DAYLIGHT DEPARTMENT

INTERNAL DAYLIGHT, SUNLIGHT AND OVERSHADOWING REPORT

The Oracle, Reading

06 March 2024

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DISCLAIMER:

N.B This report is accurate as at the time of publication and based upon the information we have been provided with as set out in the report. It does not take into account changes that have taken place since the report was written.

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1 EXECUTIVE SUMMARY

Subsequent to the preparation of the Internal Daylight, Sunlight & Overshadowing Report prepared for the December 2022 submission, amendments have been made to the scheme. The purpose of this report is to ascertain whether the February 2024 proposed development will provide residential accommodation considered acceptable in terms of daylight, sunlight and overshadowing.

This report contains the final assessments undertaken for all proposed units within the revised February 2024 scheme. All assessments have been undertaken in accordance with the BRE Guidelines 2022.

Overall, the results show that the February 2024 proposed development will provide future occupants with acceptable levels of daylight. 863 (78%) of all 1,114 habitable rooms within the February 2024 proposed development will meet the BRE's recommendation in terms of Illuminance (Spatial Daylight Autonomy/sDA). This demonstrates an 9% improvement overall upon the levels achieved by the December 2022 scheme.

Of the 251 rooms that fall short of the sDA recommendations, 219 are open-plan living/kitchen/dining rooms (LKDs), six are studios and 26 are bedrooms.

Of the main living spaces falling short of the sDA recommendations, 30 LKDs achieve the recommendation for living rooms. A further 44 fall marginally below the recommended level of 50% (150 lux to 40% of the room or greater). A further 36 would achieve 150 lux within the front third of their space for half of the daylight hours of the year. These 110 main living spaces are considered to offer good daylight amenity for a large-scale residential development.

The remaining rooms are mostly located on the lower floors within areas that face onto other development facades and have their main window further obstructed by a balcony overhead. This is a typical trade-off in amenity common of most modern residential developments where balconies provide a valued form of external amenity. The levels of daylight achieved are common of most large-scale residential development, particularly where the site is seeking to make optimum use of land for new homes.

472 (42%) of the 1,114 proposed rooms within the February 2024 scheme meet the BRE recommendation for sun exposure on 21st March, by receiving 1.5hrs or more of direct sunlight. 211 (48%) of the 436 proposed living spaces (including studios), where sunlight is most appreciated, meet the criteria on 21st March. The remaining living rooms are within isolated areas that see lower levels of sunlight predominantly due their easterly or westerly orientation. Four of these living rooms would however be within dwellings that are considered acceptably sunlit as at least one of their bedrooms meets the target sunlight hours. This demonstrates an 8% reduction overall upon the levels achieved by the December 2022 scheme.

197 living spaces seeing lower levels of sunlight are served by windows which are not oriented within 90-degrees of due south, therefore access to sunlight is more restricted and they would not have a reasonable expectation of sunlight. The design has sought to minimise living spaces which are within 90-degrees of due north as much as practicable, and avoids any rooms having a predominately north aspect which is an excellent result for a large-scale flatted development. The levels of sunlight achieved are common of most large-scale residential development, particularly where the site is seeking to make optimum use of land for new homes.

A variety of open spaces have been provided within the February 2024 scheme which offers future residents and visitors different sunlit spaces to enjoy throughout the year. 86% of the total open space provision sees two or more hours of direct sunlight on 21st March, exceeding the BRE recommendation of 50%. Additionally, all open spaces when considered in isolation, meet the recommended level. Overall, the proposed open spaces provide future occupants and visitors to the site with good access to a variety of sunlit open spaces to enjoy throughout the year.

We therefore consider that future occupants will be provided with adequately daylit and sunlit dwellings in accordance with the NPPF and Policies CC8 and CR10 of the Reading Borough Local Plan (2019), all whilst balancing the need to deliver a viable scheme that makes optimum use of land and balances other policy objectives.

2 INTRODUCTION

GIA has been instructed to provide a report upon the potential availability of Daylight and Sunlight to the proposed accommodation within the residential scheme prepared by CallisonRTKL. GIA was specifically instructed to carry out the following:

- To create a 3D computer model of the proposal based upon drawings prepared by CallisonRTKL.
- Carry out a daylight assessment using the methodologies set out in the BRE guidance for Illuminance (Spatial Daylight Autonomy/sDA).
- Carry out a sunlight assessment using the methodologies set out in the BRE guidance for Sun Exposure.
- Carry out an overshadowing assessment using the methodology set out in the BRE guidance for Sun Hours On Ground (SHOG) for all relevant amenity areas.
- Prepare a report setting out the analysis and our findings.

3 PLANNING POLICY CONTEXT

3.1 NATIONAL PLANNING POLICY

National Planning Policy Framework (2023)

The National Planning Policy Framework was revised in December 2023 and paragraph 129, part C stipulates that *"...local planning authorities should refuse applications which they consider fail to make efficient use of land, taking into account the policies in this Framework. In this context, when considering applications for housing, authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use of a site (as long as the resulting scheme would provide acceptable living standards)."*

Planning Practice Guidance (2019 update)

Paragraph 6 of the section '*Effective use of land*' states that *"Where a planning application is submitted, local planning authorities will need to consider whether...daylight and sunlight within the development itself will provide satisfactory living conditions for future occupants"*

Paragraph 7 states that *"All developments should maintain acceptable living standards. What this means in practice, in relation to assessing appropriate levels of sunlight and daylight, will depend to some extent on the context for the development as well as its detailed design. For example, in areas of high-density historic buildings, or city centre locations where tall modern buildings predominate, lower daylight and daylight and sunlight levels at some windows may be unavoidable if new developments are to be in keeping with the general form of their surroundings.*

In such situations good design (such as giving careful consideration to a building's massing and layout of habitable rooms) will be necessary to help make the best use of the site and maintain acceptable living standards."

3.2 LOCAL PLANNING POLICY

Reading Borough Local Plan (November 2019)

Policy CC8 (Safeguarding Amenity) states that:

"Development will not cause a detrimental impact on the living environment of existing residential properties or unacceptable living conditions for new residential properties, in terms of:

- *[...]*
- *Access to sunlight and daylight;*
- *[...]."*

The additional information regarding Policy CC8 then goes on to recommend the use of the 'BRE Site Layout Planning for Daylight and Sunlight: A guide to good practice' document.

Policy CR10 (Tall Buildings) states that:

"In Reading, tall buildings are defined as 10 storeys of commercial floorspace or 12 storeys of residential (equating to 36 metres tall) or above. Tall buildings will meet all the requirements below:

- *[...]*

In addition to the area-specific requirements, all tall building proposals should be of excellent design and architectural quality, and should:

- *[...]*
- *Avoid significant negative impacts on existing residential properties and the public realm in terms of outlook, privacy, daylight, sunlight, noise, light glare and nighttime lighting;*
- *[...]."*

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4 RELEVANT GUIDANCE

The Building Research Establishment (BRE) have set out in their handbook 'Site Layout Planning for Daylight and Sunlight a Guide to Good Practice (BR 209 2022)', guidelines and methodology for the measurement and assessment of daylight and sunlight within proposed buildings.

The BRE published the new edition of 'Site layout planning for daylight and sunlight: a guide to good practice' in June 2022 (BR 209), This is to be read in conjunction with BS EN 17037:2018 "Daylight in buildings", the UK National Annex of the British Standard and the CIBSE publication LG 10 'Daylighting – a guide for designers'.

The BR 209 new edition contains amended methodologies for appraising the daylight and sunlight quality within new developments. Nonetheless, the main aim of the guidance is maintained: *"to help rather than constrain the designer"* as stated in Paragraph 1.6 of the new guidance.

The report provides advice, but also clearly states that it *"is not mandatory and the guide should not be seen as an instrument of planning policy."* The guidance also acknowledges in its introduction that *"Although it gives numerical guidelines, these should be interpreted flexibly since natural lighting is only one of many factors in site layout design (see Section 5). In special circumstances the developer or planning authority may wish to use different target values. For example, in a historic city centre, or in an area with modern high-rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings."* (Paragraph 1.6)

4.1 BS EN 17037:2018 AND THE UK ANNEX

The British Standard BS8206-2:2008 was superseded by the new European Standard on daylight BS EN 17037:2018 "Daylight in buildings".

Following a review of the European Standard by a dedicated commission of UK experts, the British Standard Institution concluded that the targets suggested *"may not be achievable for some buildings, particularly dwellings"*. In particular, the UK committee believed this could be the case for *"dwellings with basement rooms or those with significant external obstructions (for example, dwellings situated in a dense urban area or with tall trees outside), or for existing buildings being refurbished or converted into dwellings"*

As a consequence, a UK National Annex was appended to BS EN 17037:2018 which suggested alternative targets, in line with those of the former BS8206-2:2008 and the previous (2011) BR209. These lower targets were then incorporated into the 2022 publication of BR209.

With this site being located within central London, a dense urban environment, the relevant targets are considered to be those contained within the UK National Annex as outlined and discussed further in Section 3.2 adjacent. It is important here to re-emphasise though that these UK targets were designed to be in line with those from the previous British Standard and BR209 publications and so utilising them does not represent a weakening of standards, rather it enables continuity in the understanding of daylight levels within residential developments.

The BS EN 17037 includes four criteria: daylighting, views, sunlight access and glare. However, daylighting and sunlight access are the only criteria considered relevant for residential buildings and therefore discussed within this report.

View out and Glare are mostly relevant in offices and schools, where occupants are more fixed to a certain location within a room. In residential habitable rooms, occupants tend to move more freely and therefore view out and glare are not assessed within residential buildings.

4.2 DAYLIGHT

The BRE set out the methods for assessing daylight within a proposed building within section 2.1 and Appendix C of the handbook. This is based on the methods detailed in the BS EN 17037.

BS EN 17037 suggests two possible methodologies for appraising daylight:

- Illuminance Method
- Daylight Factor Method

These methodologies are discussed in more detail below.

Whilst Vertical Sky Component (VSC) is no longer directly used to calculate the levels of daylight indoors, this is still referenced within the BRE guidance as a metric to appraise the level of obstruction faced by a building and the potential for good daylight indoors.

This method of assessment may also be used to appraise the daylight quality in the early stages of the design, when room layouts or window locations are still undecided.

Vertical Sky Component (VSC)

This method of assessment can be undertaken using a skylight indicator or a Waldram diagram. It measures from a single point, at the centre of the window (if known at the early design stage), the quantum of sky visible taking into account all external obstructions. Whilst these obstructions can be either other buildings or the general landscape, trees are usually ignored unless they form a continuous or dense belt of obstruction.

The VSC method is a useful 'rule of thumb' but has some significant limitations in determining the true quality of daylight within a proposed building. It does not take into account the size of the window, any reflected light off external obstructions, any reflected light within the room, or the use to which that room is put.

Illuminance method

Climate Based Daylight Modelling (CBDM) is used to predict daylight illuminance using sun and sky conditions derived from standard meteorological data (often referred to as climate or weather data). This analytical method allows the prediction of absolute daylight illuminance based on the location and building orientation, in addition to the building's daylight systems (shading systems, for example). Annex A within the BS EN 17037 proposes values of target illuminances and minimum target illuminances to exceed 50 % of daylight hours.

This is considered to be the most accurate approach when using climate data, however, it provides a very large amount of data for each assessed room, which then needs to be interrogated. One of the methodologies that can be used to interrogate this data is Spatial Daylight Autonomy (sDA).

Spatial Daylight Autonomy (sDA)

The sDA assessment is designed to understand how often each point of the room's task area sees illuminance levels at or above a specific threshold.

BS EN 17037 sets out minimum illuminance levels (300lx) that should be exceeded over 50% of the space for more than half of the daylight hours in the year. It also includes recommendations for medium and high daylighting levels within a space (500lx and 700lx respectively). It should be noted here, however, that these targets are specified irrespective of a space's use or design.

As discussed within Section 4.1, the National Annex suggests that these targets can be challenging to achieve within residential settings, particularly in areas of higher density and so suggests lower targets can be considered in this situation. It should be noted here that the reduced targets suggested within the BS EN 17037:2018 National Annex are provided so as to be comparable with the previous BR209's recommendations for ADF. These targets, considered relevant for this application, are:

- 100 lux for bedrooms
- 150 lux for living rooms
- 200 lux for living/kitchen/diners, kitchens, and studios.

It is however stated in paragraph C17 of the BRE that: "*Where a room has a shared use, the highest target should apply. For example in a bed sitting room in student accommodation, the value for a living room should be used if students would often spend time in their rooms during the day. Local authorities*

could use discretion here. For example, the target for a living room could be used for a combined living/dining/kitchen area if the kitchens are not treated as habitable spaces, as it may avoid small separate kitchens in a design".

Daylight Factor method

This method involves calculating the median daylight factor on a reference plane (assessment grid).

"The daylight factor is the illuminance at a point on the reference plane in a space, divided by the illuminance on an unobstructed horizontal surface outdoors. The CIE standard overcast sky is used, and the ratio is usually expressed as a percentage."

This method of assessments considers an overcast sky, and therefore the orientation and location of buildings is not relevant. In order to account for different climatic conditions, Annex A within the BS EN 17037 sets equivalent daylight factor targets (D) for various locations in Europe.

The median daylight factor (MDF) should meet or exceed the target daylight factor relative to a given illuminance for more than half of daylight hours, over 50% of the reference plane.

4.3 SUNLIGHT

The BRE provide guidance in respect of sunlight quality for new developments within section 3.1 of the handbook. It is generally acknowledged that the presence of sunlight is more significant in residential accommodation than it is in commercial properties, and this is reflected in the BRE document.

It states, *"in housing, the main requirement for sunlight is in living rooms, where it is valued at any time of the day, but especially in the afternoon. Sunlight is also required in conservatories. It is viewed as less important in bedrooms and in kitchens where people prefer it in the morning rather than the afternoon."*

The BRE guide considers the critical aspects of orientation and overshadowing in determining the availability of sunlight at a proposed development site.

The guide proposes minimising the number of dwellings whose living room face solely north unless there is some compensating factor such as an appealing view to the north, and it suggests a number of techniques to do so. Furthermore, it discusses massing solutions with a sensitive approach to overshadowing, so as to maximize access to sunlight.

At the same time, it acknowledges that the site's existing urban environment may impose orientation or overshadowing constraints which may not be possible to overcome.

To quantify sunlight access for interiors where sunlight is expected, it refers to the BS EN 17037 criterion that the minimum duration of sunlight exposure in at least one habitable room of a dwelling should be 1.5 h on March 21st. Table A.5 also establishes medium and high sunlight targets (3 and 4 hours).

This is to be checked at a reference point located centrally to the window's width and at the inner surface of the aperture (façade and/or roof). For multiple apertures in different facades it is possible to cumulate the time of sunlight availability if not occurring at the same time. The reference point is minimum 1.2 m above the floor and 0.3 m above the window sill if present.

The summary of section 3.1 of the guide states as follows:

"In general, a dwelling or non-domestic building which has a particular requirement for sunlight, will appear reasonably sunlit provided that:

- *At least one main window faces within 90 degrees of due south, and*
- *a habitable room, preferably a main living room, can receive a total of at least 1.5 hours of sunlight on 21 March. This is assessed at the inside centre of the window(s); sunlight received by different windows can be added provided they occur at different times and sunlight hours are not double counted.. "*

4.4 OVERSHADOWING

The BRE guidance in respect of overshadowing of amenity spaces is set out in section 3.3 of the handbook. Here it states as follows:

"Sunlight in the spaces between and around buildings has an important impact on the overall appearance and ambience of a development. It is valuable for a number of reasons, to:

- *provide attractive sunlit views (all year)*
- *make outdoor activities like sitting out and children's play more pleasant (mainly warmer months)*
- *encourage plant growth (mainly spring and summer)*
- *dry out the ground, reducing moss and slime (mainly in colder months)*
- *melt frost, ice and snow (in winter)*
- *dry clothes (all year).*

Again, it must be acknowledged that in urban areas the availability of sunlight on the ground is a factor which is significantly controlled by the existing urban fabric around the site in question and so may have very little to do with the form of the development itself. Likewise, there may be many other urban design, planning and site constraints which determine and run contrary to the best form, siting and location of a proposed development in terms of availability of sun on the ground.

The summary of section 3.3 of the guide states as follows:

"3. 3 .17 It is recommended that for it to appear adequately sunlit throughout the year, at least half of a garden or amenity area should receive at least two hours of sunlight on 21 March. If as a result of new development an existing garden or amenity area does not meet the above, and the area that can receive two hours of sun on 21 March is less than 0.80 times its former value, then the loss of sunlight is likely to be noticeable. If a detailed calculation cannot be carried out, it is recommended that the centre of the area should receive at least two hours of sunlight on 21 March.."

4.5 FURTHER RELEVANT INFORMATION

CIBSE LG 10 'Daylighting – a guide for designers'.

This guide details the process of designing for daylighting. It outlines considerations of form, orientation, and other aspects involved in designing the building envelope to optimise natural light.

The guidance in this document is written primarily for buildings located within the UK, and will be most applicable to projects in northern hemisphere. However, the principles are universal, and can be applied to other locations if the appropriate weather data is used and local standards and regulations are respected

5 METHODOLOGY

In order to undertake the daylight and sunlight assessments set out in the previous pages, we have prepared a three dimensional computer model and used specialist lighting simulation software.

Calculation Model

The three dimensional representation of the proposed development has been modelled using the scheme drawings provided to us by CallisonRTKL (Blocks YHP1 and YHP2). This has been placed in the context of its surrounding buildings which have been modelled from survey information, photogrammetry and OS. This allows for a precise model, which in turn ensures that analysis accurately represents the amount of daylight and sunlight available to the building facades, internal and external spaces, considering all of the surrounding obstructions and orientation.

Assessments grid

For the daylight assessments, an analysis 'grid' is located within each room at working plane height (850 mm from FFL) and offset by 0.30m from the walls as recommended by BR 209.

Grid points are spaced by 0.20m.

Weather Data

The weather file recorded at Gatwick Airport was considered the most relevant for this assessment.

Surfaces reflectance

The BR 209 states that "*surface reflectances should represent real conditions. Where reflectance values have not been measured or specified, default values to be used in the calculation are given in Table C4.*"

At C24 the BR209 states *"Where surface finishes have been specified or measured on site, they can be used in the calculations with appropriate factors for maintenance and furniture. To allow for these factors, maximum reflectances for white painted surfaces in the calculations should not exceed 0.8 indoors, and 0.6 outdoors. Maximum reflectances for light pastel walls should not exceed 0.7 in the calculations, and maximum reflectances for light wood floors should not exceed 0.4. Surface reflectances used should be presented in the assessment, along with a specification of the materials if non-default reflectances are used."*

The reflectance values shown in table C4 are used as standard, unless specified by the design team. The following assumptions have been confirmed as appropriate by the client:

- Interior walls - White Paint Finish - 0.7
- Ceilings - White Paint Finish - 0.8
- Floors - Light Timber Veneer (or similar) - 0.4

Table C4: Recommended default surface reflectances

SURFACE	DEFAULT REFLECTANCE
INTERIOR WALLS	0.5
CEILINGS	0.7
FLOORS	0.2
EXTERIOR WALLS AND OBSTRUCTIONS	0.2
EXTERIOR GROUND	0.2

Glazing transmittance

BR 209 para C25 states *"Glazing transmission factors, including maintenance factors, need to be included in the simulation along with account for, or modelling of, window framing. Where window frames are not specifically included in the model, frame factors should be applied based on the ratio of glass to overall window aperture area for the type of window to be used; this will generally vary with window size and whether the windows have opening lights."*

C26 follows that *"For clean, clear double glazing with a low emissivity coating, a value of 0.68 for diffuse transmittance can be used."* Which equates to a normal visible transmittance (TV normal), prior to the application of maintenance factors, of 75%. This has been used within the assessments and is shown in Table 01 below.

Framing Factors

As standard in BR 209 *"Where window types have not been specified, results for the overall window aperture should be multiplied by a default framing factor as given in Table C5."*

The Framing Factor in this instance was calculated on the provided elevations. Three window types have been detected throughout all the elevations. These are depicted overleaf in Figures 01 - 08.

Maintenance factors

Maintenance factors have been applied as per BR209 with 0.92 selected for windows not beneath an overhang and 0.76 for those overhung by the building massing.

The final transmittance values (TV total) are shown in Table 01 below.

