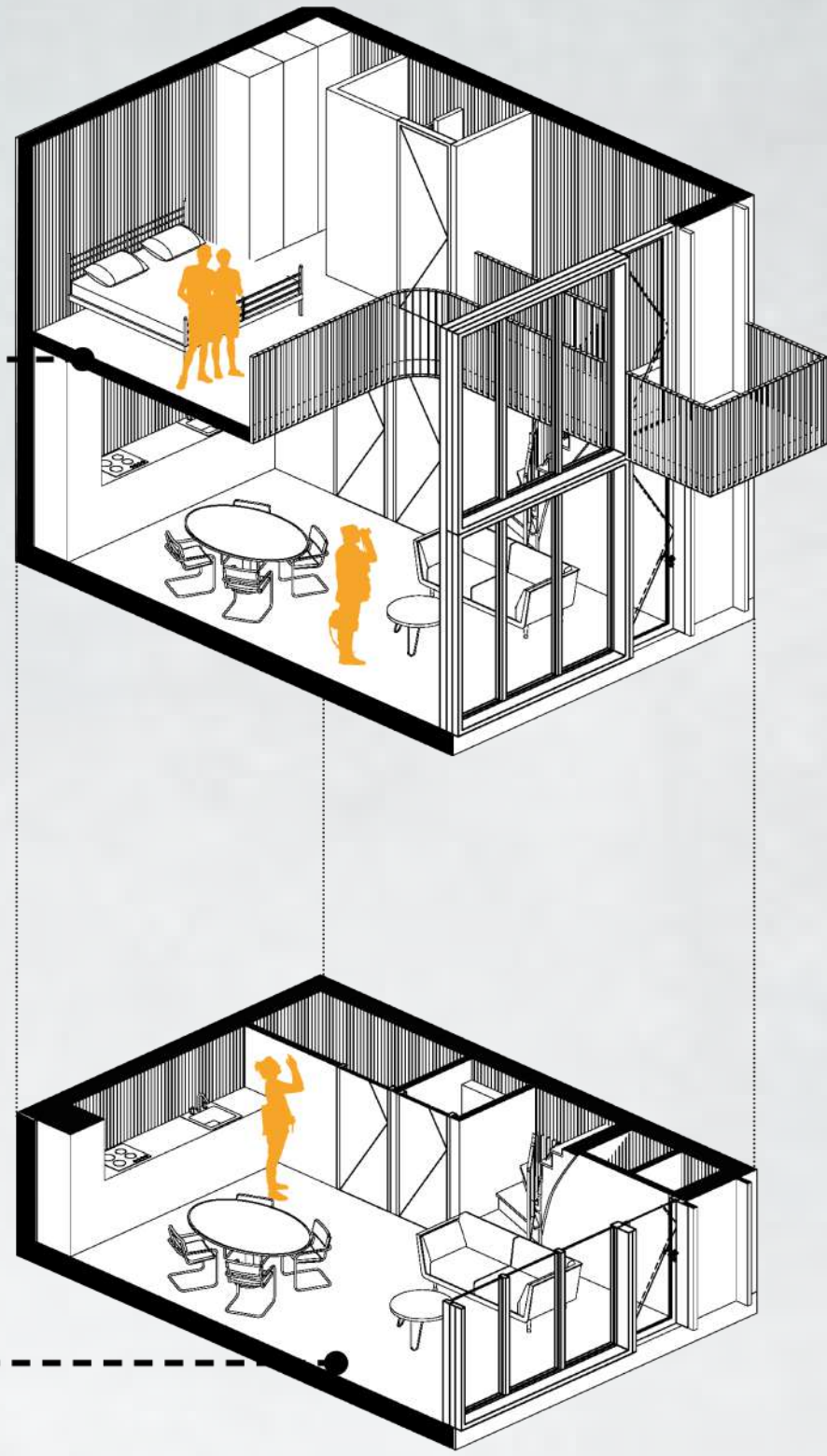


FIRST FLOOR



GROUND FLOOR

AXO DRAWINGS



## TARGET GROUPS



SPECIFICATIONS

FLOOR AREA : 60 M<sup>2</sup>  
VOLUME : 210 M<sup>3</sup>  
BEDROOMS : 2  
HEIGHT : 5,5 M

SPECIAL FEATURES :