Table 01: Typical reflectance, transmittance and maintenance factors

GLAZING TYPE AND MAINTENANCE FACTORS:	TV(Normal)	FRAMING FACTOR	MAINT. FACTOR	TV(Total)
Window type 1 - NOT SHELTERED	0.75	0.7	0.92	0.48
Window type 2 - SHELTERED	0.75	0.7	0.76	0.40
Window type 3 - NOT SHELTERED	0.75	0.75	0.92	0.52

5.1 GLAZING TYPES - WINDOW MAPS



Fig. 01: South-west view - YHP1

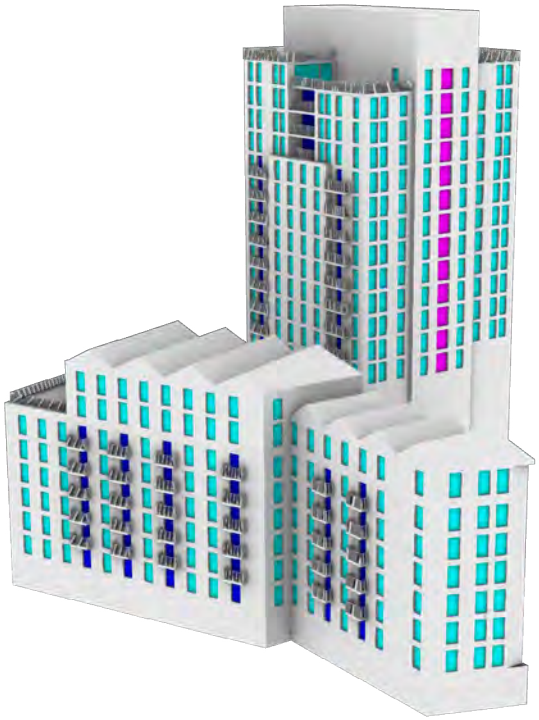


Fig. 02: North-east view - YHP1

1 2 3

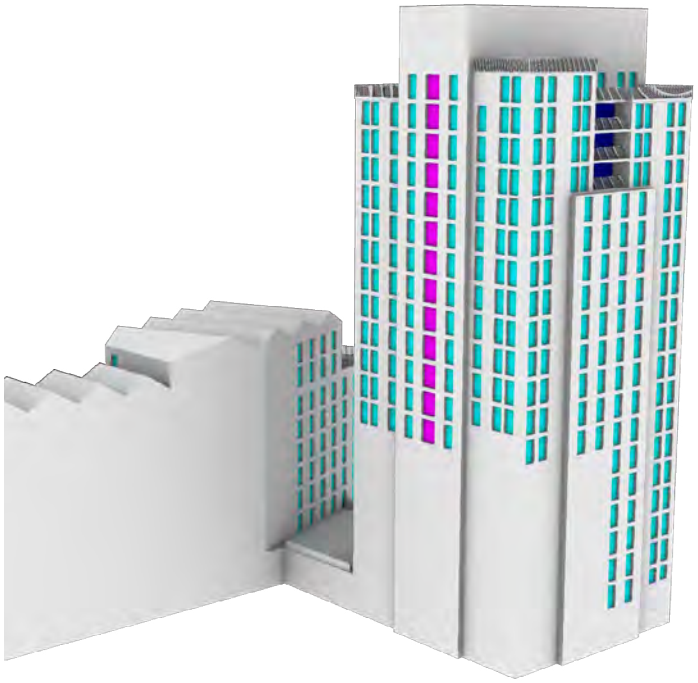


Fig. 03: North-west view - YHP1



Fig. 04: South-east view - YHP1

1 2 3

5.2 GLAZING TYPES - WINDOW MAPS



Fig. 05: South-west view - YHP2



Fig. 06: North-east view - YHP2





Fig. 07: South-east view - YHP2



Fig. 08: North-west view - YHP2

1 2 3

6 CONCLUSIONS

Subsequent to the preparation of the Internal Daylight, Sunlight & Overshadowing Report prepared for the December 2022 submission, amendments have been made to the scheme. This section reports upon the full technical assessments of the amended February 2024 scheme.

6.1 CONCLUSIONS ON DAYLIGHT

In order to ascertain the levels of daylight within the proposed development, all habitable rooms have been assessed for illuminance using the spatial daylight autonomy (sDA) methodology.

The results given on pages 20-129 have shown that of the 1,114 proposed habitable rooms, 863 (78%) see levels of sDA that either meet or exceed the BRE recommendation for their room use. This demonstrates an 9% improvement overall upon the levels achieved by the December 2022 scheme.

Of the 251 rooms that fall short of the sDA recommendations, 219 are open-plan living/kitchen/dining rooms (LKDs), six are studios and 26 are bedrooms.

Of the main living spaces (LKDs & studios), 211 of the 436 rooms meet or exceed the BRE recommendation of 200lux within half the room for half the daylight hours within a year. Of the main living spaces that fall short of recommendation, 30 would meet or exceed the BRE recommendation of 150lux for living rooms and are therefore considered acceptably daylit for their primary function as living spaces.

Of the remaining 195 main living spaces, 44 fall marginally below the living room recommendation, with 40% to 49% of their area meeting the recommended level, and therefore the front portion where the living space is located would be adequately daylit. Therefore, a total of 285 main living spaces (65% of the total) are considered to offer good daylight levels.

The remaining 151 main living spaces which see lower levels of light are mostly located on the lower floors within areas that face onto other development facades and have their main window further obstructed by a balcony overhead. This is a typical trade-off in amenity common of most modern residential developments where balconies provide a valued form of external amenity.

In addition to the above, 36 of the 151 main living spaces seeing lower levels of light would achieve 150 lux within the front third of their space for half the daylight hours in the year, therefore the living zones at the front are well daylit.

Overall, the scheme is delivering well daylit bedrooms with 652 of the 678 (96%) meeting or exceeding the levels suggested by BRE. 11 of the remaining 26 bedrooms fall marginally below the bedroom recommendation, with 40% to 49% of their area meeting the recommended level, and are therefore considered to be adequately daylit.

The remaining 15 bedrooms are located on the lower floors where the expectation for daylight is lower and are obstructed by a proposed block immediately opposite.

Overall, we conclude that the levels of light achieved within the February 2024 proposed development are in line with expectation for a large-scale residential development with balconies, particularly where the site is seeking to make optimum use of land for new homes. We therefore consider that future occupants will be provided with adequate daylight in accordance with the NPPF and Policies CC8 and CR10 of the Reading Borough Local Plan (2019), all whilst balancing the need to deliver a viable scheme that makes optimum use of land and balances other policy objectives.

6.2 CONCLUSIONS ON SUNLIGHT

In terms of sunlight, BRE states that in housing, the main requirement for sunlight is in living rooms and that it is viewed as less important in bedrooms and in kitchens. The guidelines then go on to say that "*a habitable room, preferably a main living room*" should meet the criteria and that "*Where groups of dwellings are planned, site layout design should aim to maximise the number of dwellings with a main living room that meets the above recommendations*". Therefore, whilst all rooms have been assessed for sunlight, greatest importance ought to be given to the performance of living spaces.

The results given on pages 20-129 have shown that of the 1,114 proposed habitable rooms, 472 (42%) see levels of sun exposure on 21st March that either meet or exceed the BRE recommendation of 1.5hrs. This demonstrates an 8% reduction overall upon

the levels achieved by the December 2022 scheme.

Of the 436 main living spaces (including studios), 211 (48%) would see at least 1.5 hours of sunlight on the 21st March.

Of the 225 living spaces (223 LKDs and two studios) falling below the recommended level of sunlight. Four living spaces are located within a unit where at least one of the bedrooms passes and so the dwelling is considered to be acceptably sunlit as at least one habitable room sees 1.5 hours of sunlight on 21st March.

Of the remaining 221 living spaces falling below the recommended level of sunlight, 10 are only marginally below the BRE recommendation of 1.5 hours with at least 1 hour of sunlight on 21st March.

197 of the 211 living spaces (including studios) seeing lower levels of sunlight are served by windows which are not oriented within 90-degrees of due south therefore access to sunlight is more restricted and they are not considered to have a reasonable expectation of sunlight. The design has sought to minimise living spaces which are within 90-degrees of due north as much as practicable, and avoids any rooms having a predominately north aspect which is an excellent result for a large-scale flatted development.

The remaining living spaces are generally located within areas that face onto other development facades to the east or west. Owing to their easterly or westerly orientation, these rooms only have the potential to capture half of the sun path, mostly in the mornings or afternoons when the sun is lower in the sky and so is intercepted by massing opposite. Some of these living spaces also have their main window further obstructed by a balcony overhead. This is a typical trade-off in amenity common of most modern residential developments where balconies provide a valued form of external amenity.

Overall, we conclude that the levels of sunlight achieved within the February 2024 proposed development are in line with expectation for a large-scale residential development with balconies, particularly where the site is seeking to make optimum use of land for new homes. We therefore consider that future occupants will be provided with adequate sunlight in accordance with the NPPF and Policies CC8 and CR10 of the Reading Borough Local Plan (2019), all whilst balancing the need to deliver a viable scheme that makes optimum use of land and balances other policy objectives.

6.3 CONCLUSIONS ON OVERSHADOWING

Sun Hours on Ground assessments have been undertaken for the areas of open space provided within the proposed scheme. The results from these assessments are shown on pages 130-133 of this report.

A variety of open spaces have been provided throughout the scheme which offers future residents and visitors different sunlit spaces to enjoy during the year. Overall, 86% of the total open space provided sees two or more hours of direct sunlight on 21st March, exceeding the BRE recommendation of 50%.

In terms of each space individually, all open spaces and terraces meet or exceed the BRE criteria:

- North Site Public Realm - 88%;
- Pocket Park (North-site) - 98%;
- South Site Public Realm - 80%;
- Podium Terrace 1 (North-site) - 59%;
- Podium Terrace 2 (South-site) - 52%;
- Roof Top Terrace 1 (North-site) - 100%;
- Roof Top Terrace 2 (North-site) - 100%;
- Roof Top Terrace 3 (North-site) - 100%;
- Roof Top Terrace 4 (South-site) - 100%;
- Roof Top Terrace 5 (South-site) - 100%.

Sun exposure images have been provided for all areas on pages 132 and 133 which show good sunlight access particularly on the summer solstice, when these spaces are most likely to be in frequent use.

Overall, due to all provided open spaces meeting the BRE recommended level, we conclude that the open spaces provide future occupants and visitors to the site with good access to a variety of sunlit open spaces to enjoy throughout the year.

7 SITE OVERVIEW



Fig. 09: Top view



Fig. 10: Perspective view

8 INTERNAL DAYLIGHT AND SUNLIGHT ASSESSMENTS

Block A - Level 00M

		DAYLIGHT						SUNLIGHT		
ROOM REF.	ROOM USE	EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK A - LEVEL 00										
1	BEDROOM	9.7	2.7	1.1	100	9.7		00:00	00:00	00:00
2	L/K/D	2.7	0.3	0.0	200	0.0		00:00	00:00	00:12
3	BEDROOM	30.5	15.3	8.5	100	30.5		00:00	00:00	00:12
4	L/K/D	17.9	9.3	6.0	200	6.0		00:00	00:00	00:03
5	BEDROOM	61.5	29.9	19.7	100	61.5		00:00	00:00	00:00
6	L/K/D	100.0	100.0	94.9	200	94.9		01:45	01:41	01:49
7	BEDROOM	74.1	39.4	23.8	100	74.1		00:47	00:55	01:03
8	BEDROOM	96.6	66.0	42.2	100	96.6		01:43	01:57	01:58
9	L/K/D	47.5	35.8	28.0	200	28.0		02:34	02:54	02:31
10	BEDROOM	78.1	51.5	35.5	100	78.1		01:50	02:21	02:20
11	BEDROOM	86.7	49.7	31.3	100	86.7		02:01	02:35	02:31
12	L/K/D	100.0	91.2	80.8	200	80.8		05:27	06:34	06:47
13	BEDROOM	100.0	100.0	94.8	100	100.0		03:02	03:25	03:29
14	STUDIO	33.5	19.2	13.0	200	13.0		02:55	03:16	03:12

Table 02: Assessment Data



Fig. 11: Floor Plan



Block A - Level 01

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK A - LEVEL 01										
15	BEDROOM	10.6	4.0	1.3	100	10.6		00:00	00:00	00:00
16	L/K/D	2.4	0.2	0.0	200	0.0		00:00	00:00	00:14
17	BEDROOM	51.1	27.8	16.5	100	51.1		00:00	00:00	00:18
18	BEDROOM	73.2	40.9	26.2	100	73.2		00:00	00:00	00:12
19	L/K/D	28.2	16.1	10.5	200	10.5		00:00	00:00	00:02
20	BEDROOM	100.0	69.2	43.6	100	100.0		00:00	00:00	00:00
21	L/K/D	100.0	95.9	81.9	200	81.9		01:48	01:47	02:10
22	BEDROOM	99.0	75.4	45.6	100	99.0		00:58	01:00	01:12
23	BEDROOM	100.0	98.6	82.0	100	100.0		02:08	01:55	01:58
24	L/K/D	64.2	49.0	40.4	200	40.4		03:10	02:53	02:51
25	BEDROOM	100.0	80.5	59.2	100	100.0		02:25	02:22	02:20
26	BEDROOM	100.0	88.8	57.1	100	100.0		02:32	02:35	02:32
27	L/K/D	100.0	100.0	93.8	200	93.8		05:54	06:38	06:56
28	BEDROOM	100.0	100.0	97.4	100	100.0		03:06	03:32	03:40
29	STUDIO	36.0	19.8	13.5	200	13.5		03:06	03:21	03:21

Table 03: Assessment Data

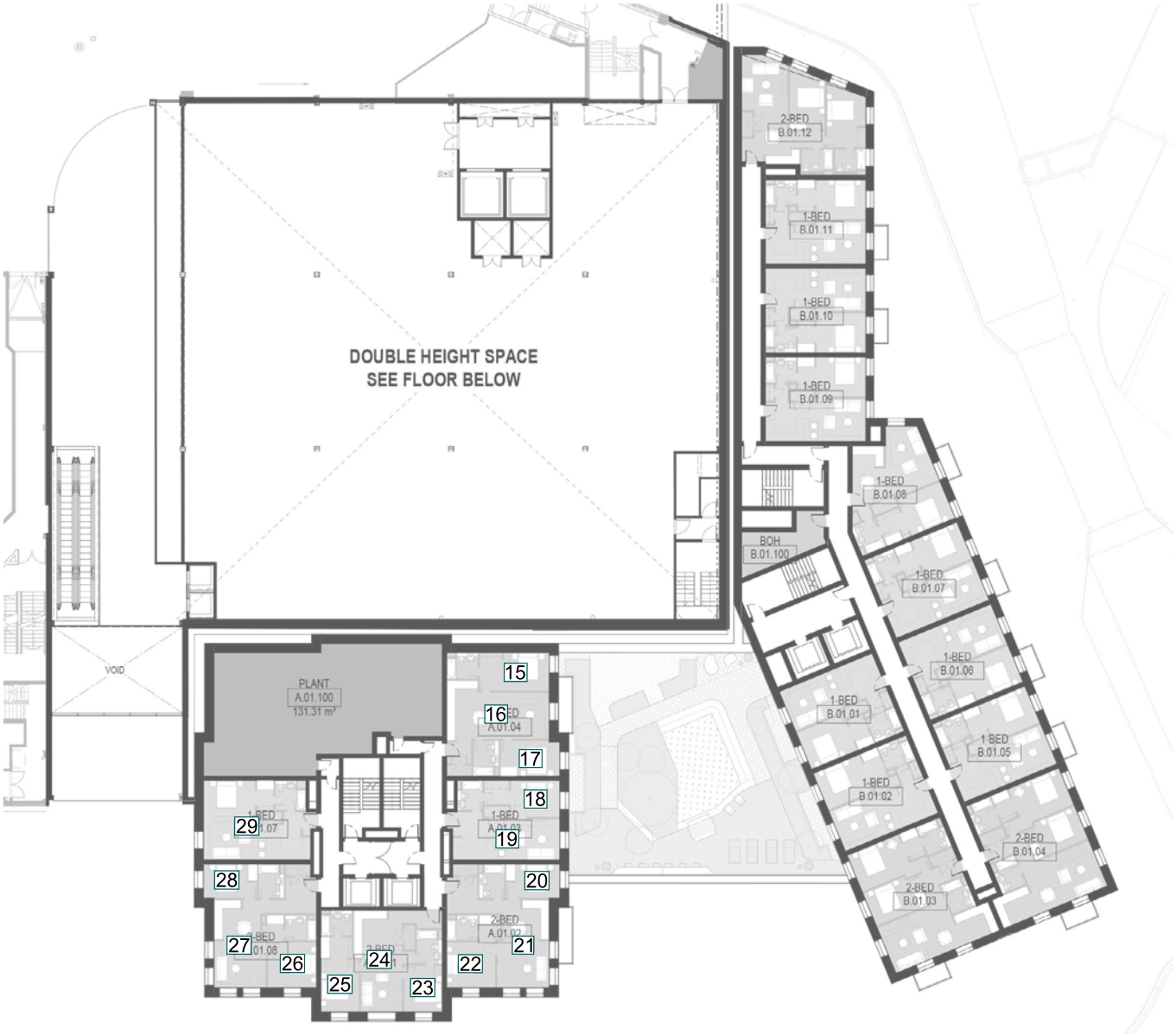


Fig. 12: Floor Plan



Block A - Level 02

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK A - LEVEL 02										
30	BEDROOM	14.6	6.6	3.5	100	14.6		00:00	00:00	00:06
31	L/K/D	4.0	0.8	0.0	200	0.0		00:00	00:00	00:23
32	BEDROOM	60.2	34.1	21.6	100	60.2		00:00	00:00	00:20
33	BEDROOM	84.6	49.7	32.2	100	84.6		00:00	00:00	00:15
34	L/K/D	32.2	19.5	13.0	200	13.0		00:00	00:00	00:06
35	BEDROOM	100.0	82.9	53.8	100	100.0		00:00	00:00	00:00
36	L/K/D	100.0	99.2	86.2	200	86.2		01:48	01:53	02:25
37	BEDROOM	100.0	82.1	53.8	100	100.0		00:58	01:09	01:20
38	BEDROOM	100.0	100.0	89.1	100	100.0		02:08	02:01	02:01
39	L/K/D	71.2	51.7	42.7	200	42.7		03:11	02:57	02:52
40	BEDROOM	100.0	85.2	64.5	100	100.0		02:36	02:22	02:22
41	BEDROOM	100.0	94.6	64.0	100	100.0		02:48	02:35	02:33
42	L/K/D	100.0	100.0	98.2	200	98.2		06:21	06:47	07:13
43	BEDROOM	100.0	100.0	100.0	100	100.0		03:16	03:41	03:57
44	STUDIO	40.6	23.3	15.6	200	15.6		03:16	03:29	03:36

Table 04: Assessment Data

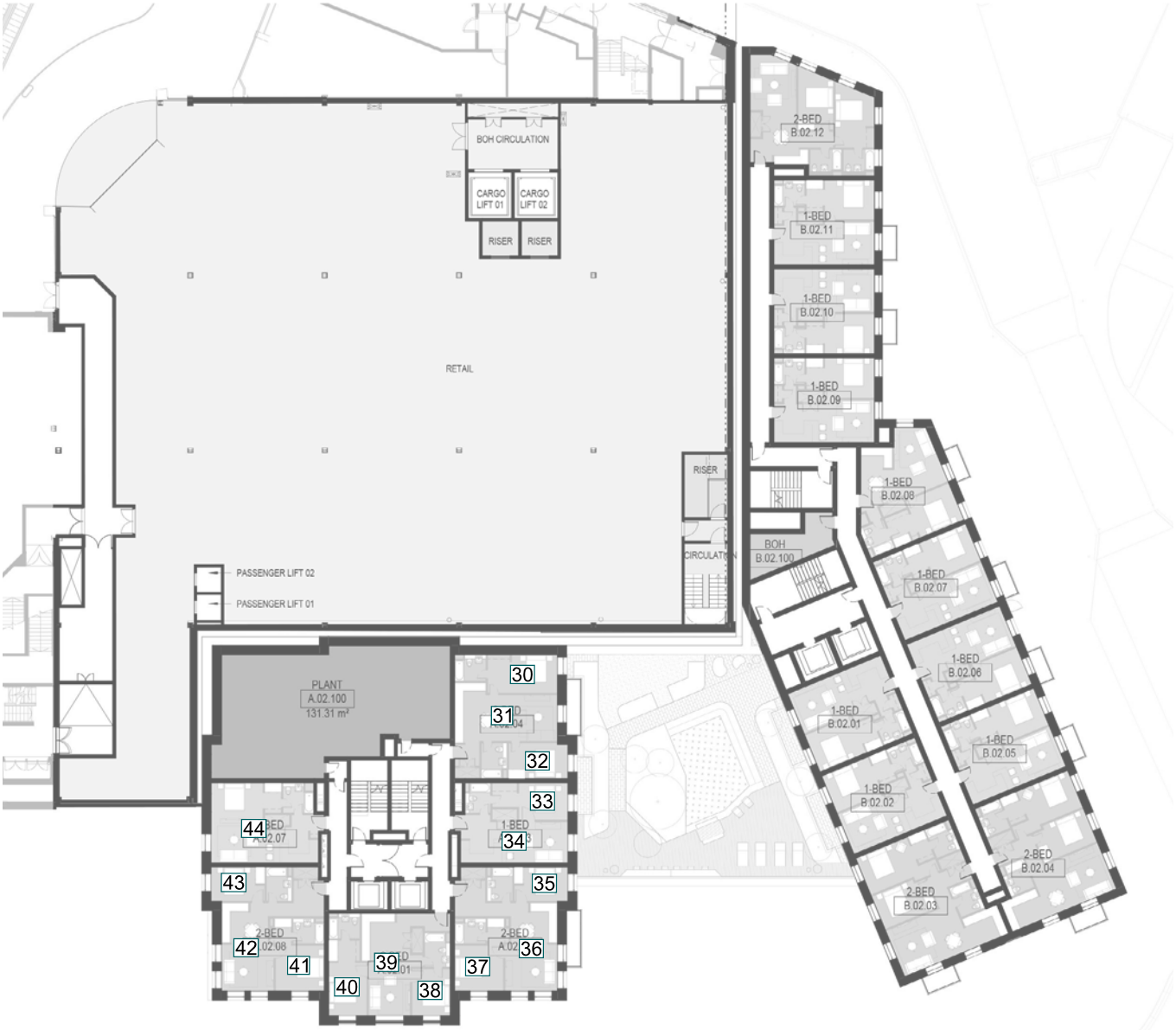


Fig. 13: Floor Plan



Block A - Level 03

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK A - LEVEL 03										
45	BEDROOM	19.0	9.7	6.0	100	19.0		00:00	00:00	00:06
46	L/K/D	5.6	1.6	0.4	200	0.4		00:00	00:00	00:30
47	BEDROOM	72.7	41.5	27.3	100	72.7		00:00	00:00	00:44
48	BEDROOM	94.0	60.4	40.9	100	94.0		00:00	00:00	00:31
49	L/K/D	37.0	23.9	16.0	200	16.0		00:00	00:00	00:25
50	BEDROOM	100.0	94.0	68.4	100	100.0		00:00	00:00	00:10
51	L/K/D	100.0	100.0	90.8	200	90.8		01:48	01:53	02:37
52	BEDROOM	100.0	87.2	59.2	100	100.0		00:58	01:10	01:23
53	BEDROOM	100.0	100.0	93.2	100	100.0		02:08	02:10	02:07
54	L/K/D	78.0	54.1	44.7	200	44.7		03:11	03:05	02:56
55	BEDROOM	100.0	89.9	69.2	100	100.0		02:36	02:26	02:24
56	BEDROOM	100.0	97.4	69.4	100	100.0		02:48	02:38	02:35
57	L/K/D	100.0	100.0	100.0	200	100.0		06:39	06:56	07:29
58	BEDROOM	100.0	100.0	100.0	100	100.0		03:28	03:58	04:26
59	STUDIO	46.3	27.6	19.1	200	19.1		03:26	03:47	03:46

Table 05: Assessment Data

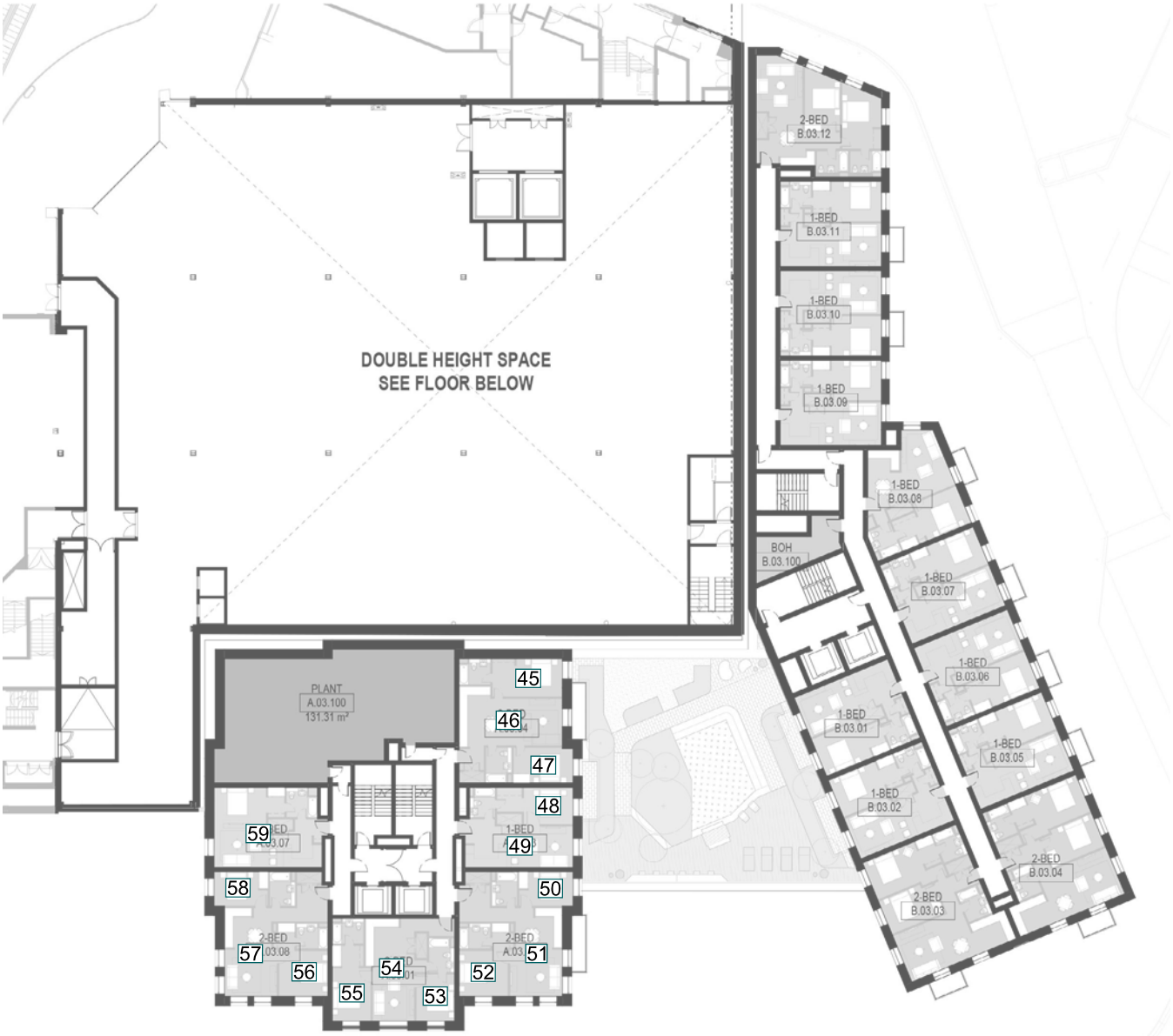


Fig. 14: Floor Plan



Block A - Level 04

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK A - LEVEL 04										
60	BEDROOM	27.0	14.6	10.2	100	27.0		00:00	00:00	00:06
61	L/K/D	7.4	3.2	1.2	200	1.2		00:00	00:00	00:30
62	BEDROOM	88.6	51.1	36.4	100	88.6		00:00	00:00	00:48
63	BEDROOM	99.3	71.8	50.7	100	99.3		00:00	00:00	00:51
64	L/K/D	42.4	28.2	20.0	200	20.0		00:00	00:00	00:52
65	BEDROOM	100.0	99.1	84.6	100	100.0		00:00	00:00	00:32
66	L/K/D	100.0	100.0	94.5	200	94.5		01:48	01:53	03:02
67	BEDROOM	100.0	92.3	64.1	100	100.0		00:58	01:10	01:27
68	BEDROOM	100.0	100.0	95.2	100	100.0		02:08	02:11	02:10
69	L/K/D	84.4	56.7	46.7	200	46.7		03:11	03:10	03:11
70	BEDROOM	100.0	93.5	73.4	100	100.0		02:36	02:34	02:27
71	BEDROOM	100.0	99.5	76.3	100	100.0		02:48	02:45	02:39
72	L/K/D	100.0	100.0	100.0	200	100.0		06:50	07:13	07:53
73	BEDROOM	100.0	100.0	100.0	100	100.0		03:40	04:13	04:52
74	STUDIO	51.9	31.8	22.3	200	22.3		03:35	04:09	04:27

Table 06: Assessment Data

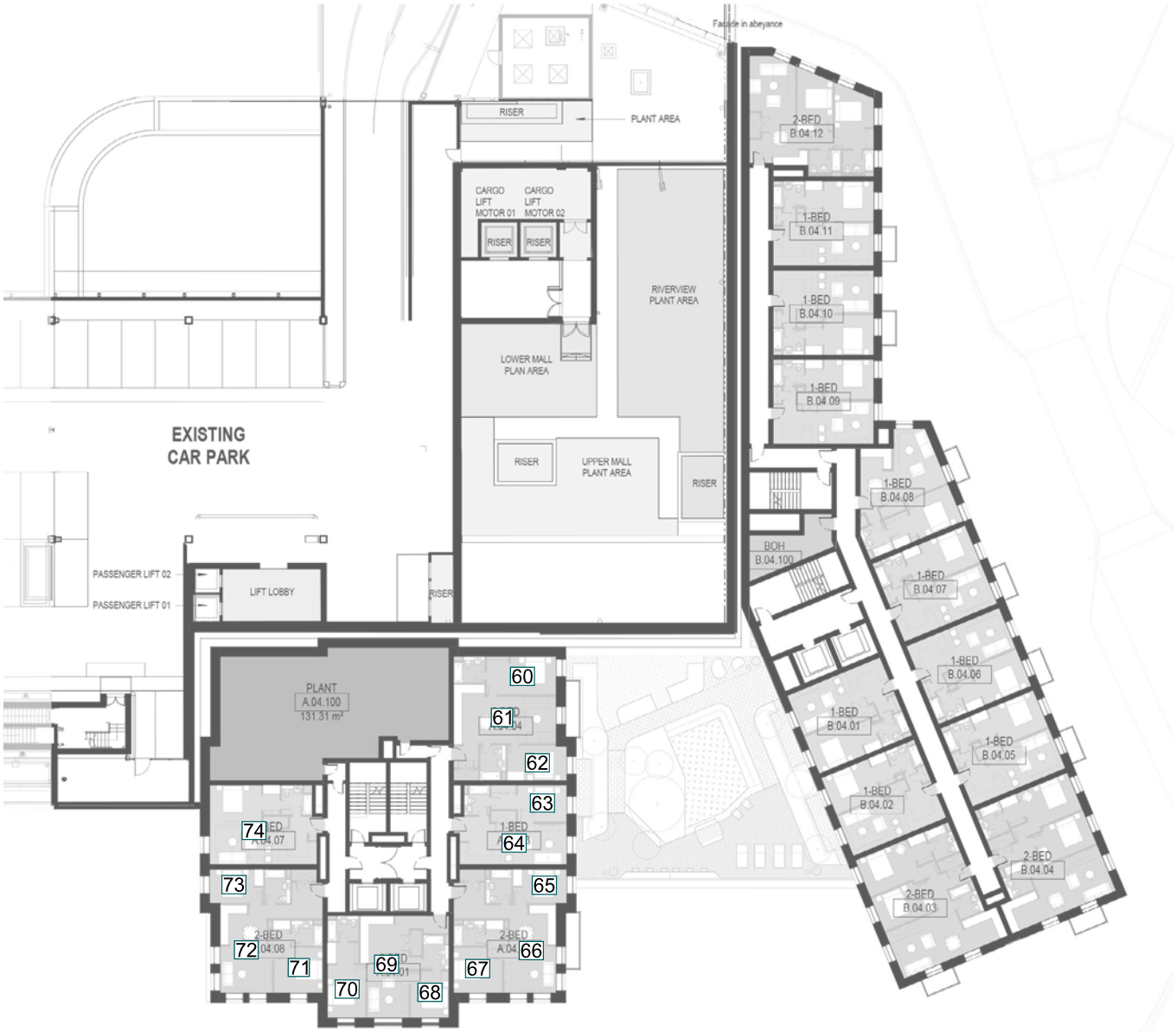


Fig. 15: Floor Plan



Block A - Level 05

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK A - LEVEL 05										
75	BEDROOM	41.6	23.5	15.9	100	41.6		00:00	00:00	00:18
76	L/K/D	11.8	6.2	3.0	200	3.0		00:00	00:00	00:32
77	BEDROOM	98.9	64.2	47.2	100	98.9		00:00	00:00	00:53
78	BEDROOM	100.0	87.2	64.1	100	100.0		00:00	00:00	00:56
79	L/K/D	47.1	33.9	24.7	200	24.7		00:00	00:00	00:59
80	BEDROOM	100.0	100.0	94.9	100	100.0		00:00	00:00	00:57
81	L/K/D	100.0	100.0	98.2	200	98.2		01:58	02:06	03:56
82	BEDROOM	100.0	94.9	69.2	100	100.0		01:04	01:10	01:35
83	BEDROOM	100.0	100.0	98.6	100	100.0		02:08	02:11	02:13
84	L/K/D	88.5	59.0	48.3	200	48.3		03:11	03:08	03:29
85	BEDROOM	100.0	96.4	77.5	100	100.0		02:36	02:36	02:31
86	BEDROOM	100.0	99.5	82.7	100	100.0		02:48	02:50	02:38
87	L/K/D	100.0	100.0	100.0	200	100.0		06:53	07:36	08:16
88	BEDROOM	100.0	100.0	100.0	100	100.0		03:43	04:29	05:17
89	STUDIO	56.4	36.2	24.5	200	24.5		03:43	04:28	05:08

Table 07: Assessment Data

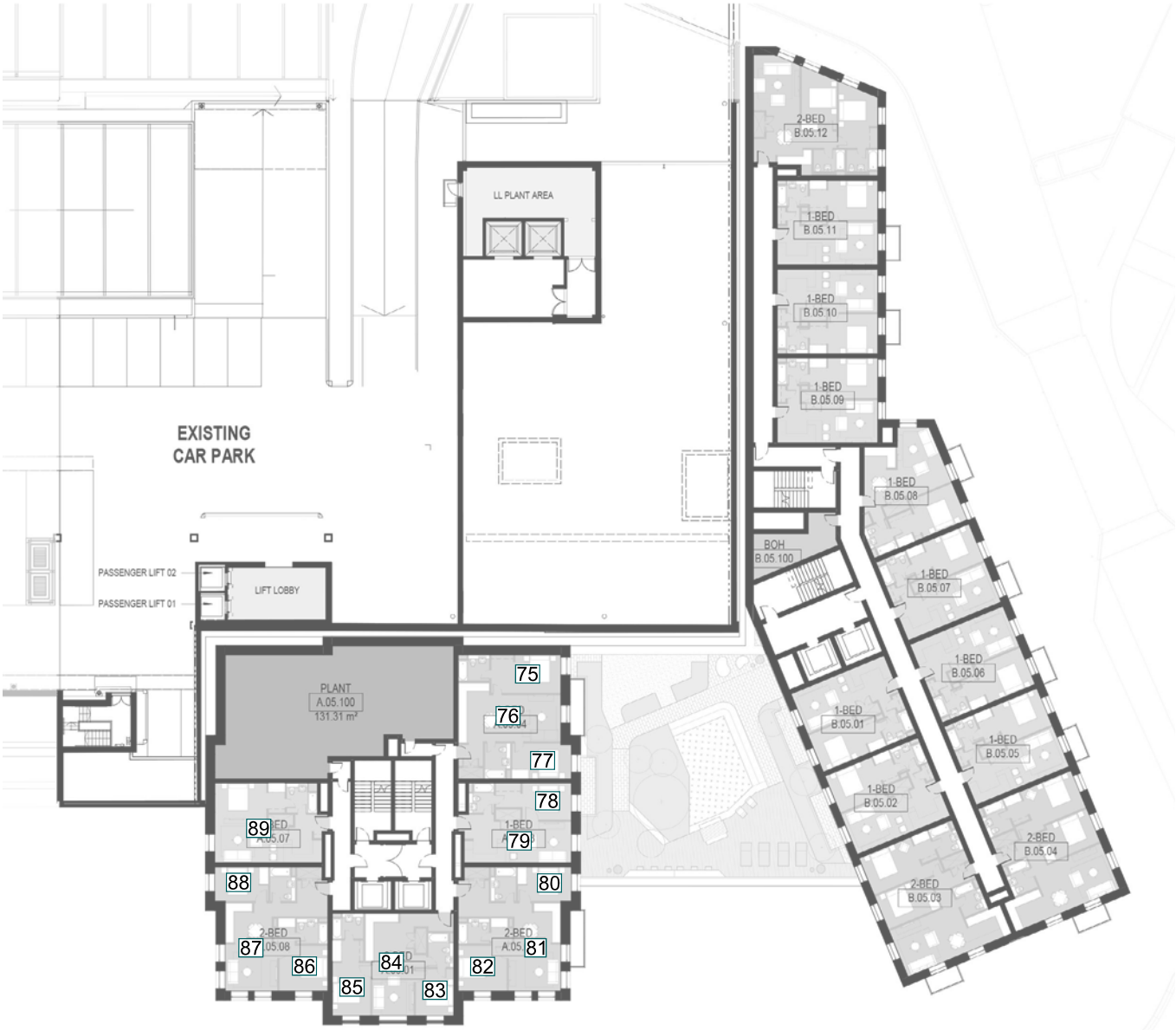


Fig. 16: Floor Plan

Block A - Level 06

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK A - LEVEL 06										
90	L/K/D	100.0	91.2	75.5	200	75.5		00:00	00:00	00:52
91	BEDROOM	100.0	100.0	94.9	100	100.0		00:00	00:00	00:57
92	BEDROOM	100.0	99.3	83.2	100	100.0		00:00	00:00	00:57
93	L/K/D	54.1	39.7	29.4	200	29.4		00:00	00:00	00:59
94	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:57
95	L/K/D	100.0	100.0	99.7	200	99.7		02:04	02:25	04:45
96	BEDROOM	100.0	96.9	75.4	100	100.0		01:16	01:15	02:26
97	BEDROOM	100.0	100.0	100.0	100	100.0		02:14	02:12	02:26
98	L/K/D	91.0	59.7	48.3	200	48.3		03:14	03:11	03:47
99	BEDROOM	100.0	99.4	82.2	100	100.0		02:36	02:36	02:34
100	BEDROOM	100.0	100.0	87.7	100	100.0		02:48	02:49	02:42
101	L/K/D	100.0	100.0	100.0	200	100.0		06:53	07:39	08:27
102	BEDROOM	100.0	100.0	100.0	100	100.0		03:43	04:31	05:23
103	L/K/D	72.7	53.4	41.4	200	41.4		03:43	04:31	05:08
104	BEDROOM	100.0	100.0	100.0	100	100.0		03:43	04:31	04:40
105	BEDROOM	100.0	100.0	100.0	100	100.0		03:40	03:35	04:19
106	L/K/D	49.2	25.8	18.1	200	18.1		02:57	04:31	05:23
107	BEDROOM	93.0	57.2	40.8	100	93.0		03:43	04:31	05:23
108	L/K/D	30.1	14.4	7.8	200	7.8		00:00	00:00	00:00
109	BEDROOM	26.1	11.7	5.0	100	26.1		00:00	00:00	00:00
110	BEDROOM	42.3	21.1	11.9	100	42.3		00:00	00:00	00:00

Table 08: Assessment Data



Fig. 17: Floor Plan



Block A - Level 07

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK A - LEVEL 07										
111	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:59
112	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:59
113	BEDROOM	100.0	100.0	96.6	100	100.0		00:00	00:00	00:57
114	L/K/D	60.3	44.3	33.5	200	33.5		00:00	00:00	00:59
115	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:57
116	L/K/D	100.0	100.0	100.0	200	100.0		02:04	02:33	04:50
117	BEDROOM	100.0	96.4	79.5	100	100.0		01:17	01:23	02:56
118	BEDROOM	100.0	100.0	100.0	100	100.0		02:25	02:19	03:25
119	L/K/D	96.6	63.0	50.9	200	50.9		03:21	03:15	04:35
120	BEDROOM	100.0	100.0	85.8	100	100.0		02:39	02:34	02:58
121	BEDROOM	100.0	100.0	93.8	100	100.0		02:49	02:50	03:02
122	L/K/D	100.0	100.0	99.9	200	99.9		06:55	07:41	08:32
123	BEDROOM	100.0	100.0	100.0	100	100.0		03:44	04:33	05:25
124	L/K/D	74.1	54.7	43.4	200	43.4		03:44	04:33	05:25
125	BEDROOM	100.0	100.0	100.0	100	100.0		03:44	04:33	05:25
126	BEDROOM	100.0	100.0	100.0	100	100.0		03:44	04:33	05:25
127	L/K/D	100.0	100.0	100.0	200	100.0		03:44	04:33	05:25
128	BEDROOM	100.0	99.5	95.9	100	100.0		00:00	00:00	00:00
129	L/K/D	100.0	93.9	78.6	200	78.6		00:00	00:00	00:06
130	BEDROOM	100.0	94.2	82.1	100	100.0		00:00	00:00	00:00
131	BEDROOM	100.0	99.5	92.8	100	100.0		00:00	00:00	00:00