- SPACIOUS APARTMENT
- INTERNAL STORAGE SPACE
- BALCONY ON FIRST FLOOR

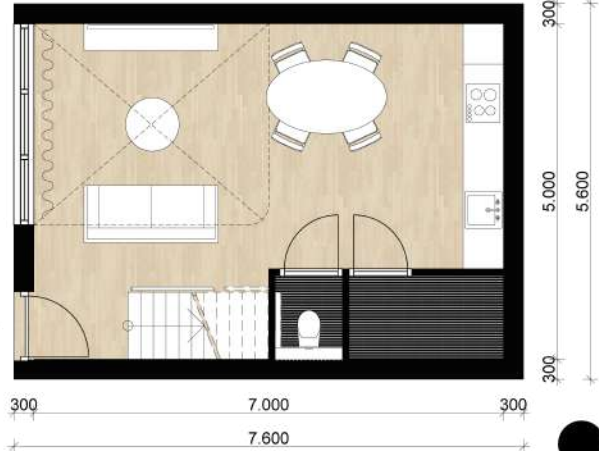
FLOOR PLANS



SECOND FLOOR

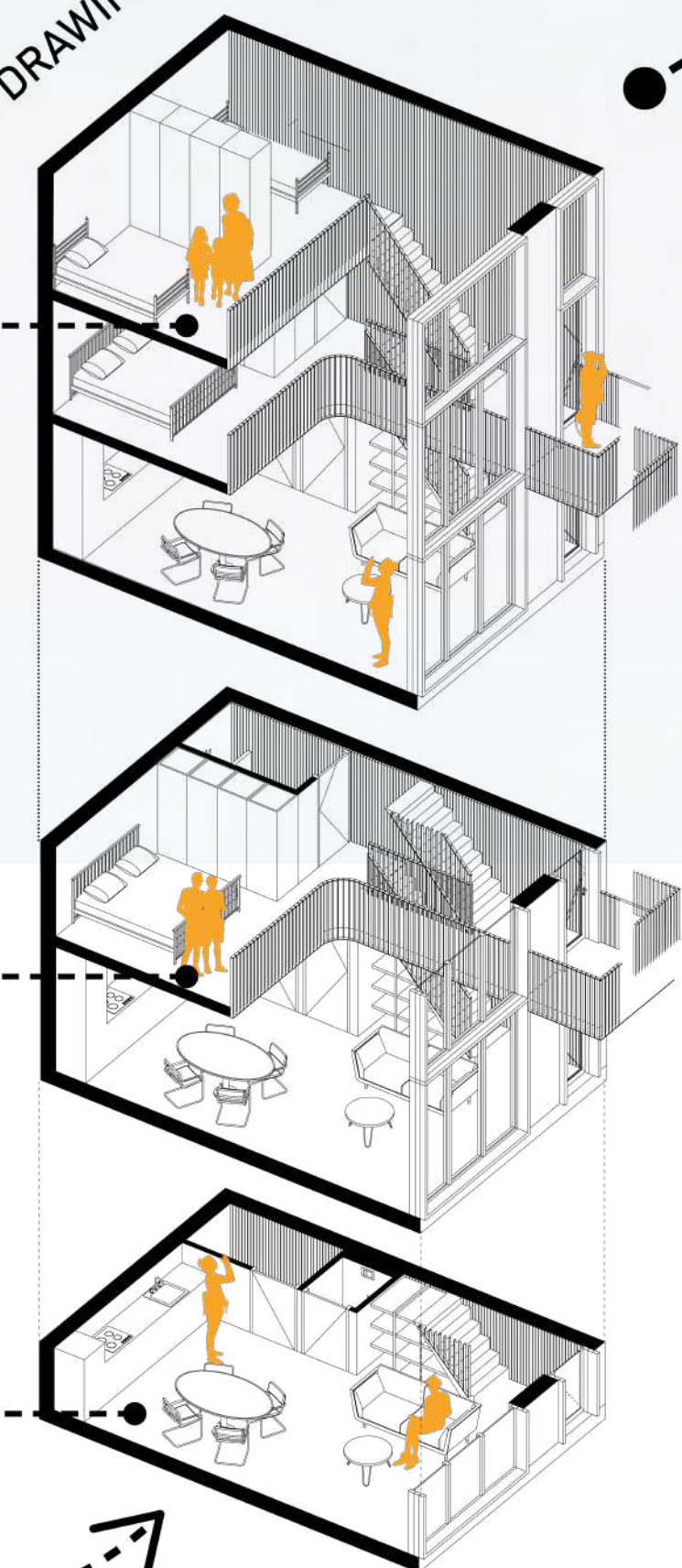


FIRST FLOOR



GROUND FLOOR

AXO DRAWINGS



RENDER



## THREE STOREY STUDIO APARTMENT

TARGET GROUP : DETAILS :