Table 09: Assessment Data

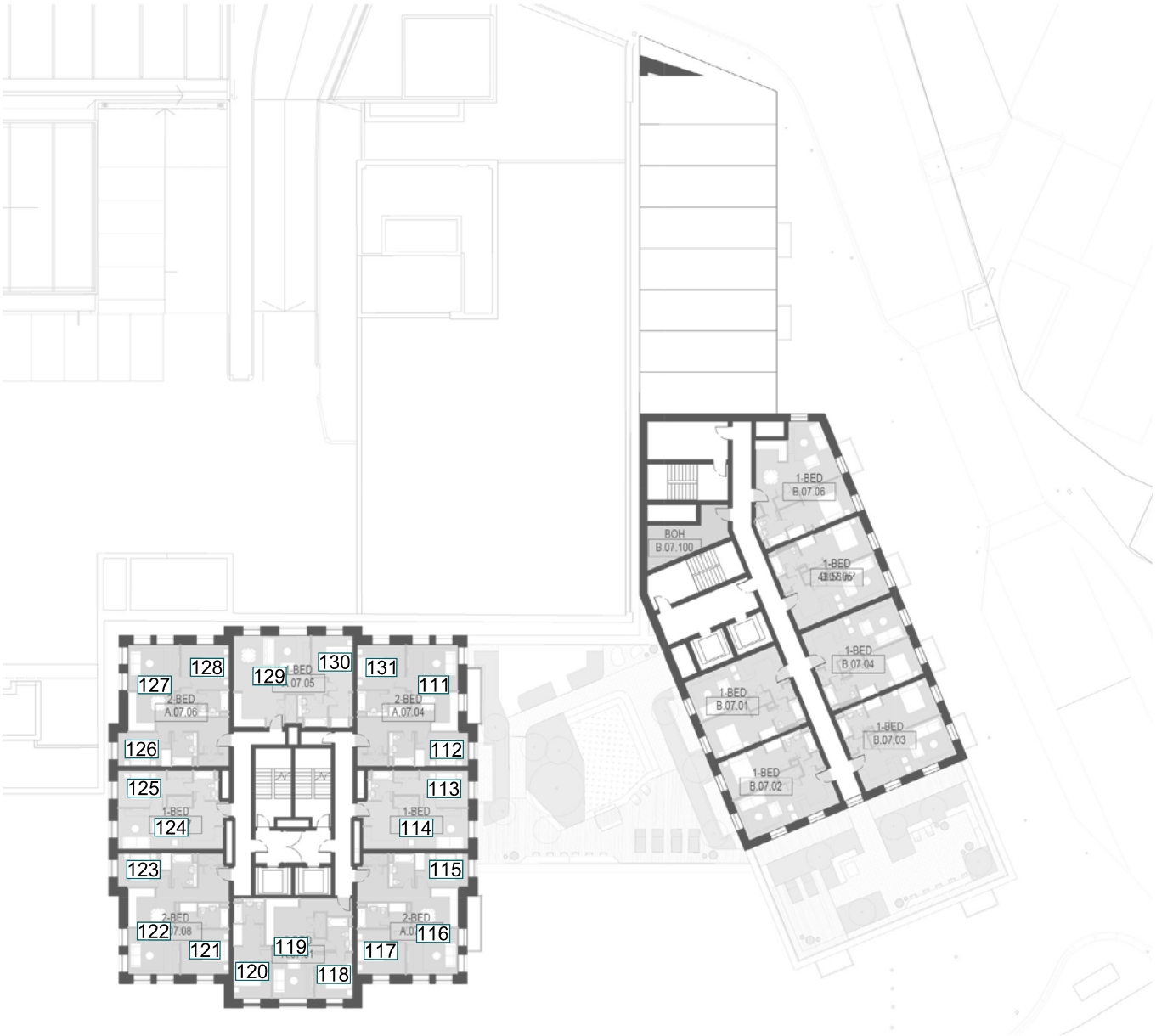


Fig. 18: Floor Plan



Block A - Level 08

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK A - LEVEL 08										
132	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:59
133	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:59
134	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:59
135	L/K/D	64.3	47.3	36.7	200	36.7		00:00	00:00	00:59
136	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:57
137	L/K/D	100.0	100.0	100.0	200	100.0		02:04	02:46	05:28
138	BEDROOM	100.0	100.0	100.0	100	100.0		01:17	01:30	03:06
139	BEDROOM	100.0	100.0	100.0	100	100.0		02:25	02:24	03:53
140	L/K/D	100.0	100.0	94.7	200	94.7		03:29	03:22	05:23
141	BEDROOM	100.0	100.0	100.0	100	100.0		02:52	02:47	03:58
142	BEDROOM	100.0	100.0	100.0	100	100.0		02:56	02:51	04:03
143	L/K/D	100.0	100.0	100.0	200	100.0		06:57	07:43	09:29
144	BEDROOM	100.0	100.0	100.0	100	100.0		03:43	04:31	05:23
145	L/K/D	76.1	56.1	43.9	200	43.9		03:43	04:31	05:23
146	BEDROOM	100.0	100.0	100.0	100	100.0		03:44	04:33	05:25
147	BEDROOM	100.0	100.0	100.0	100	100.0		03:43	04:31	05:23
148	L/K/D	100.0	100.0	100.0	200	100.0		03:44	04:33	05:25
149	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00
150	L/K/D	100.0	100.0	98.7	200	98.7		00:00	00:00	00:06
151	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00
152	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00

Table 10: Assessment Data

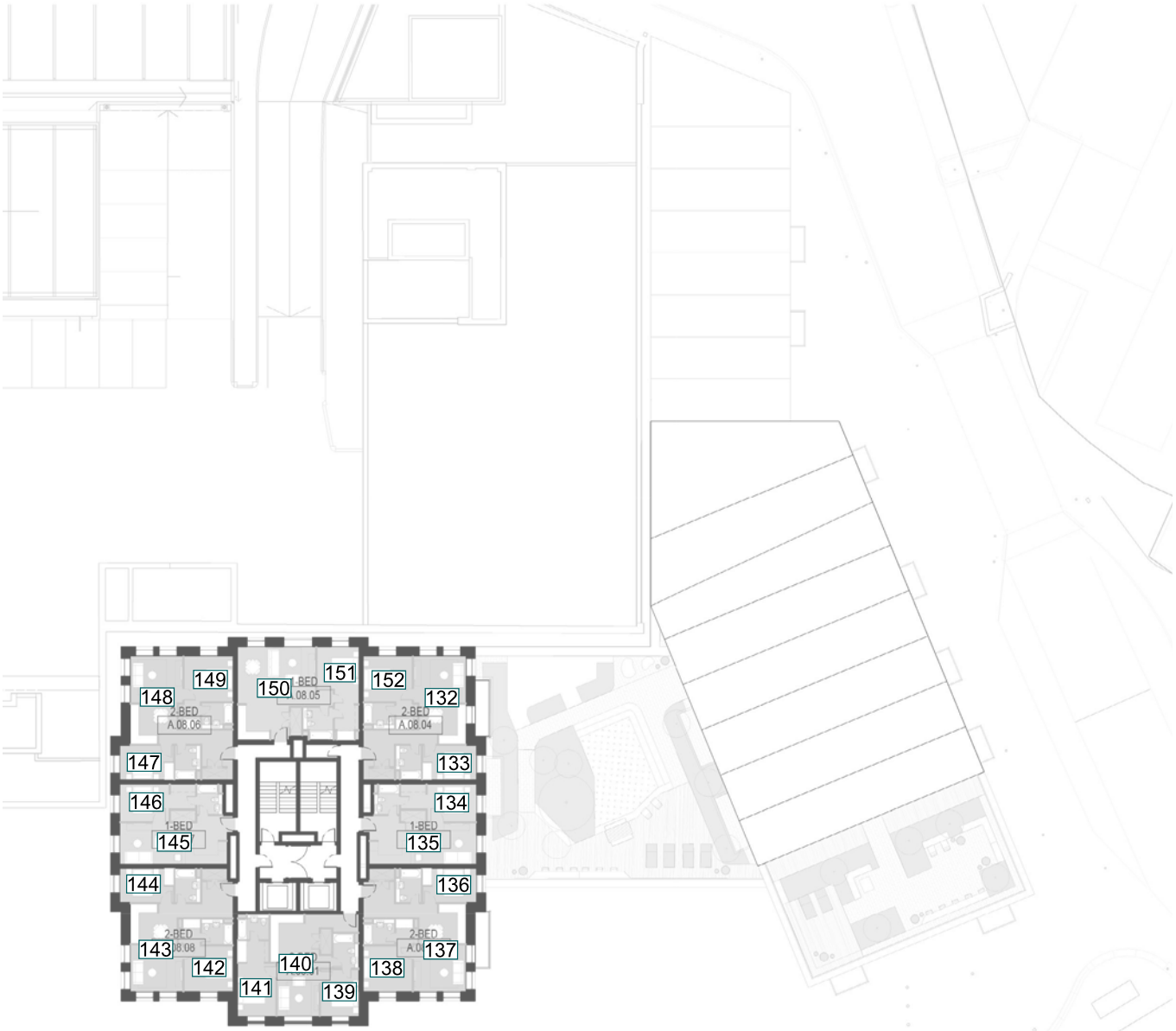


Fig. 19: Floor Plan

Block A - Level 09

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK A - LEVEL 09										
153	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:59
154	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:59
155	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:59
156	L/K/D	66.1	48.6	37.2	200	37.2		00:00	00:00	00:59
157	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:57
158	L/K/D	100.0	100.0	100.0	200	100.0		02:10	03:38	06:21
159	BEDROOM	100.0	100.0	100.0	100	100.0		01:19	02:12	03:59
160	BEDROOM	100.0	100.0	100.0	100	100.0		02:25	02:32	04:07
161	L/K/D	100.0	100.0	97.6	200	97.6		03:31	03:25	05:35
162	BEDROOM	100.0	100.0	100.0	100	100.0		02:56	02:50	04:27
163	BEDROOM	100.0	100.0	100.0	100	100.0		03:04	02:59	04:23
164	L/K/D	100.0	100.0	100.0	200	100.0		07:05	07:52	10:13
165	BEDROOM	100.0	100.0	100.0	100	100.0		03:43	04:31	05:23
166	L/K/D	78.3	57.6	44.8	200	44.8		03:43	04:31	05:23
167	BEDROOM	100.0	100.0	100.0	100	100.0		03:44	04:33	05:25
168	BEDROOM	100.0	100.0	100.0	100	100.0		03:43	04:31	05:23
169	L/K/D	100.0	100.0	100.0	200	100.0		03:44	04:33	05:25
170	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00
171	L/K/D	100.0	100.0	99.2	200	99.2		00:00	00:00	00:06
172	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00
173	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00

Table 11: Assessment Data

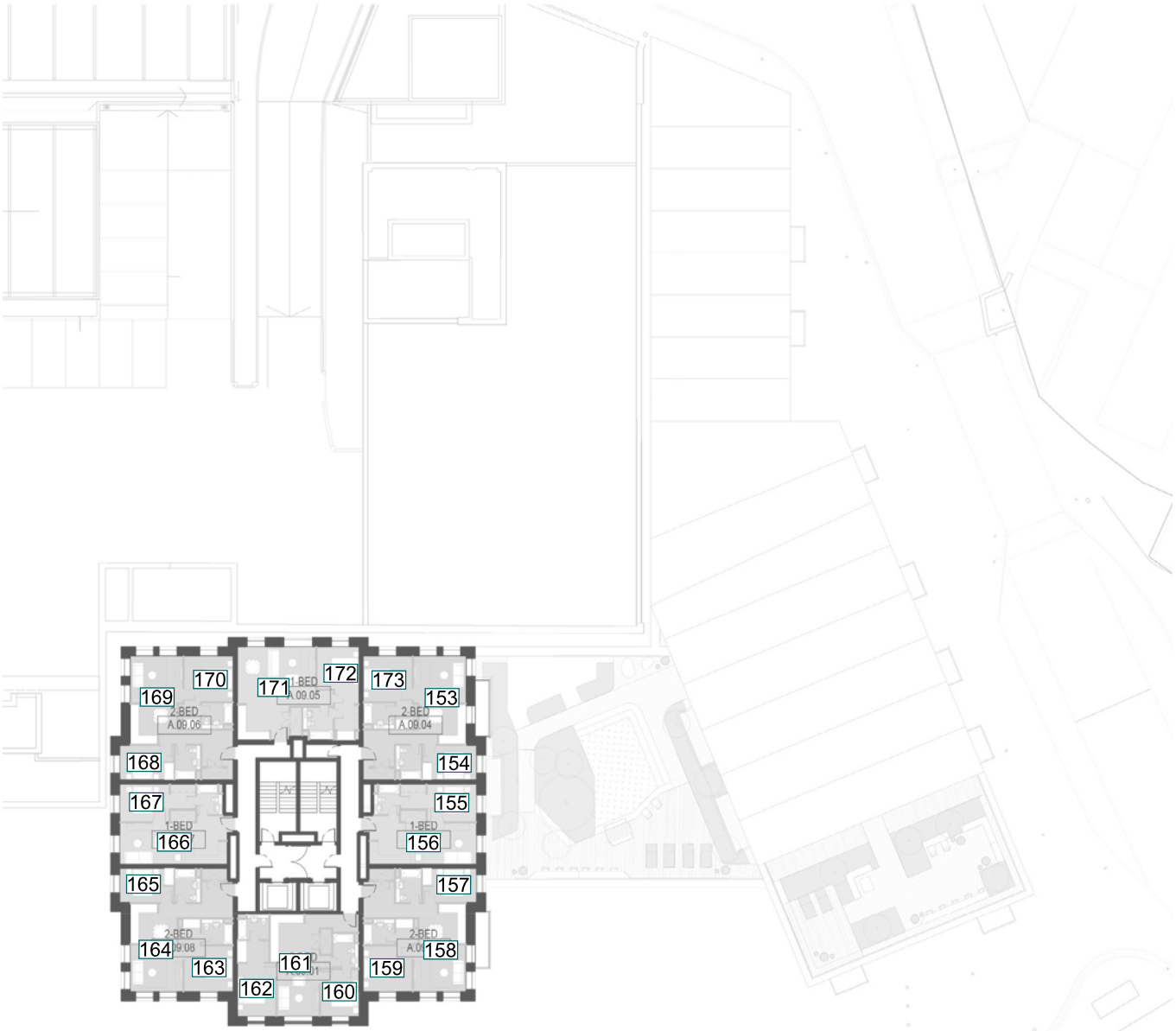


Fig. 20: Floor Plan

Block A - Level 10

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK A - LEVEL 10										
174	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:59
175	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:59
176	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:59
177	L/K/D	65.8	48.6	37.4	200	37.4		00:00	00:00	00:59
178	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:57
179	L/K/D	100.0	100.0	100.0	200	100.0		02:26	04:06	06:30
180	BEDROOM	100.0	100.0	100.0	100	100.0		01:29	03:06	04:48
181	BEDROOM	100.0	100.0	100.0	100	100.0		02:29	03:37	05:02
182	L/K/D	100.0	100.0	98.9	200	98.9		03:31	04:15	06:11
183	BEDROOM	100.0	100.0	100.0	100	100.0		02:56	03:08	04:39
184	BEDROOM	100.0	100.0	100.0	100	100.0		03:03	03:14	04:23
185	L/K/D	100.0	100.0	100.0	200	100.0		07:12	08:01	10:26
186	BEDROOM	100.0	100.0	100.0	100	100.0		03:43	04:31	05:23
187	L/K/D	79.8	58.1	45.8	200	45.8		03:43	04:31	05:23
188	BEDROOM	100.0	100.0	100.0	100	100.0		03:44	04:33	05:25
189	BEDROOM	100.0	100.0	100.0	100	100.0		03:43	04:31	05:23
190	L/K/D	100.0	100.0	100.0	200	100.0		03:44	04:33	05:25
191	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00
192	L/K/D	100.0	100.0	99.8	200	99.8		00:00	00:00	00:06
193	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00
194	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00

Table 12: Assessment Data

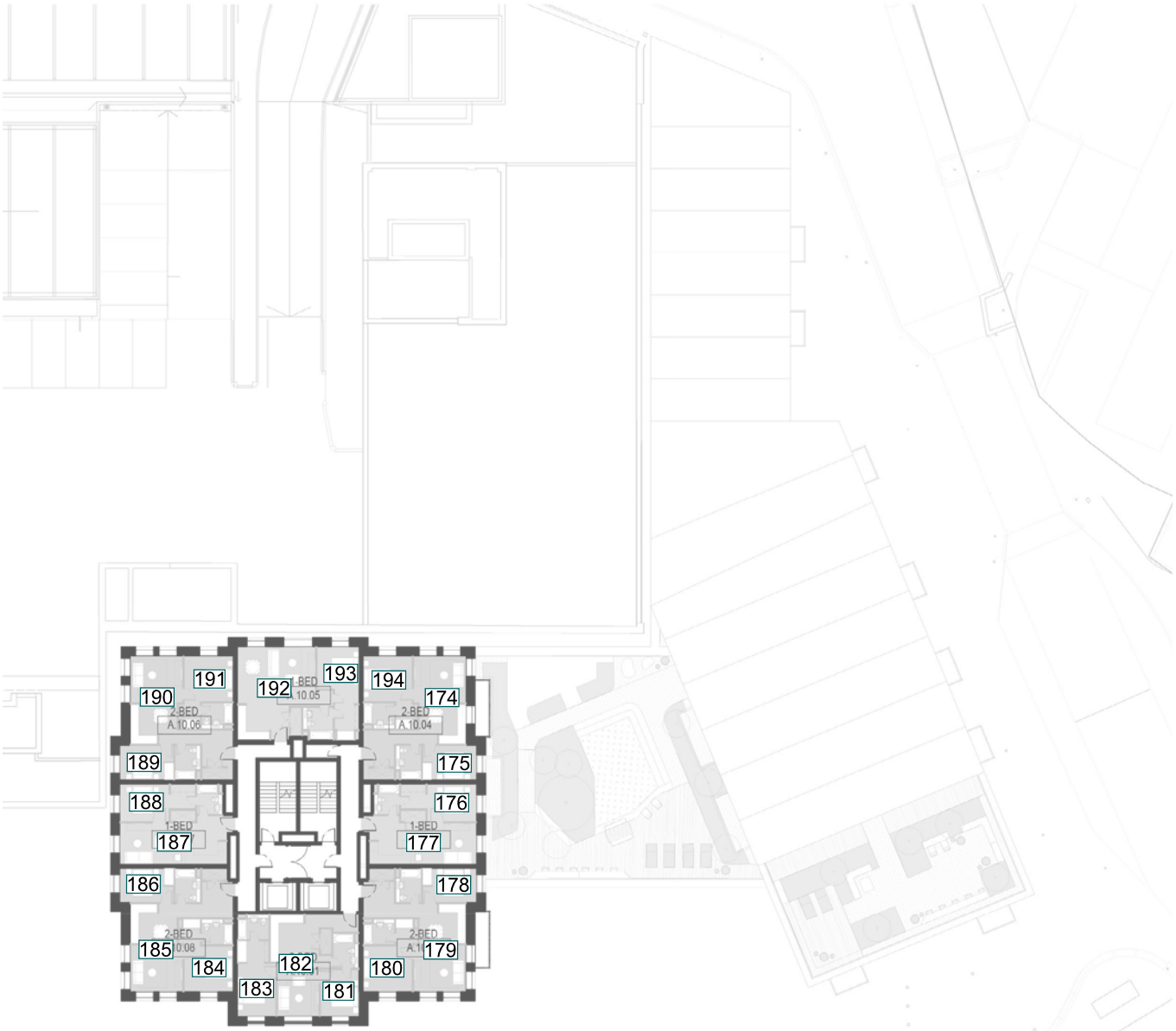


Fig. 21: Floor Plan

Block A - Level 11

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK A - LEVEL 11										
195	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:59
196	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:59
197	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:59
198	L/K/D	66.3	48.6	37.5	200	37.5		00:00	00:00	00:59
199	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:57
200	L/K/D	100.0	100.0	100.0	200	100.0		02:57	04:56	06:30
201	BEDROOM	100.0	100.0	100.0	100	100.0		01:51	03:20	04:48
202	BEDROOM	100.0	100.0	100.0	100	100.0		02:41	04:20	05:31
203	L/K/D	100.0	100.0	99.8	200	99.8		03:40	05:15	07:07
204	BEDROOM	100.0	100.0	100.0	100	100.0		02:59	04:20	05:12
205	BEDROOM	100.0	100.0	100.0	100	100.0		03:07	04:19	04:23
206	L/K/D	100.0	100.0	100.0	200	100.0		07:16	08:51	10:44
207	BEDROOM	100.0	100.0	100.0	100	100.0		03:43	04:31	05:23
208	L/K/D	81.5	59.4	46.4	200	46.4		03:43	04:31	05:23
209	BEDROOM	100.0	100.0	100.0	100	100.0		03:44	04:33	05:25
210	BEDROOM	100.0	100.0	100.0	100	100.0		03:43	04:31	05:23
211	L/K/D	100.0	100.0	100.0	200	100.0		03:44	04:33	05:25
212	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00
213	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:06
214	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00
215	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00

Table 13: Assessment Data

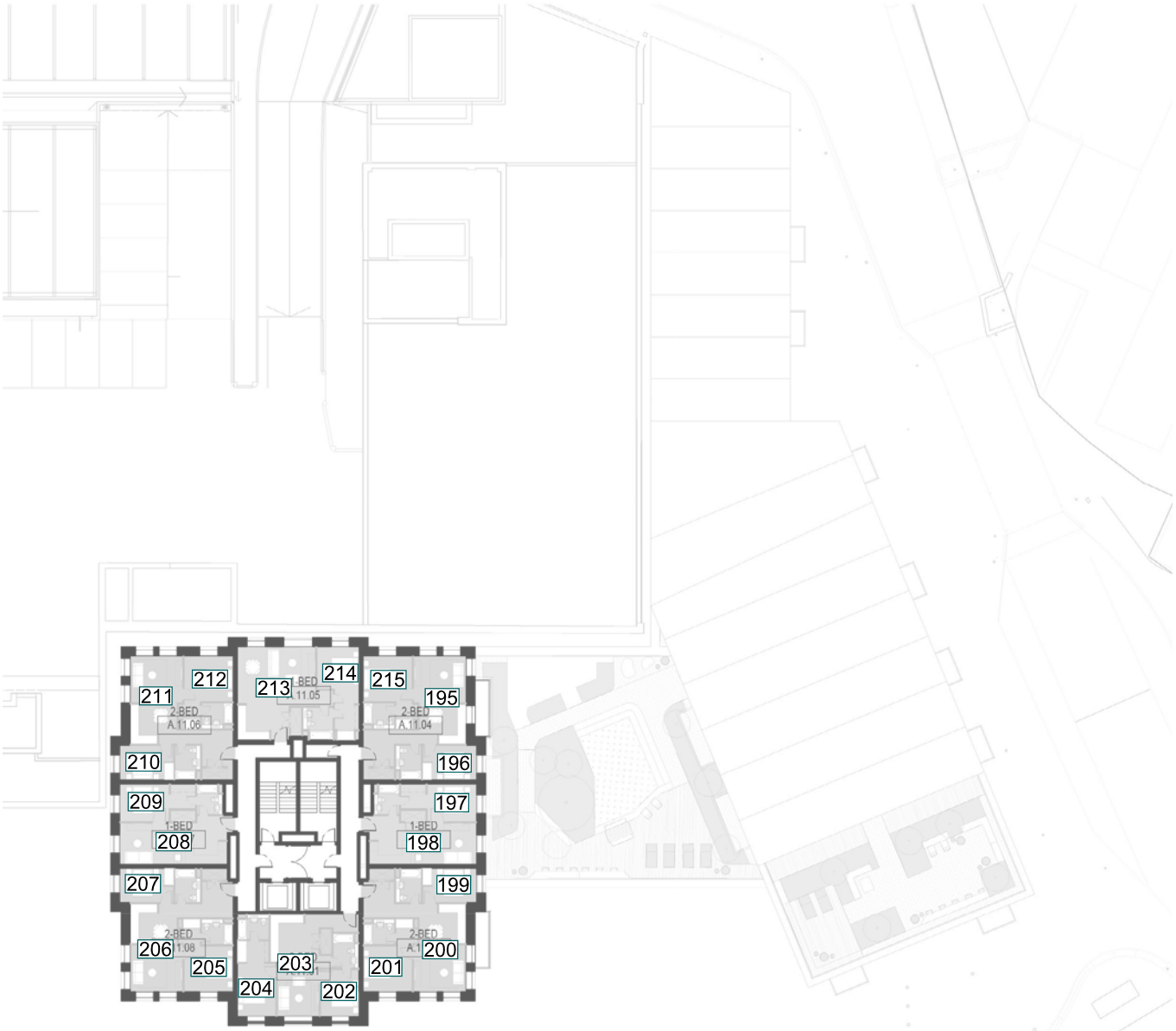


Fig. 22: Floor Plan



Block A - Level 12

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK A - LEVEL 12										
216	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:59
217	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:59
218	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:59
219	L/K/D	66.6	48.4	37.0	200	37.0		00:00	00:00	00:59
220	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:57
221	L/K/D	100.0	100.0	100.0	200	100.0		04:01	05:52	06:30
222	BEDROOM	100.0	100.0	100.0	100	100.0		02:52	04:18	04:48
223	BEDROOM	100.0	100.0	100.0	100	100.0		03:26	04:39	05:31
224	L/K/D	100.0	100.0	100.0	200	100.0		04:13	05:32	07:16
225	BEDROOM	100.0	100.0	100.0	100	100.0		03:15	04:55	05:34
226	BEDROOM	100.0	100.0	100.0	100	100.0		03:19	04:52	04:23
227	L/K/D	100.0	100.0	100.0	200	100.0		07:16	09:41	10:59
228	BEDROOM	100.0	100.0	100.0	100	100.0		03:43	04:31	05:23
229	L/K/D	83.9	59.9	47.4	200	47.4		03:43	04:31	05:23
230	BEDROOM	100.0	100.0	100.0	100	100.0		03:44	04:33	05:25
231	BEDROOM	100.0	100.0	100.0	100	100.0		03:43	04:31	05:23
232	L/K/D	100.0	100.0	100.0	200	100.0		03:44	04:33	05:25
233	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00
234	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:06
235	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00
236	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00

Table 14: Assessment Data

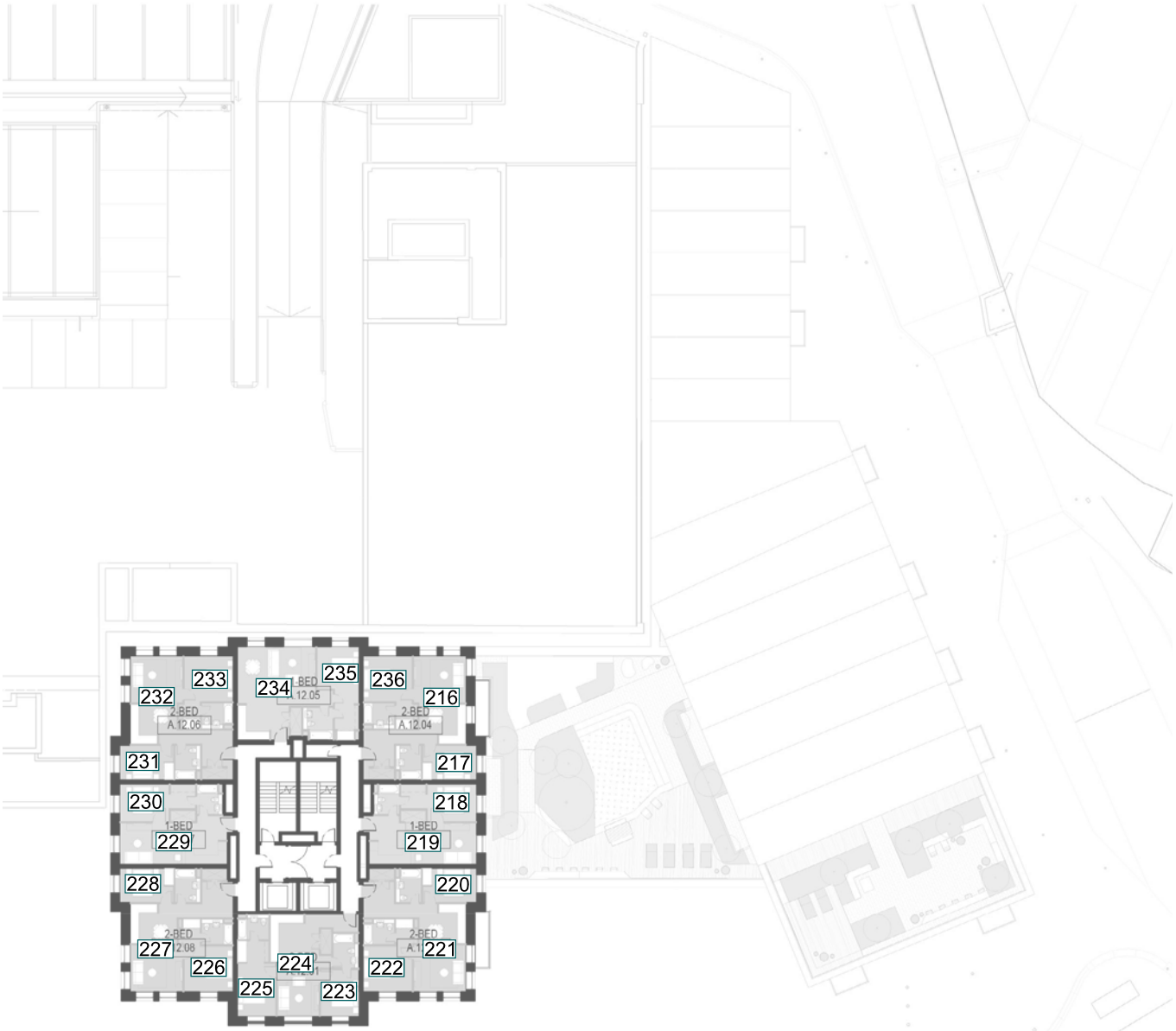


Fig. 23: Floor Plan

Block A - Level 13

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK A - LEVEL 13										
237	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:57
238	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:59
239	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:57
240	L/K/D	67.3	49.0	37.9	200	37.9		00:00	00:00	00:59
241	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:57
242	L/K/D	100.0	100.0	100.0	200	100.0		04:28	05:52	06:30
243	BEDROOM	100.0	100.0	99.5	100	100.0		03:32	05:02	04:46
244	BEDROOM	100.0	100.0	100.0	100	100.0		04:36	05:29	05:31
245	L/K/D	100.0	87.8	61.9	200	61.9		05:22	06:01	07:16
246	BEDROOM	100.0	100.0	100.0	100	100.0		04:18	05:14	05:31
247	BEDROOM	100.0	100.0	100.0	100	100.0		04:18	04:52	04:23
248	L/K/D	100.0	100.0	100.0	200	100.0		07:56	09:58	10:59
249	BEDROOM	100.0	100.0	100.0	100	100.0		03:44	04:33	05:25
250	L/K/D	86.9	61.8	48.9	200	48.9		03:44	04:33	05:25
251	BEDROOM	100.0	100.0	100.0	100	100.0		03:44	04:33	05:25
252	BEDROOM	100.0	100.0	100.0	100	100.0		03:44	04:33	05:25
253	L/K/D	100.0	100.0	100.0	200	100.0		03:44	04:33	05:25
254	BEDROOM	100.0	100.0	98.5	100	100.0		00:00	00:00	00:00
255	STUDIO	98.3	89.1	81.0	200	81.0		00:00	00:00	00:06
256	BEDROOM	100.0	97.1	88.4	100	100.0		00:00	00:00	00:00
257	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00

Table 15: Assessment Data

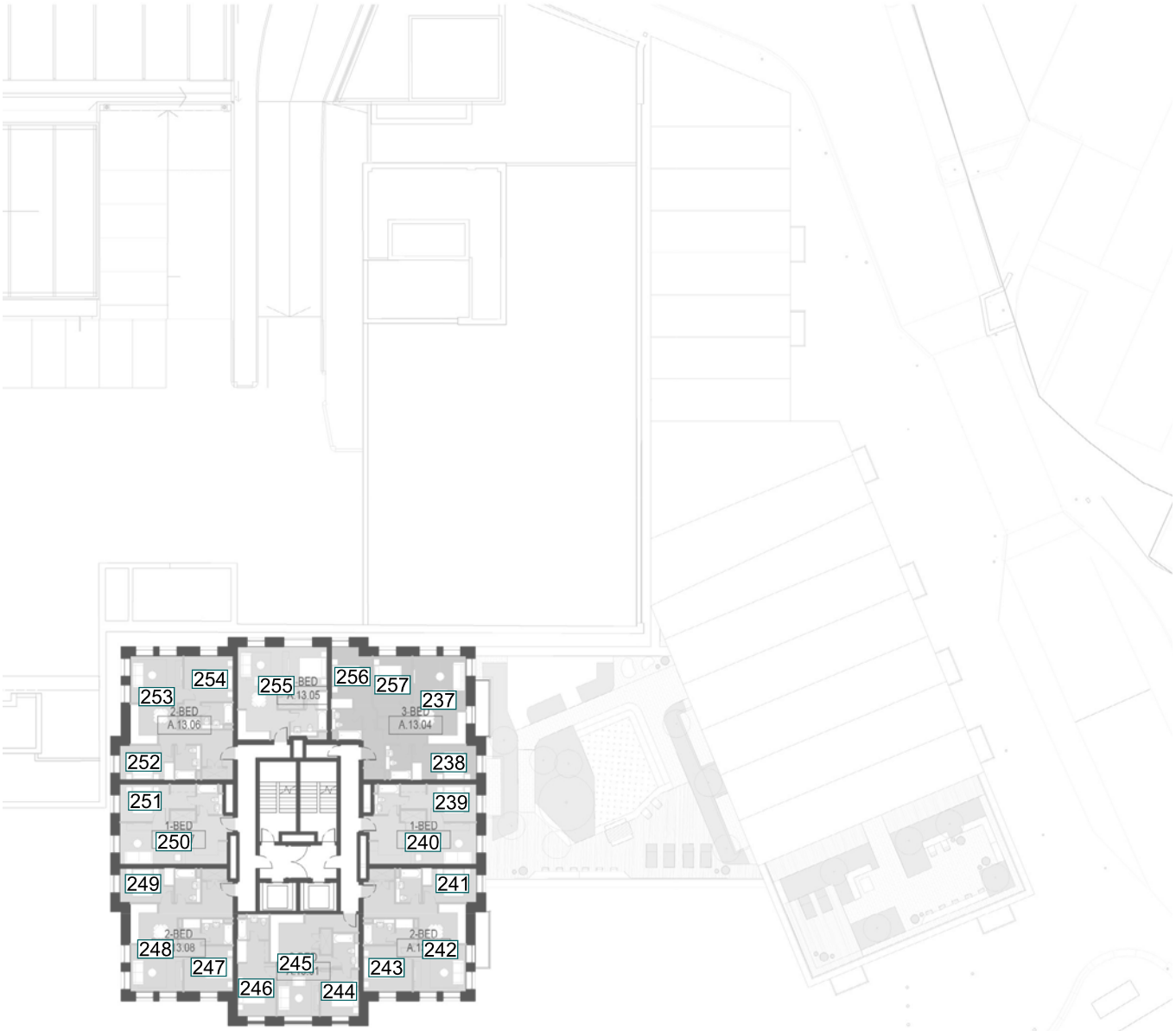


Fig. 24: Floor Plan

Block A - Level 14

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK A - LEVEL 14										
258	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:57
259	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:59
260	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:57
261	L/K/D	67.3	49.1	37.5	200	37.5		00:00	00:00	00:59
262	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:57
263	L/K/D	100.0	100.0	100.0	200	100.0		05:04	05:52	06:30
264	BEDROOM	100.0	100.0	100.0	100	100.0		04:06	05:02	04:46
265	BEDROOM	100.0	100.0	100.0	100	100.0		05:00	05:52	05:31
266	L/K/D	100.0	92.8	64.3	200	64.3		05:54	06:30	07:16
267	BEDROOM	100.0	100.0	100.0	100	100.0		05:04	05:43	05:31
268	BEDROOM	100.0	100.0	100.0	100	100.0		05:05	04:52	04:23
269	L/K/D	100.0	100.0	100.0	200	100.0		08:50	10:19	10:59
270	BEDROOM	100.0	100.0	100.0	100	100.0		03:44	04:33	05:25
271	L/K/D	88.0	62.2	49.8	200	49.8		03:44	04:33	05:25
272	BEDROOM	100.0	100.0	100.0	100	100.0		03:44	04:33	05:25
273	BEDROOM	100.0	100.0	100.0	100	100.0		03:44	04:33	05:25
274	L/K/D	100.0	100.0	100.0	200	100.0		03:44	04:33	05:25
275	BEDROOM	100.0	100.0	99.0	100	100.0		00:00	00:00	00:00
276	STUDIO	98.3	90.2	81.1	200	81.1		00:00	00:00	00:06
277	BEDROOM	100.0	98.3	89.0	100	100.0		00:00	00:00	00:00
278	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00

Table 16: Assessment Data

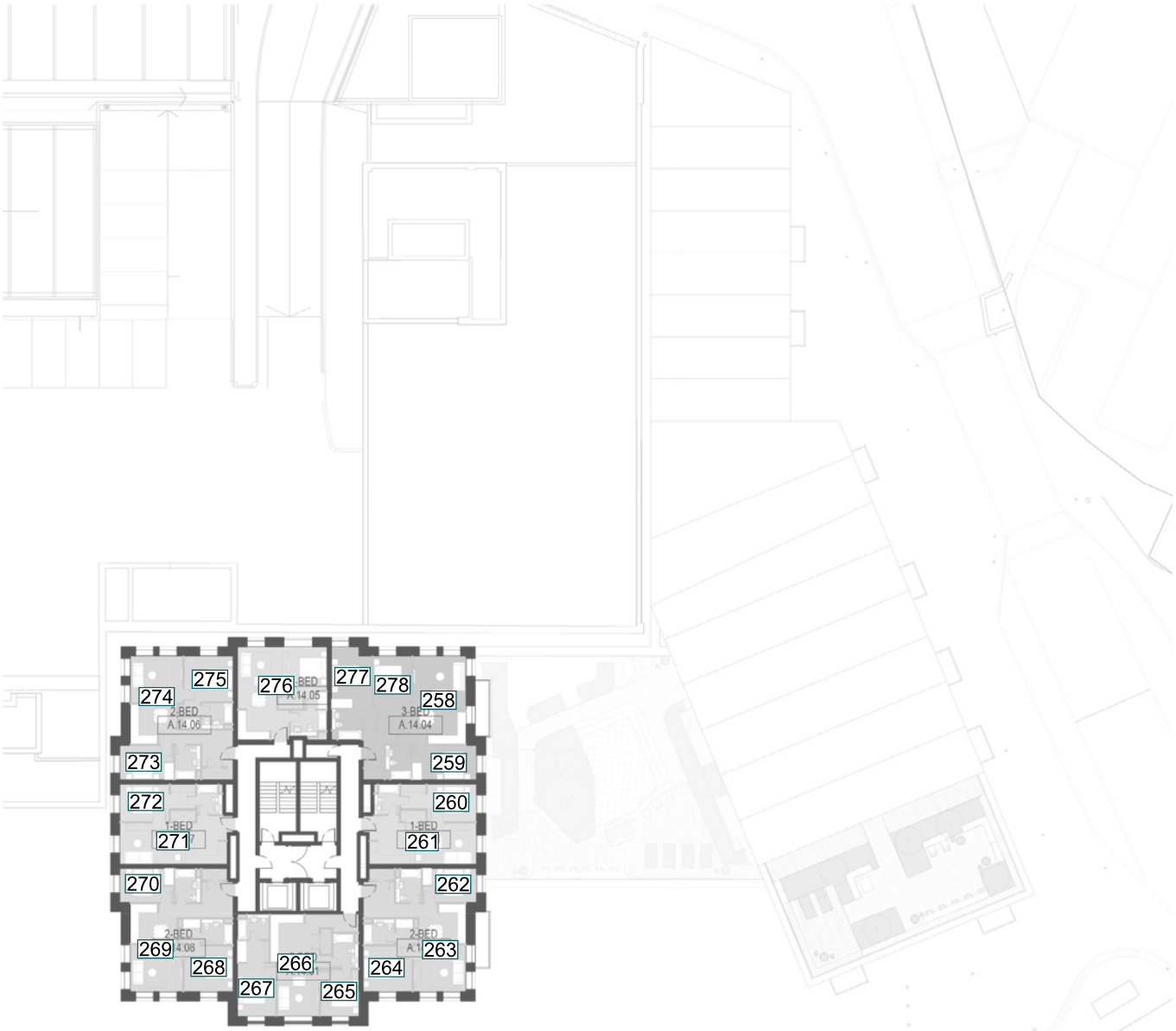


Fig. 25: Floor Plan



Block A - Level 15

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK A - LEVEL 15										
279	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:57
280	L/K/D	99.8	77.8	58.9	200	58.9		00:00	00:00	00:59
281	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	01:00	01:54
282	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00
283	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:59
284	L/K/D	100.0	100.0	100.0	200	100.0		05:12	05:52	06:30
285	BEDROOM	100.0	100.0	99.4	100	100.0		04:18	05:03	04:48
286	BEDROOM	100.0	100.0	100.0	100	100.0		05:12	05:52	05:31
287	L/K/D	100.0	96.9	67.9	200	67.9		06:04	06:39	07:16
288	BEDROOM	100.0	100.0	100.0	100	100.0		05:12	05:52	05:31
289	BEDROOM	100.0	100.0	100.0	100	100.0		05:12	04:54	04:25
290	L/K/D	100.0	100.0	100.0	200	100.0		08:58	10:27	10:59
291	BEDROOM	100.0	100.0	100.0	100	100.0		03:44	04:33	05:25
292	BEDROOM	100.0	100.0	100.0	100	100.0		02:56	03:36	03:22
293	BEDROOM	100.0	100.0	100.0	100	100.0		03:51	03:36	02:28
294	L/K/D	100.0	99.4	79.4	200	79.4		03:44	04:33	05:25
295	BEDROOM	100.0	100.0	100.0	100	100.0		03:44	04:33	05:25
296	BEDROOM	100.0	100.0	99.3	100	100.0		00:00	00:00	00:00
297	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:06
298	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00
299	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00