FLOOR AREA : 75 M<sup>2</sup>  
VOLUME : 263 M<sup>3</sup>  
BEDROOMS : 3  
HEIGHT : 7,5 M

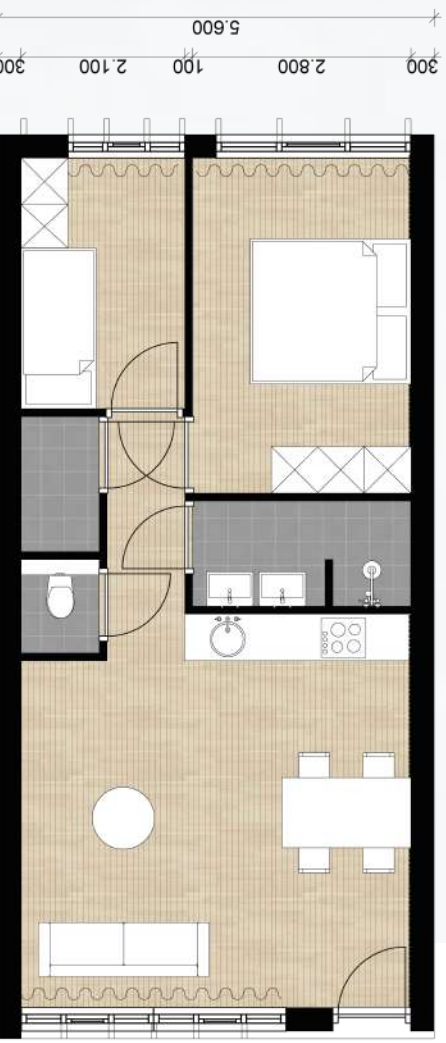
SPECIAL FEATURES :

- COMPACT HOUSING
- LARGE INTERNAL HEIGHT
- BALCONY AT THE FIRST FLOOR
- EXTRA INTERNAL STORAGE
- POSSIBILITY TO MIRROR ENTRANCE LOCATION