Table 17: Assessment Data

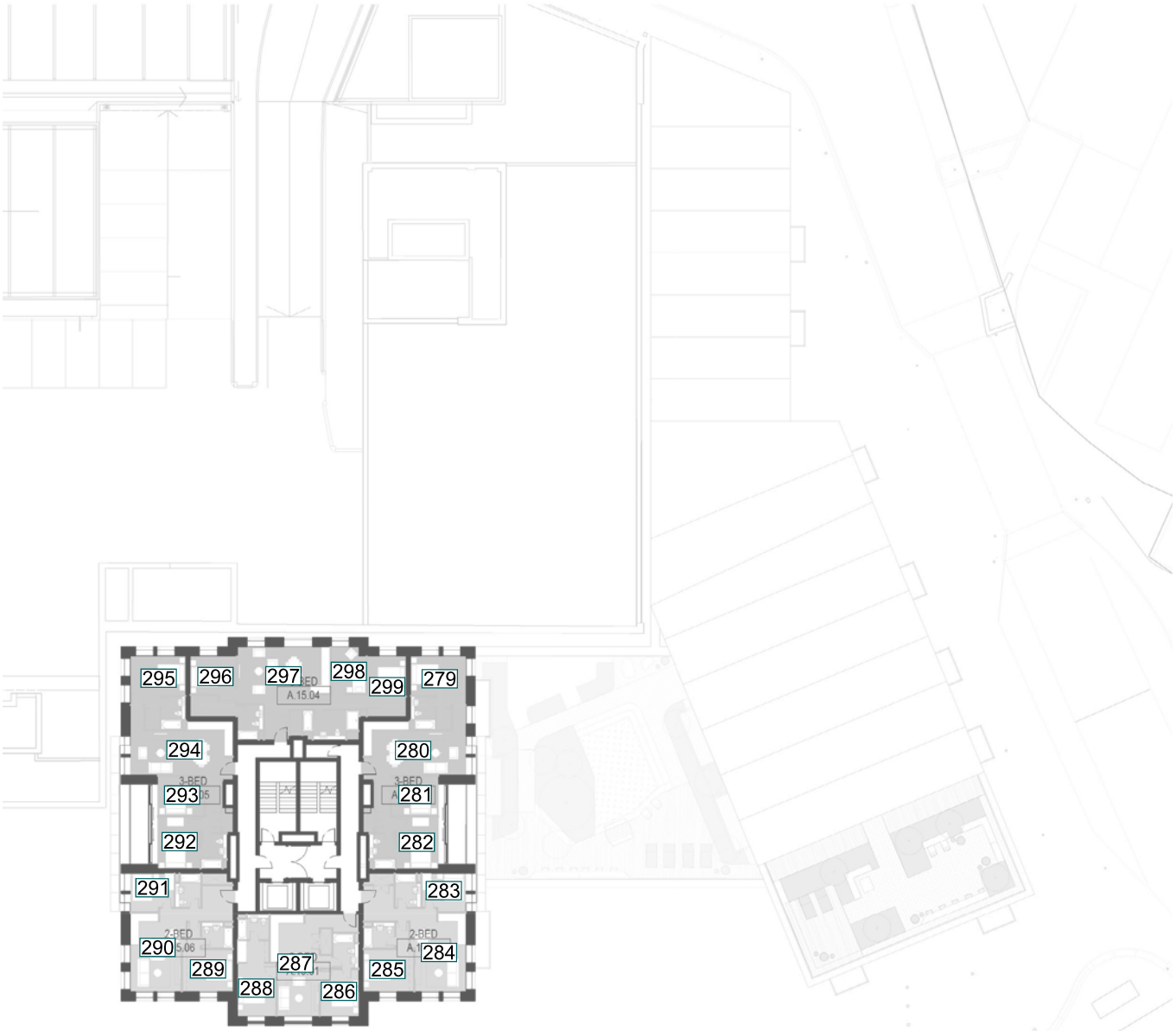


Fig. 26: Floor Plan



Block A - Level 16

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK A - LEVEL 16										
300	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:57
301	L/K/D	100.0	81.6	60.1	200	60.1		00:00	00:00	00:59
302	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	01:00	01:54
303	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00
304	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:59
305	L/K/D	100.0	100.0	100.0	200	100.0		05:12	05:52	06:30
306	BEDROOM	100.0	100.0	100.0	100	100.0		04:18	05:03	04:48
307	BEDROOM	100.0	100.0	100.0	100	100.0		05:12	05:52	05:31
308	L/K/D	100.0	98.1	71.2	200	71.2		06:04	06:39	07:16
309	BEDROOM	100.0	100.0	100.0	100	100.0		05:12	05:52	05:31
310	BEDROOM	100.0	100.0	100.0	100	100.0		05:12	04:54	04:25
311	L/K/D	100.0	100.0	100.0	200	100.0		08:58	10:27	10:59
312	BEDROOM	100.0	100.0	100.0	100	100.0		03:44	04:33	05:25
313	BEDROOM	100.0	100.0	100.0	100	100.0		02:56	03:36	03:22
314	BEDROOM	100.0	100.0	100.0	100	100.0		03:51	03:36	02:28
315	L/K/D	100.0	99.4	79.2	200	79.2		03:44	04:33	05:25
316	BEDROOM	100.0	100.0	100.0	100	100.0		03:44	04:33	05:25
317	BEDROOM	100.0	100.0	99.3	100	100.0		00:00	00:00	00:00
318	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:06
319	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00
320	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00

Table 18: Assessment Data

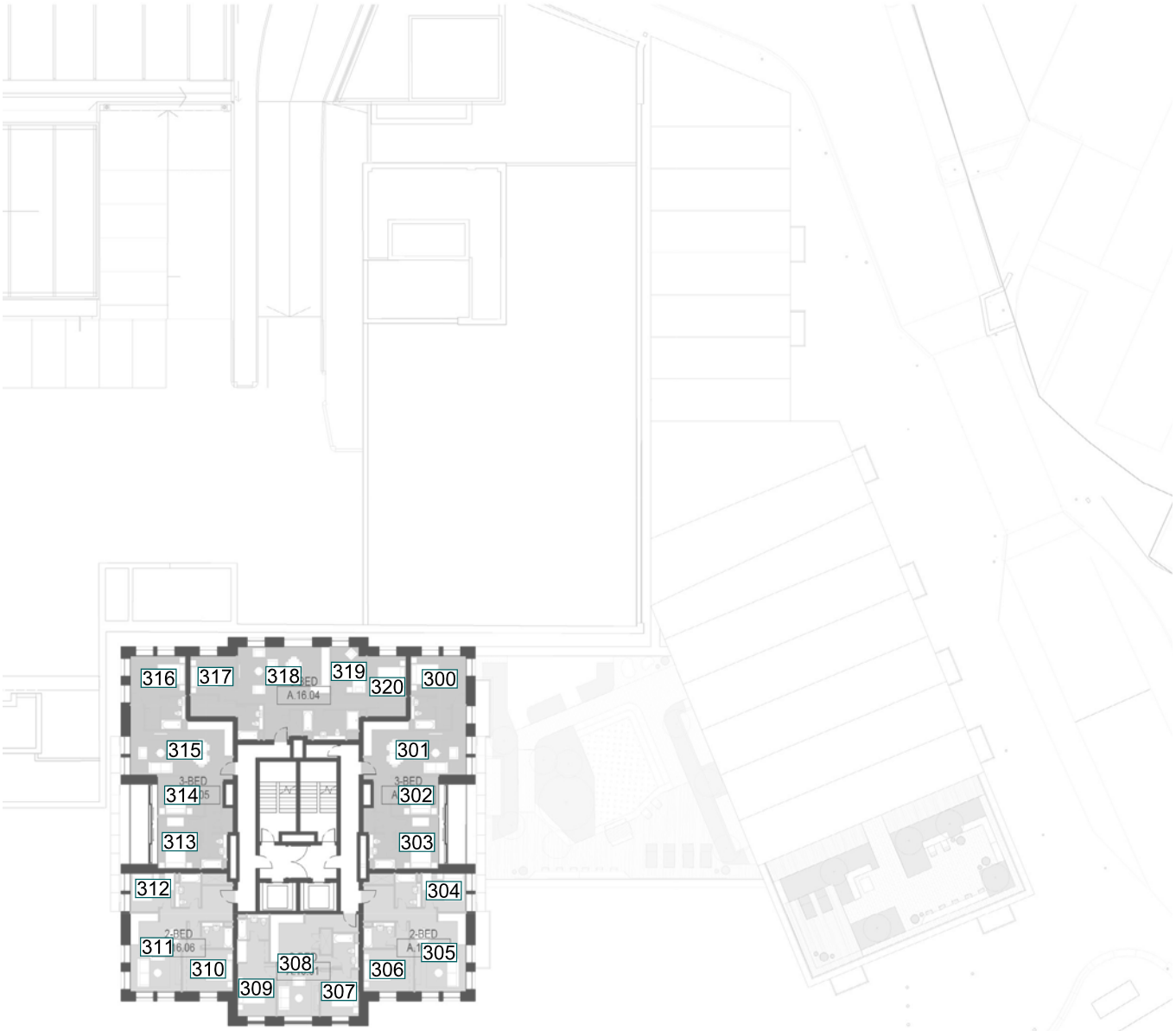


Fig. 27: Floor Plan

Block A - Level 17

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK A - LEVEL 17										
321	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:57
322	L/K/D	100.0	82.6	60.3	200	60.3		00:00	00:00	00:59
323	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	01:00	01:54
324	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00
325	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:59
326	L/K/D	100.0	100.0	100.0	200	100.0		05:12	05:52	06:30
327	BEDROOM	100.0	100.0	100.0	100	100.0		04:18	05:03	04:48
328	BEDROOM	100.0	100.0	100.0	100	100.0		05:12	05:52	05:31
329	L/K/D	100.0	98.8	73.3	200	73.3		06:04	06:39	07:16
330	BEDROOM	100.0	100.0	100.0	100	100.0		05:12	05:52	05:31
331	BEDROOM	100.0	100.0	100.0	100	100.0		05:12	04:54	04:25
332	L/K/D	100.0	100.0	100.0	200	100.0		08:58	10:27	10:59
333	BEDROOM	100.0	100.0	100.0	100	100.0		03:44	04:33	05:25
334	BEDROOM	100.0	100.0	100.0	100	100.0		02:56	03:36	03:22
335	BEDROOM	100.0	100.0	100.0	100	100.0		03:51	03:36	02:28
336	L/K/D	100.0	99.4	81.2	200	81.2		03:44	04:33	05:25
337	BEDROOM	100.0	100.0	100.0	100	100.0		03:44	04:33	05:25
338	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00
339	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:06
340	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00
341	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00

Table 19: Assessment Data

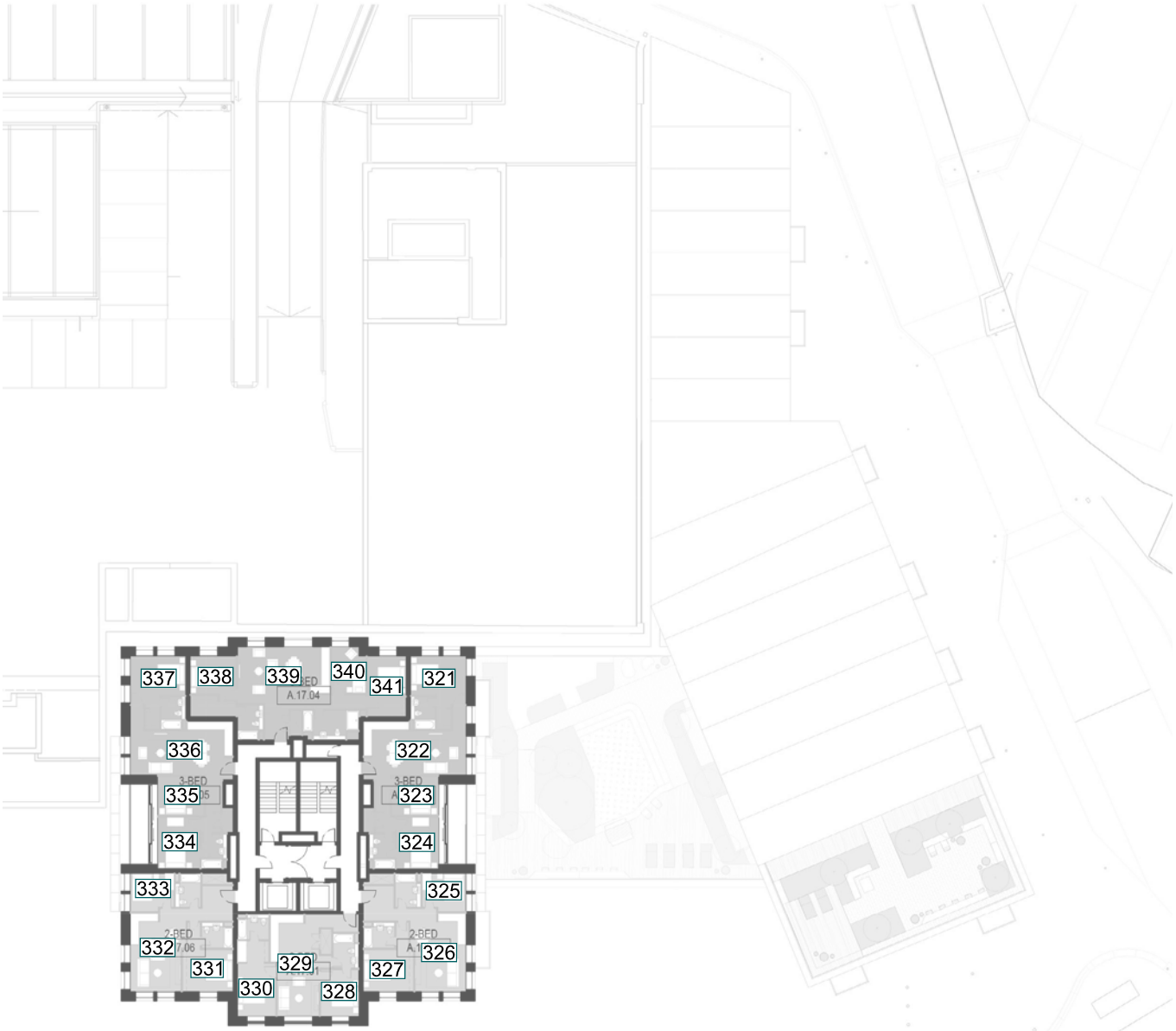


Fig. 28: Floor Plan



Block A - Level 18

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK A - LEVEL 18										
342	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00
343	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:59
344	BEDROOM	100.0	100.0	100.0	100	100.0		05:14	05:54	06:31
345	BEDROOM	100.0	100.0	100.0	100	100.0		05:12	05:52	05:31
346	L/K/D	100.0	100.0	100.0	200	100.0		09:00	10:28	12:02
347	BEDROOM	100.0	100.0	100.0	100	100.0		04:07	03:45	03:26
348	L/K/D	100.0	100.0	100.0	200	100.0		07:49	08:15	08:53
349	BEDROOM	100.0	100.0	100.0	100	100.0		03:43	04:31	05:23
350	L/K/D	100.0	100.0	97.9	200	97.9		00:00	00:00	00:06
351	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:59

Table 20: Assessment Data

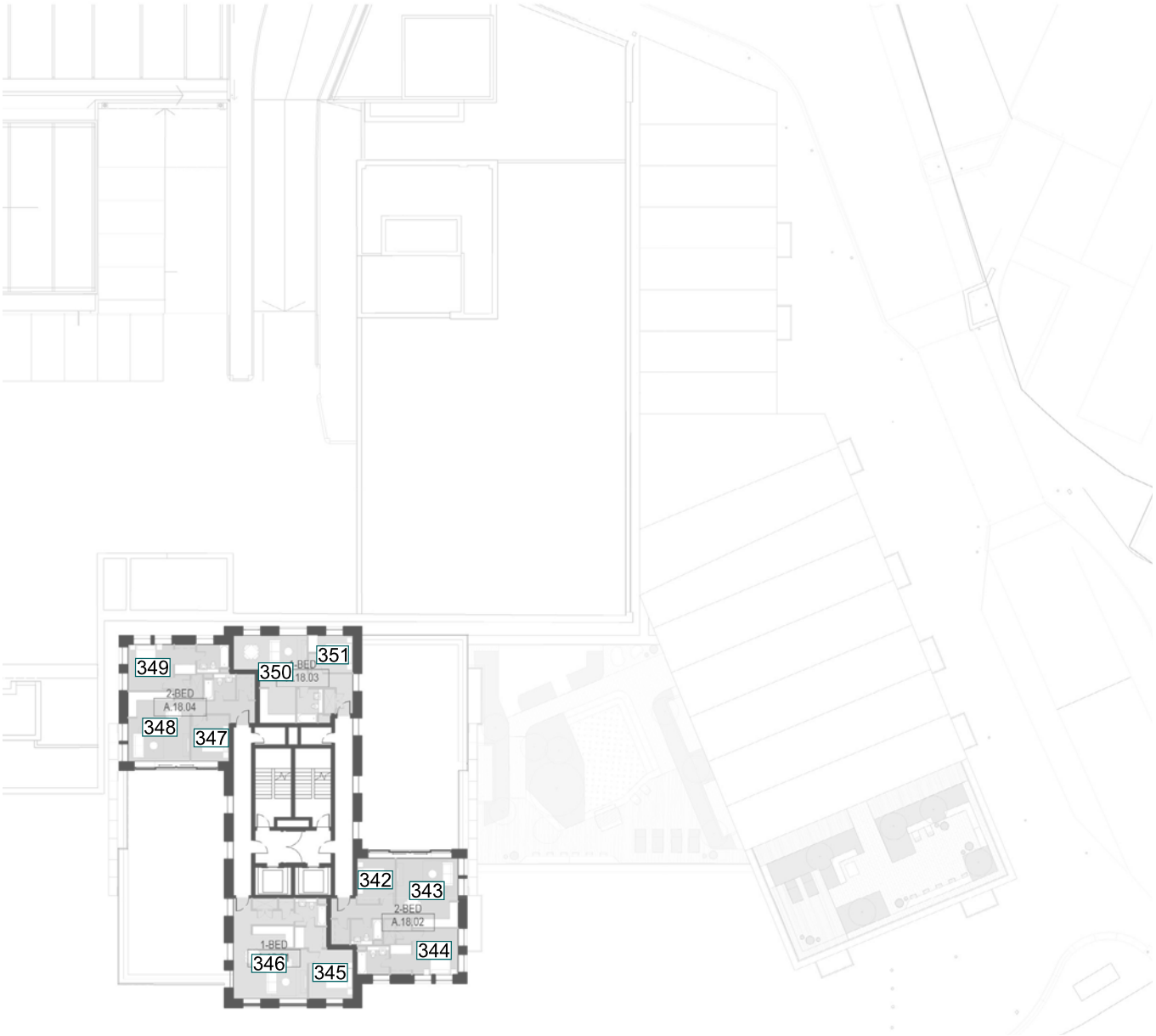


Fig. 29: Floor Plan



Block B - Level 00M

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK B - LEVEL 00										
352	L/K/D	98.4	91.2	84.6	200	84.6		00:33	01:42	04:03
353	BEDROOM	100.0	78.8	56.9	100	100.0		00:00	00:00	00:00
354	BEDROOM	92.6	61.9	41.8	100	92.6		00:00	00:00	00:00
355	L/K/D	34.6	18.8	10.2	200	10.2		00:00	00:00	00:00
356	BEDROOM	100.0	75.4	54.5	100	100.0		00:00	00:00	00:00
357	BEDROOM	80.2	43.7	23.4	100	80.2		00:00	00:00	00:00
358	L/K/D	43.9	29.5	19.8	200	19.8		00:00	00:00	00:00
359	L/K/D	23.7	12.5	7.6	200	7.6		00:00	00:00	00:00
360	BEDROOM	91.6	51.5	33.5	100	91.6		00:00	00:00	00:00
361	BEDROOM	85.6	46.4	28.8	100	85.6		00:00	00:00	00:00
362	L/K/D	53.6	26.8	15.0	200	15.0		00:00	00:00	00:00
363	L/K/D	23.0	13.6	9.2	200	9.2		00:00	00:00	00:00
364	BEDROOM	74.9	41.9	28.1	100	74.9		00:00	00:00	00:16
365	BEDROOM	47.9	25.7	15.6	100	47.9		00:00	00:00	00:52
366	L/K/D	33.9	20.8	14.7	200	14.7		00:00	00:00	00:59
367	L/K/D	23.8	11.7	6.5	200	6.5		00:00	00:00	00:48
368	BEDROOM	83.2	58.7	42.5	100	83.2		00:00	00:00	00:41
369	BEDROOM	98.3	84.3	72.7	100	98.3		00:00	00:00	00:17
370	BEDROOM	29.1	18.2	13.3	100	29.1		00:00	00:00	00:00
371	L/K/D	23.2	13.9	9.3	200	9.3		00:00	00:00	00:00
372	L/K/D	12.3	6.0	3.1	200	3.1		00:05	00:05	01:04
373	BEDROOM	46.1	22.2	12.0	100	46.1		00:21	00:19	01:24
374	BEDROOM	54.5	29.9	17.4	100	54.5		00:40	00:40	01:45
375	L/K/D	25.6	15.1	9.7	200	9.7		01:01	01:04	02:03
376	BEDROOM	45.5	29.1	20.1	100	45.5		01:23	01:30	02:18
377	BEDROOM	93.1	59.1	39.3	100	93.1		01:47	01:49	02:22
378	L/K/D	97.8	87.2	78.9	200	78.9		02:51	03:18	05:24

Table 21: Assessment Data

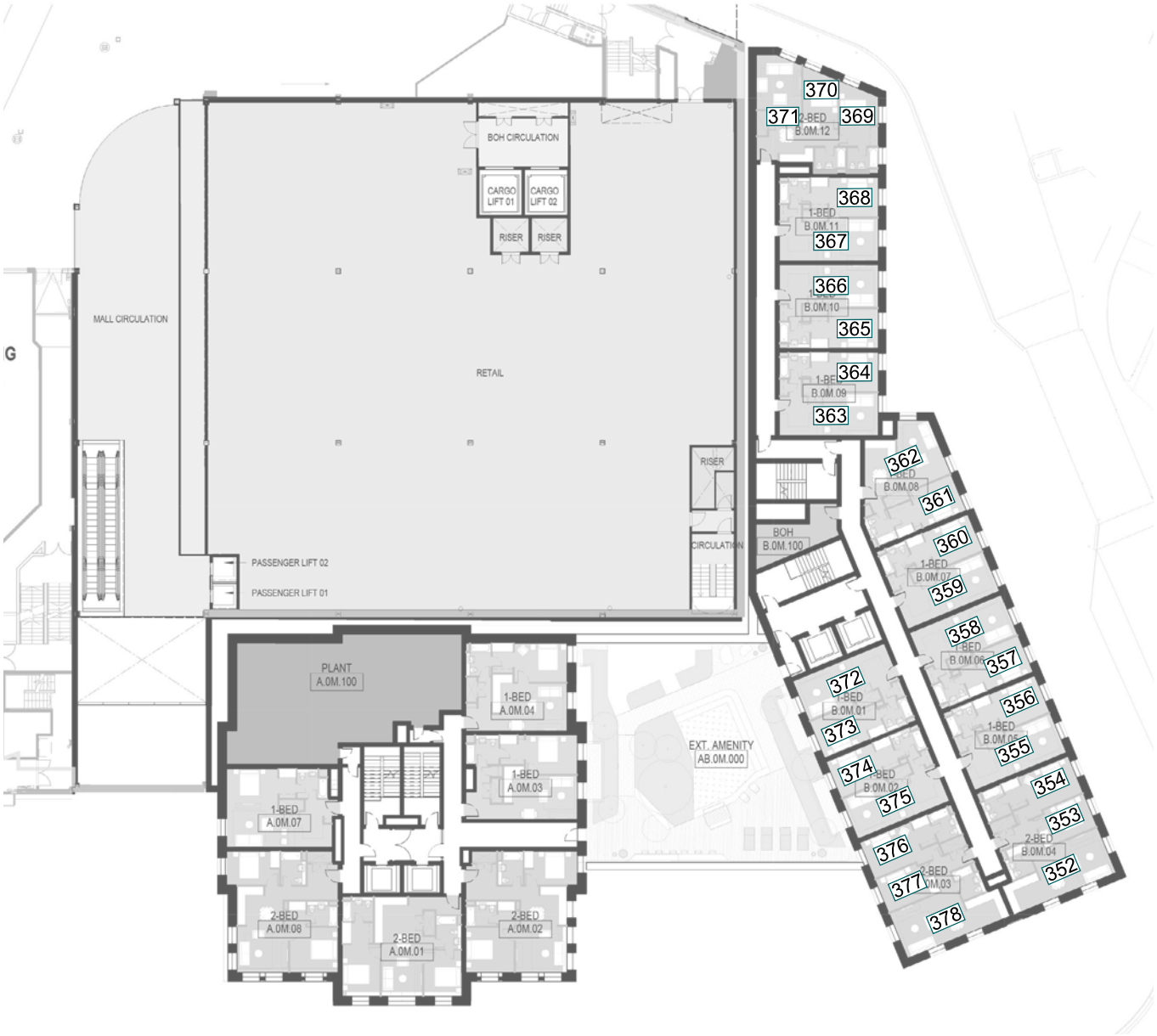


Fig. 30: Floor Plan



Block B - Level 01

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK B - LEVEL 01										
379	L/K/D	100.0	98.6	91.7	200	91.7		00:51	02:20	04:13
380	BEDROOM	100.0	100.0	80.6	100	100.0		00:00	00:00	00:00
381	BEDROOM	100.0	88.4	63.2	100	100.0		00:00	00:00	00:00
382	L/K/D	46.4	27.3	14.2	200	14.2		00:00	00:00	00:00
383	BEDROOM	100.0	100.0	78.4	100	100.0		00:00	00:00	00:00
384	BEDROOM	100.0	67.1	38.3	100	100.0		00:00	00:00	00:00
385	L/K/D	58.2	41.5	29.8	200	29.8		00:00	00:00	00:00
386	L/K/D	39.3	18.9	11.6	200	11.6		00:00	00:00	00:00
387	BEDROOM	100.0	91.3	54.2	100	100.0		00:00	00:00	00:00
388	BEDROOM	100.0	88.9	51.0	100	100.0		00:00	00:00	00:00
389	L/K/D	64.9	56.2	31.5	200	31.5		00:00	00:00	00:00
390	L/K/D	41.4	21.7	13.6	200	13.6		00:00	00:00	00:00
391	BEDROOM	100.0	79.0	46.7	100	100.0		00:00	00:00	00:31
392	BEDROOM	89.2	43.7	25.7	100	89.2		00:00	00:00	01:05
393	L/K/D	52.9	35.5	22.9	200	22.9		00:00	00:00	01:05
394	L/K/D	39.4	21.5	11.7	200	11.7		00:00	00:00	01:05
395	BEDROOM	100.0	94.0	67.1	100	100.0		00:00	00:00	01:04
396	BEDROOM	100.0	100.0	91.3	100	100.0		00:00	00:00	00:43
397	BEDROOM	60.0	32.1	21.2	100	60.0		00:00	00:00	00:00
398	L/K/D	37.7	25.1	15.9	200	15.9		00:00	00:00	00:00
399	L/K/D	19.2	8.5	4.7	200	4.7		00:05	00:09	01:04
400	BEDROOM	67.7	32.9	18.0	100	67.7		00:21	00:26	01:24
401	BEDROOM	80.8	43.7	25.7	100	80.8		00:40	00:45	01:45
402	L/K/D	37.5	21.4	13.1	200	13.1		01:01	01:09	02:10
403	BEDROOM	83.3	47.6	30.7	100	83.3		01:23	01:32	02:34
404	BEDROOM	100.0	86.2	56.6	100	100.0		01:47	01:50	02:50
405	L/K/D	100.0	97.8	89.0	200	89.0		02:53	03:24	06:31

Table 22: Assessment Data

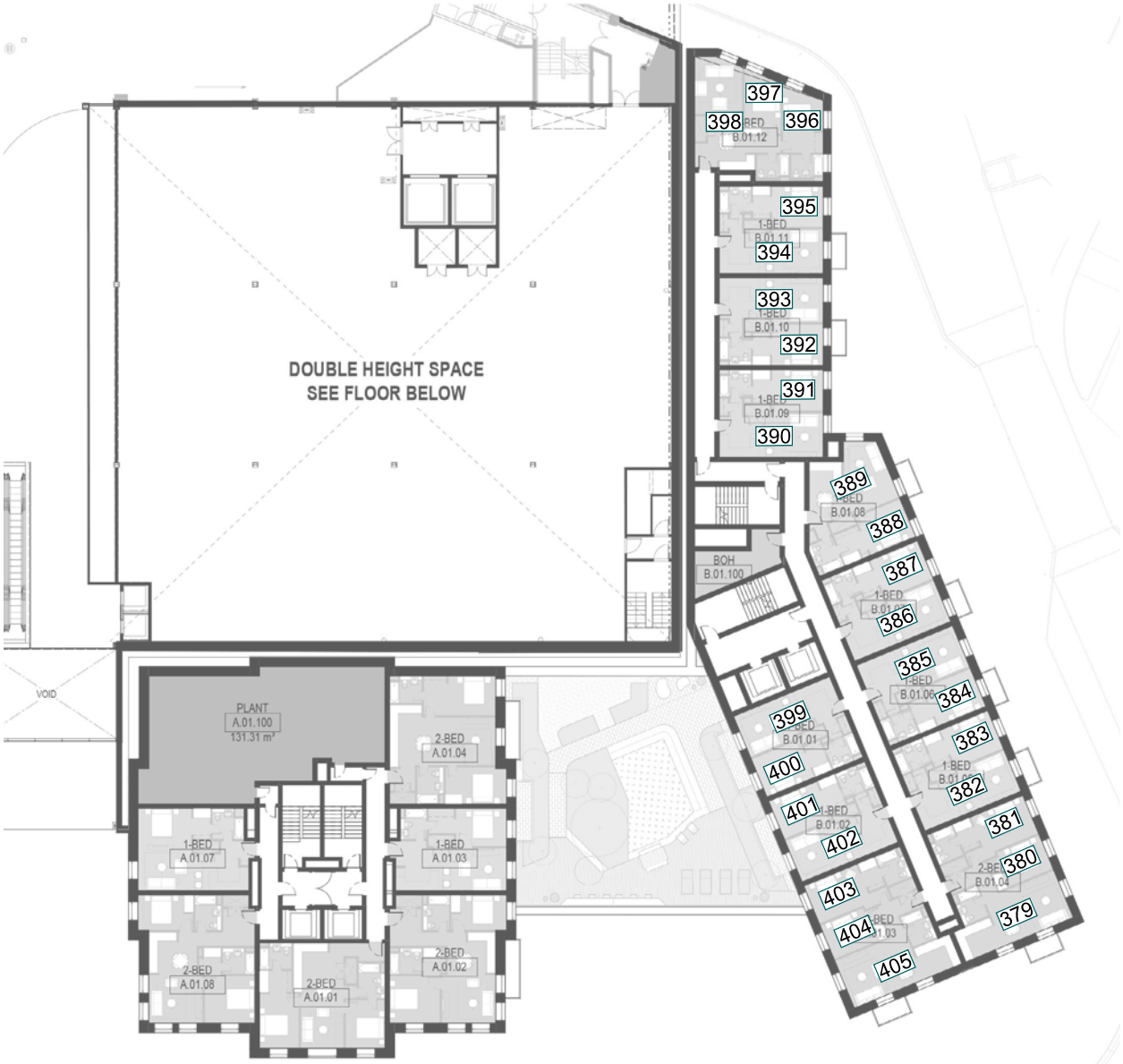


Fig. 31: Floor Plan



Block B - Level 02

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK B - LEVEL 02										
406	L/K/D	100.0	99.5	93.3	200	93.3		01:08	03:12	04:57
407	BEDROOM	100.0	100.0	89.4	100	100.0		00:00	00:00	00:00
408	BEDROOM	100.0	94.2	67.2	100	100.0		00:00	00:00	00:00
409	L/K/D	49.2	29.5	15.8	200	15.8		00:00	00:00	00:00
410	BEDROOM	100.0	100.0	86.8	100	100.0		00:00	00:00	00:00
411	BEDROOM	100.0	76.6	43.7	100	100.0		00:00	00:00	00:00
412	L/K/D	62.1	45.7	32.4	200	32.4		00:00	00:00	00:00
413	L/K/D	44.2	21.4	12.7	200	12.7		00:00	00:00	00:00
414	BEDROOM	100.0	97.6	66.5	100	100.0		00:00	00:00	00:00
415	BEDROOM	100.0	98.0	60.1	100	100.0		00:00	00:00	00:00
416	L/K/D	66.8	61.2	43.1	200	43.1		00:00	00:00	00:00
417	L/K/D	47.9	25.4	16.0	200	16.0		00:00	00:00	00:00
418	BEDROOM	100.0	96.4	56.3	100	100.0		00:00	00:00	00:36
419	BEDROOM	100.0	55.7	31.1	100	100.0		00:00	00:00	01:14
420	L/K/D	60.0	41.8	27.1	200	27.1		00:00	00:00	01:23
421	L/K/D	46.6	27.7	14.8	200	14.8		00:00	00:00	01:12
422	BEDROOM	100.0	100.0	80.8	100	100.0		00:00	00:00	01:15
423	BEDROOM	100.0	100.0	99.4	100	100.0		00:00	00:00	01:10
424	BEDROOM	85.5	44.2	27.9	100	85.5		00:00	00:00	00:00
425	L/K/D	50.1	34.2	22.0	200	22.0		00:00	00:00	00:00
426	L/K/D	22.8	10.6	6.0	200	6.0		00:05	00:18	01:04
427	BEDROOM	77.8	40.4	22.2	100	77.8		00:21	00:35	01:24
428	BEDROOM	88.0	50.3	29.9	100	88.0		00:45	00:55	01:45
429	L/K/D	40.9	23.5	14.8	200	14.8		01:12	01:19	02:10
430	BEDROOM	88.9	52.9	33.3	100	88.9		01:35	01:41	02:34
431	BEDROOM	100.0	92.5	63.5	100	100.0		01:52	01:57	02:54
432	L/K/D	100.0	99.3	90.8	200	90.8		03:03	03:37	07:14

Table 23: Assessment Data

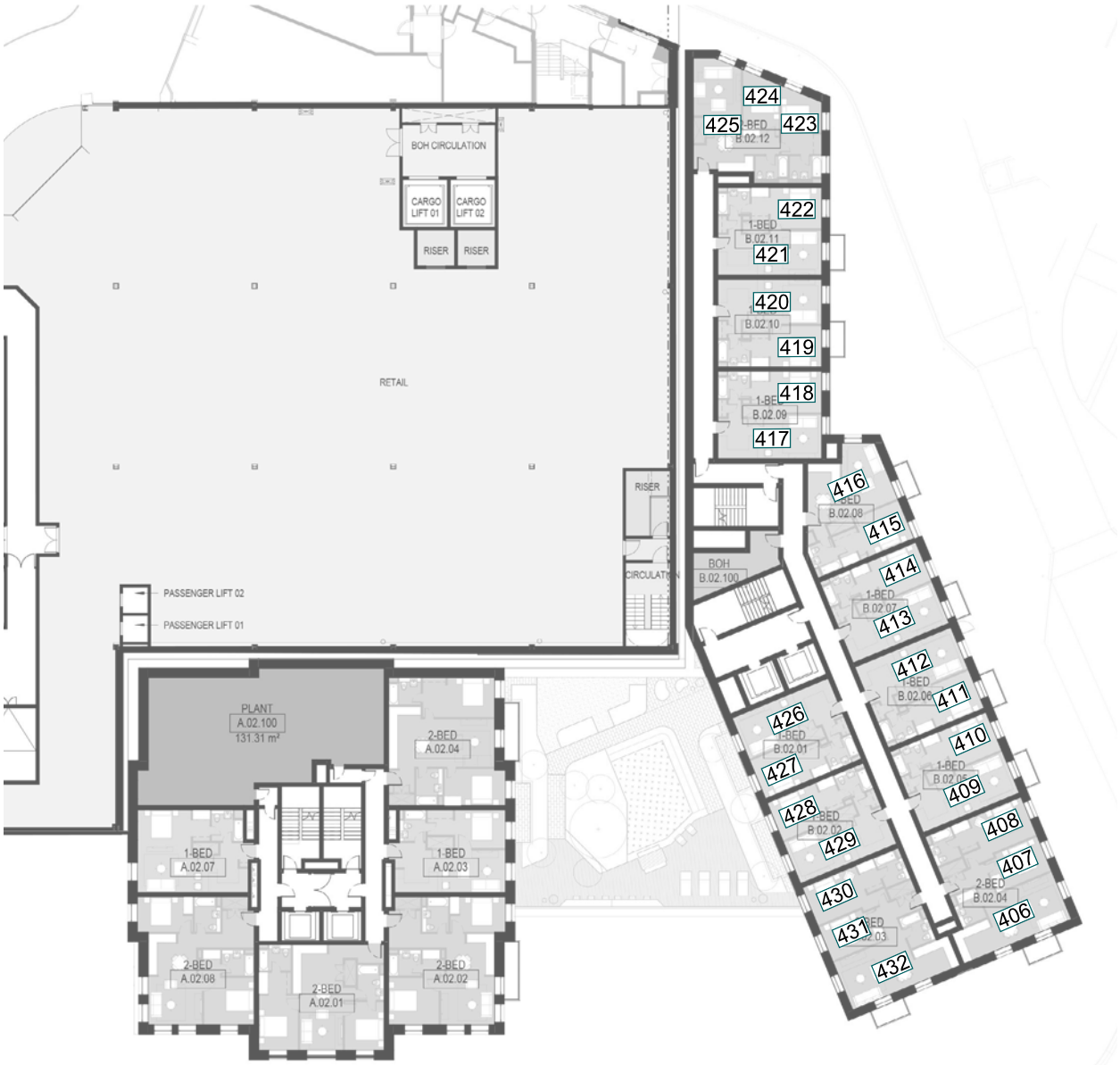


Fig. 32: Floor Plan



Block B - Level 03

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK B - LEVEL 03										
433	L/K/D	100.0	100.0	94.8	200	94.8		01:24	03:58	05:22
434	BEDROOM	100.0	100.0	96.3	100	100.0		00:00	00:00	00:00
435	BEDROOM	100.0	96.8	70.4	100	100.0		00:00	00:00	00:00
436	L/K/D	50.8	31.1	16.8	200	16.8		00:00	00:00	00:00
437	BEDROOM	100.0	100.0	91.0	100	100.0		00:00	00:00	00:00
438	BEDROOM	100.0	80.8	46.1	100	100.0		00:00	00:00	00:00
439	L/K/D	64.8	47.5	34.2	200	34.2		00:00	00:00	00:00
440	L/K/D	47.0	23.3	13.4	200	13.4		00:00	00:00	00:00
441	BEDROOM	100.0	100.0	75.4	100	100.0		00:00	00:00	00:00
442	BEDROOM	100.0	98.7	66.7	100	100.0		00:00	00:00	00:00
443	L/K/D	68.2	63.1	50.1	200	50.1		00:00	00:00	00:00
444	L/K/D	51.2	27.7	16.8	200	16.8		00:00	00:00	00:00
445	BEDROOM	100.0	98.8	65.9	100	100.0		00:00	00:00	00:47
446	BEDROOM	100.0	67.7	34.1	100	100.0		00:00	00:00	01:14
447	L/K/D	63.9	45.3	29.5	200	29.5		00:00	00:00	01:23
448	L/K/D	50.8	30.3	16.8	200	16.8		00:00	00:00	01:14
449	BEDROOM	100.0	100.0	91.0	100	100.0		00:00	00:00	01:23
450	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	01:23
451	BEDROOM	100.0	62.4	37.0	100	100.0		00:00	00:00	00:00
452	L/K/D	57.5	43.0	29.6	200	29.6		00:00	00:00	00:00
453	L/K/D	26.9	13.7	7.6	200	7.6		00:05	00:28	01:04
454	BEDROOM	87.4	46.1	25.7	100	87.4		00:21	00:45	01:24
455	BEDROOM	96.4	56.9	35.3	100	96.4		00:45	01:06	01:45
456	L/K/D	44.9	26.9	16.4	200	16.4		01:13	01:31	02:10
457	BEDROOM	94.2	60.8	37.6	100	94.2		01:39	01:54	02:34
458	BEDROOM	100.0	96.9	69.8	100	100.0		02:00	02:09	03:00
459	L/K/D	100.0	100.0	92.4	200	92.4		03:35	04:25	07:41