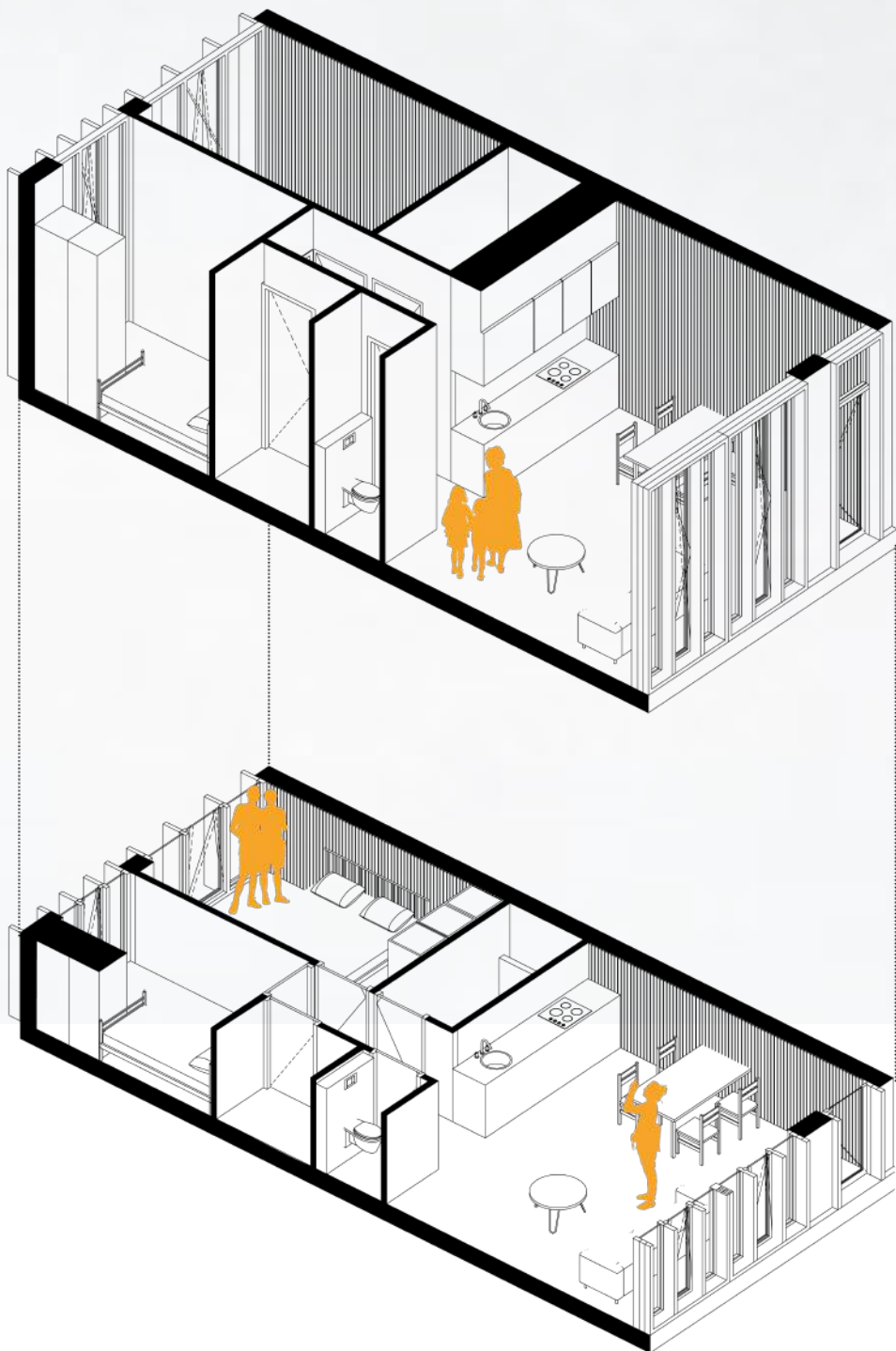
## SPATIAL EXPERIENCE

THE APARTMENTS IN THE CITY BLOCK ARE DIFFERENTLY CONFIGURED TO PROVIDE DIFFERENT SPATIAL EXPERIENCES. THE SPATIAL EXPERIENCE OF THE END USER IS THE MOST IMPORTANT PART. SINCE THE SPACE IS NOT LARGE THE QUALITY HAS TO BE FOUND IN DIFFERENT ASPECTS OF THE DWELLING. THE MINIMAL INTERNAL HEIGHT OF THE APARTMENTS IS 3,5 METERS AND THIS CREATES A SPACIOUS FEELING. THE LIVING SPACES ARE CONFIGURED IN A WAY THAT PROVIDES EASY-TO-ARRANGE SPACES AND THE COMPACT BEDROOM AND BATHROOMS PROVIDE PRIVATE PARTS. THE LARGE WINDOWS ALLOW LOTS OF DAYLIGHT TO ENTER THE DWELLING, THIS CREATES A LEVEL OF FLEXIBILITY SINCE THE USER CAN CURATE SPACES ACCORDING TO THEIR PREFERENCES.

THE LARGER APARTMENTS HAVE EITHER MORE INTERNAL HEIGHT OR ARE DEEPER IN DIMENSION. THIS EXTRA SPACE IS USED TO FACILITATE MORE LIVING SPACES FOR EXTRA BEDROOMS. THIS INTERNAL HEIGHT PROVIDES MORE LIGHT PENETRATION AND CREATES A SENSE OF TRANQUILLITY. THE ADDED BALCONY ON THE FIRST FLOOR OF THE APARTMENTS HELPED TO CREATE MORE SOCIAL SAFETY AND PROVIDES AN EXTRA LAYER TO THE FACADE. THE HEIGHT HELPED TO CREATE MORE FLOOR AREA WITH THE SAME FOOTPRINT.



GROUND FLOOR



## TARGET GROUPS



SPECIFICATIONS

FLOOR AREA : 51 M<sup>2</sup>  
VOLUME : 179 M<sup>3</sup>  
BEDROOMS : 2  
HEIGHT : 3,5 M

SPECIAL FEATURES :

- SPACIOUS TWO BEDROOMS
- INTERNAL STORAGE SPACE
- INTERNAL HEIGHT

# DWELLING TYPOLOGIES



# BLOCK R



SEE YOU IN THE FUTURE !