Table 24: Assessment Data

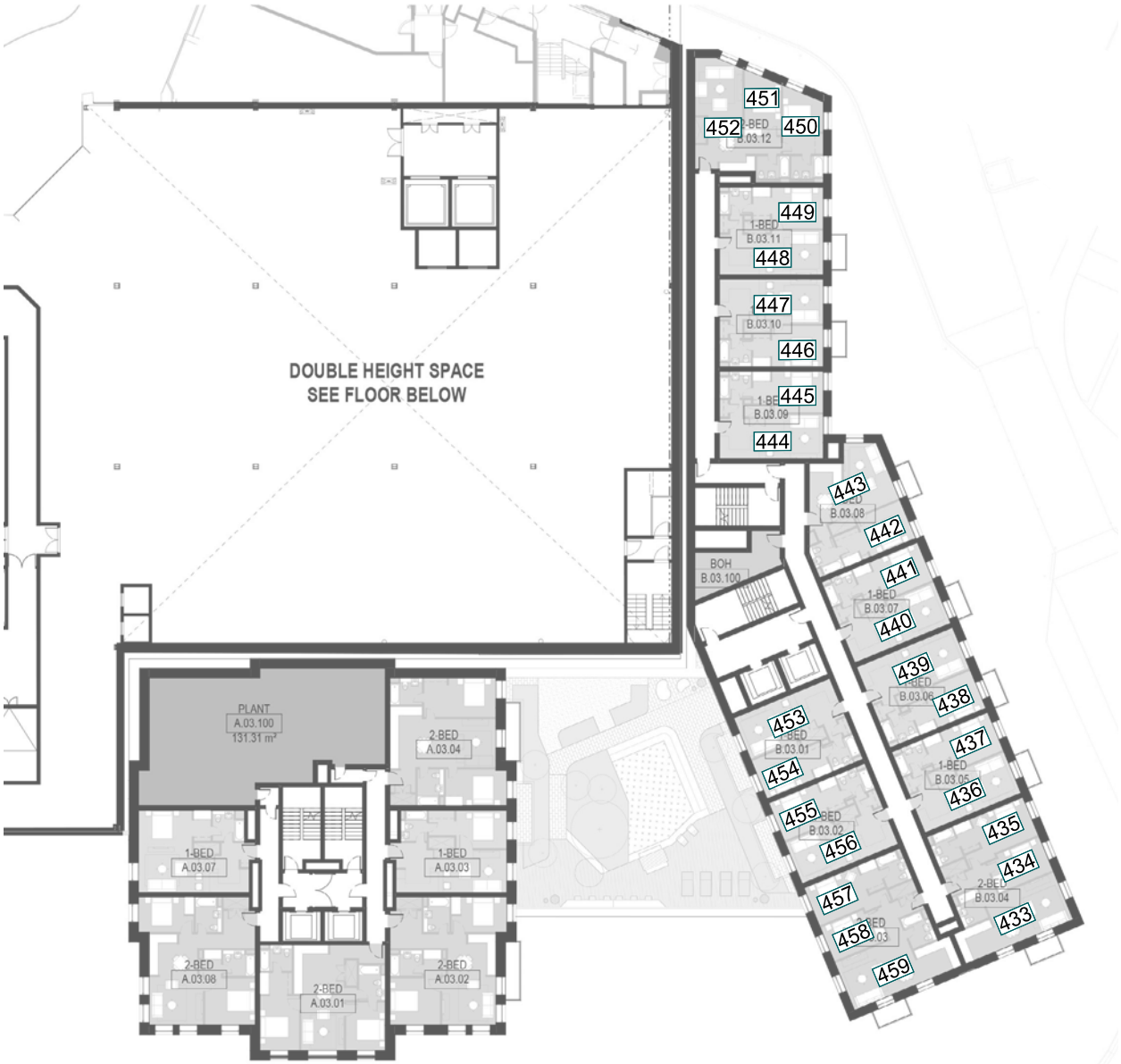


Fig. 33: Floor Plan



Block B - Level 04

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK B - LEVEL 04										
460	L/K/D	100.0	100.0	96.4	200	96.4		01:59	04:09	05:32
461	BEDROOM	100.0	100.0	99.4	100	100.0		00:00	00:00	00:00
462	BEDROOM	100.0	98.4	72.0	100	100.0		00:00	00:00	00:00
463	L/K/D	51.6	32.3	18.1	200	18.1		00:00	00:00	00:00
464	BEDROOM	100.0	100.0	94.6	100	100.0		00:00	00:00	00:00
465	BEDROOM	100.0	86.2	48.8	100	100.0		00:00	00:00	00:00
466	L/K/D	66.8	49.1	35.5	200	35.5		00:00	00:00	00:00
467	L/K/D	49.1	24.3	14.5	200	14.5		00:00	00:00	00:00
468	BEDROOM	100.0	100.0	80.2	100	100.0		00:00	00:00	00:00
469	BEDROOM	100.0	100.0	75.2	100	100.0		00:00	00:00	00:00
470	L/K/D	69.6	64.2	55.5	200	55.5		00:00	00:00	00:00
471	L/K/D	52.9	30.2	17.8	200	17.8		00:00	00:00	00:00
472	BEDROOM	100.0	100.0	72.5	100	100.0		00:00	00:00	00:47
473	BEDROOM	100.0	76.0	37.7	100	100.0		00:00	00:00	01:14
474	L/K/D	67.1	48.2	32.1	200	32.1		00:00	00:03	01:23
475	L/K/D	52.8	32.9	17.9	200	17.9		00:00	00:00	01:14
476	BEDROOM	100.0	100.0	96.4	100	100.0		00:00	00:01	01:23
477	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:01	01:23
478	BEDROOM	100.0	89.7	47.3	100	100.0		00:00	00:00	00:00
479	L/K/D	62.3	50.6	35.4	200	35.4		00:00	00:00	00:00
480	L/K/D	31.9	16.8	9.8	200	9.8		00:05	01:00	01:04
481	BEDROOM	96.4	54.5	32.3	100	96.4		00:21	01:11	01:24
482	BEDROOM	99.4	66.5	40.7	100	99.4		00:45	01:24	01:45
483	L/K/D	47.8	30.9	18.8	200	18.8		01:13	01:44	02:10
484	BEDROOM	97.9	68.8	41.5	100	97.9		01:39	02:06	02:34
485	BEDROOM	100.0	98.7	75.8	100	100.0		02:00	02:23	03:01
486	L/K/D	100.0	100.0	94.8	200	94.8		03:47	05:20	08:34

Table 25: Assessment Data



Fig. 34: Floor Plan



Block B - Level 05

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK B - LEVEL 05										
487	L/K/D	100.0	100.0	100.0	200	100.0		02:37	04:40	05:39
488	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00
489	BEDROOM	100.0	100.0	84.1	100	100.0		00:00	00:00	00:00
490	L/K/D	62.7	43.8	30.1	200	30.1		00:00	00:00	00:00
491	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:00
492	BEDROOM	100.0	100.0	77.2	100	100.0		00:00	00:00	00:00
493	L/K/D	74.7	54.8	41.3	200	41.3		00:00	00:00	00:00
494	L/K/D	60.2	39.0	23.0	200	23.0		00:00	00:00	00:00
495	BEDROOM	100.0	100.0	94.9	100	100.0		00:00	00:00	00:00
496	BEDROOM	100.0	100.0	92.8	100	100.0		00:00	00:00	00:00
497	L/K/D	76.0	66.6	62.6	200	62.6		00:00	00:00	00:00
498	L/K/D	60.5	37.7	21.2	200	21.2		00:00	00:00	00:00
499	BEDROOM	100.0	100.0	92.2	100	100.0		00:00	00:00	00:47
500	BEDROOM	100.0	98.8	65.9	100	100.0		00:00	00:01	01:14
501	L/K/D	75.5	55.5	39.7	200	39.7		00:00	00:05	01:23
502	L/K/D	63.5	45.1	30.6	200	30.6		00:00	00:01	01:14
503	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:05	01:23
504	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:08	01:23
505	BEDROOM	100.0	100.0	71.5	100	100.0		00:00	00:00	00:00
506	L/K/D	69.1	55.9	44.3	200	44.3		00:00	00:00	00:00
507	L/K/D	43.0	23.3	14.0	200	14.0		00:05	01:13	01:11
508	BEDROOM	100.0	76.6	46.1	100	100.0		00:22	01:34	01:24
509	BEDROOM	100.0	86.2	53.9	100	100.0		00:46	01:56	01:45
510	L/K/D	57.2	38.9	24.0	200	24.0		01:14	02:13	02:10
511	BEDROOM	100.0	83.1	53.7	100	100.0		01:39	02:30	02:34
512	BEDROOM	100.0	100.0	91.2	100	100.0		02:00	02:39	03:01
513	L/K/D	100.0	100.0	99.9	200	99.9		04:14	06:19	08:39

Table 26: Assessment Data

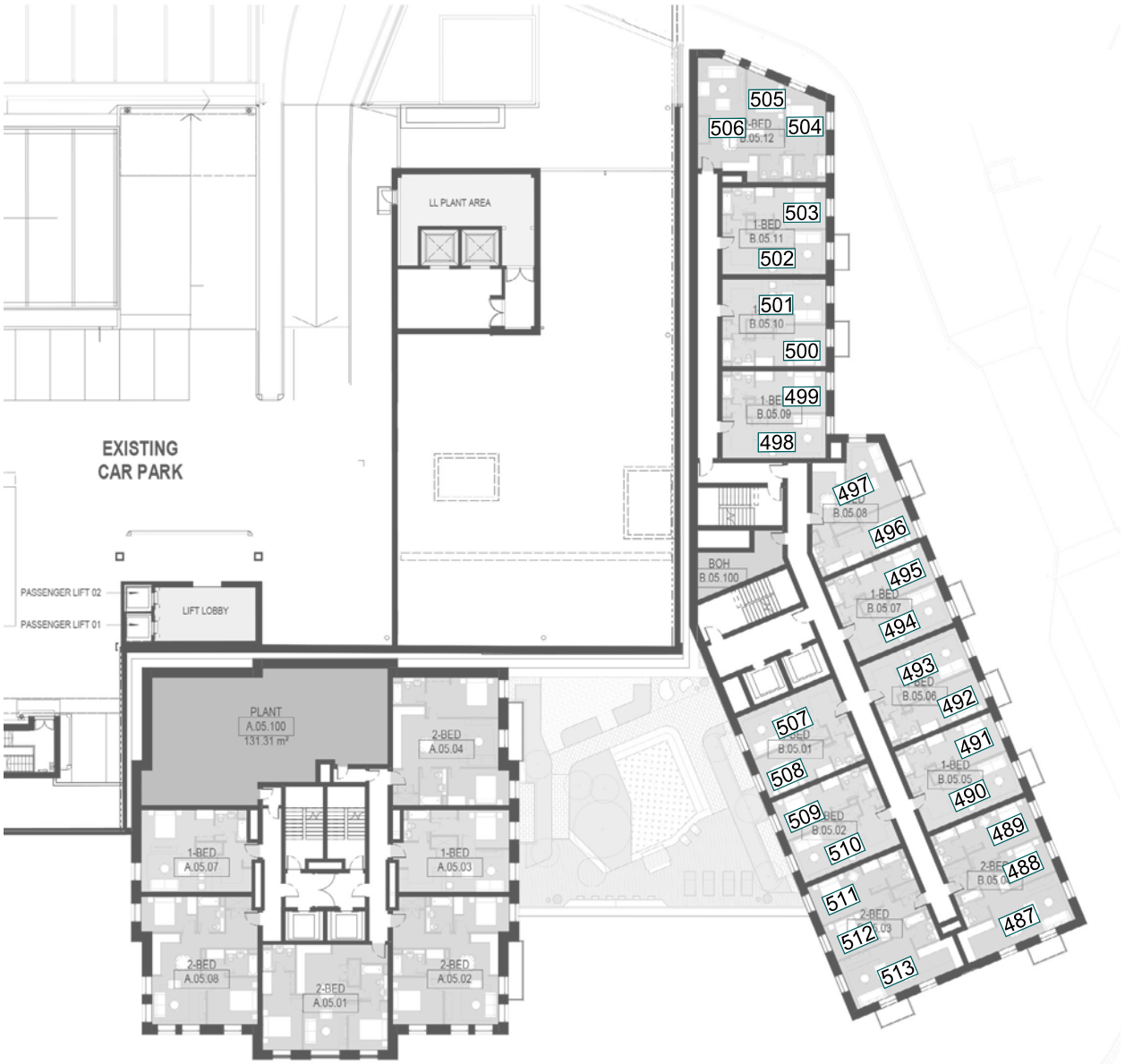


Fig. 35: Floor Plan



Block B- Level 06

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK B - LEVEL 06										
514	L/K/D	100.0	100.0	100.0	200	100.0		02:54	04:50	05:39
515	BEDROOM	100.0	100.0	95.8	100	100.0		00:00	00:00	00:00
516	BEDROOM	100.0	100.0	96.4	100	100.0		00:00	00:00	00:00
517	L/K/D	65.0	49.1	35.8	200	35.8		00:00	00:00	00:00
518	L/K/D	65.5	46.6	31.1	200	31.1		00:00	00:00	00:00
519	BEDROOM	100.0	100.0	83.2	100	100.0		00:00	00:00	00:00
520	BEDROOM	100.0	98.7	80.1	100	100.0		00:00	00:00	00:00
521	L/K/D	75.8	66.8	63.0	200	63.0		00:00	00:00	00:00
522	L/K/D	54.5	33.2	20.4	200	20.4		00:00	00:00	00:00
523	BEDROOM	100.0	98.8	76.6	100	100.0		00:00	00:00	00:47
524	BEDROOM	100.0	100.0	89.2	100	100.0		00:00	00:08	01:23
525	L/K/D	66.6	49.2	34.5	200	34.5		00:00	00:08	01:23
526	L/K/D	68.3	50.9	39.0	200	39.0		00:00	00:05	01:21
527	BEDROOM	100.0	100.0	95.2	100	100.0		00:00	00:08	01:23
528	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:08	01:23
529	BEDROOM	100.0	100.0	63.0	100	100.0		00:00	00:00	00:00
530	L/K/D	65.3	53.7	40.6	200	40.6		00:00	00:00	00:00
531	L/K/D	41.2	25.4	16.6	200	16.6		00:18	01:13	01:51
532	BEDROOM	100.0	72.5	48.5	100	100.0		00:38	01:34	01:37
533	BEDROOM	100.0	79.6	52.7	100	100.0		01:00	01:59	01:45
534	L/K/D	100.0	100.0	100.0	200	100.0		03:45	06:41	07:22

Table 27: Assessment Data

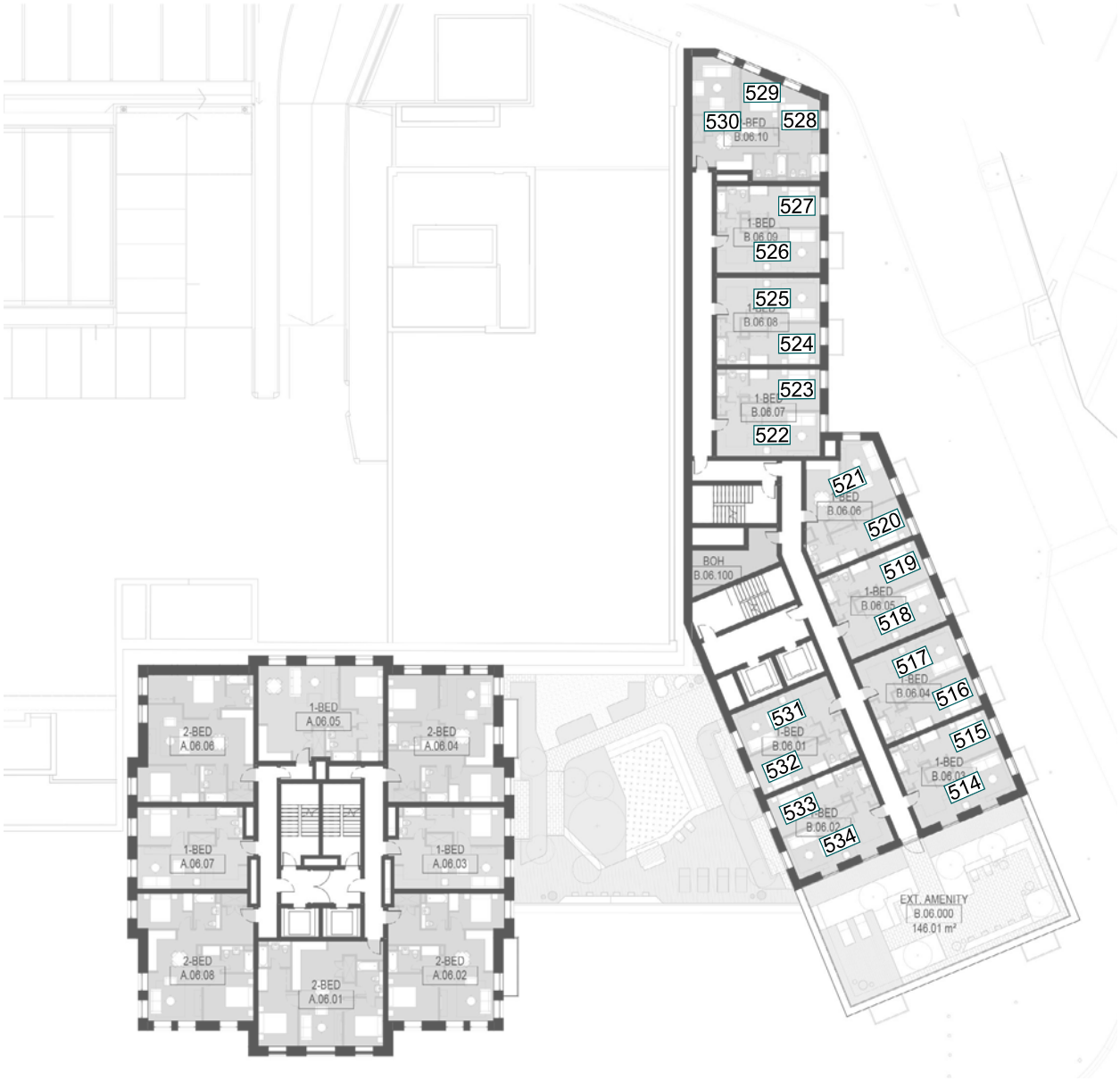


Fig. 36: Floor Plan



Block B- Level 07

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK B - LEVEL 07										
535	L/K/D	100.0	100.0	100.0	200	100.0		03:28	04:50	05:39
536	BEDROOM	100.0	100.0	87.4	100	100.0		00:00	00:00	00:00
537	BEDROOM	100.0	100.0	89.2	100	100.0		00:00	00:00	00:00
538	L/K/D	63.6	47.0	34.2	200	34.2		00:00	00:00	00:00
539	L/K/D	62.8	44.1	28.2	200	28.2		00:00	00:00	00:00
540	BEDROOM	100.0	98.8	76.6	100	100.0		00:00	00:00	00:00
541	BEDROOM	100.0	99.0	75.2	100	100.0		00:00	00:00	00:00
542	L/K/D	76.1	66.6	62.8	200	62.8		00:00	00:00	00:00
543	L/K/D	41.8	25.4	16.1	200	16.1		00:37	01:24	01:56
544	BEDROOM	100.0	72.2	46.4	100	100.0		00:54	01:34	01:37
545	BEDROOM	100.0	76.6	49.1	100	100.0		01:18	02:01	01:47
546	L/K/D	100.0	100.0	100.0	200	100.0		03:54	06:46	07:22

Table 28: Assessment Data

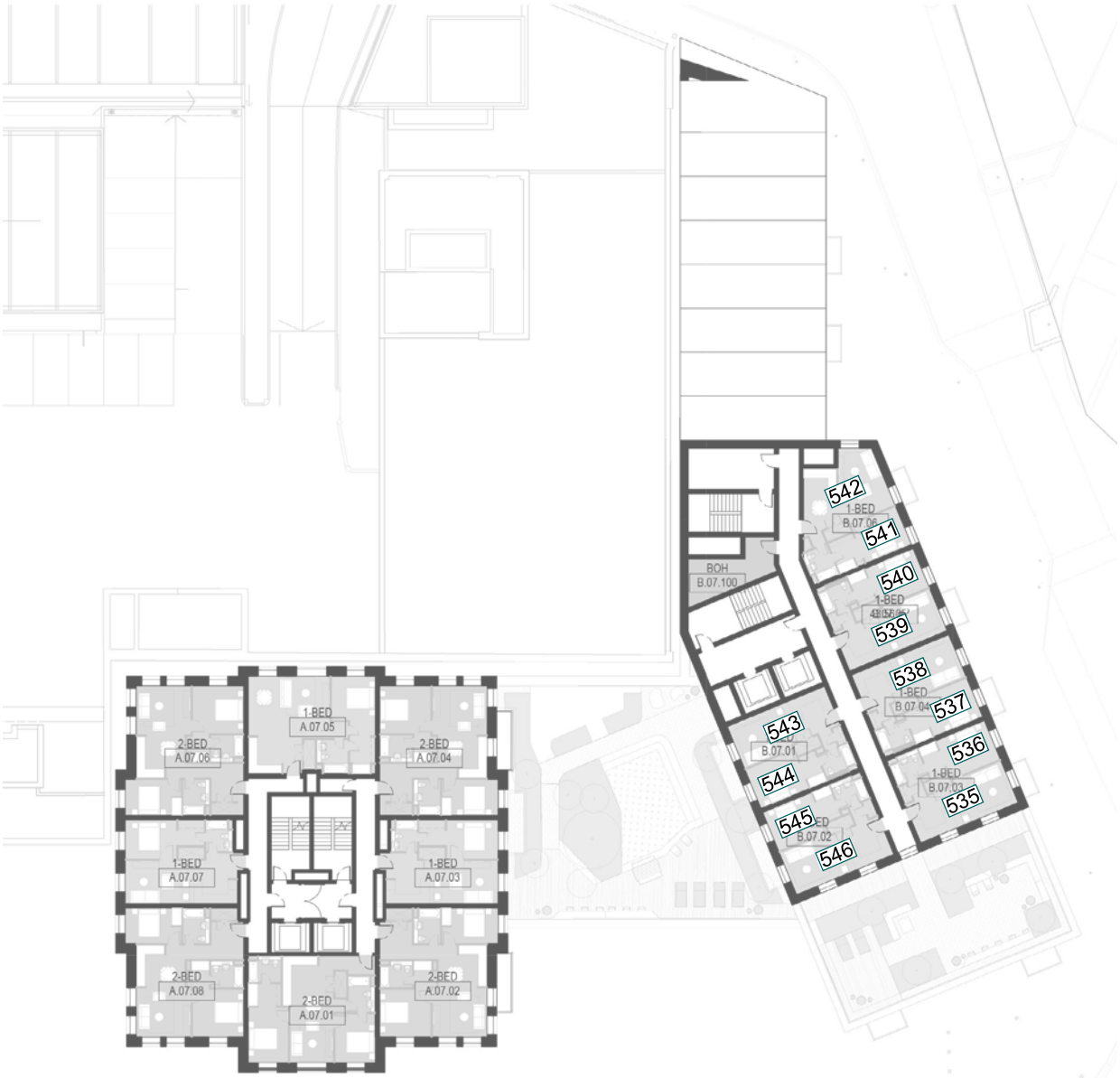


Fig. 37: Floor Plan



Block C - Level 01

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK C - LEVEL 01										
547	BEDROOM	45.5	27.5	19.0	100	45.5		00:00	00:00	00:51
548	L/K/D	19.9	12.2	8.7	200	8.7		00:10	00:11	00:43
549	BEDROOM	31.0	18.5	12.5	100	31.0		00:00	00:00	00:21
550	L/K/D	24.3	14.3	9.8	200	9.8		01:09	01:02	01:11
551	BEDROOM	64.6	33.9	23.3	100	64.6		01:44	01:34	01:34
552	BEDROOM	99.4	59.1	38.2	100	99.4		02:22	02:09	02:02
553	L/K/D	100.0	100.0	99.2	200	99.2		07:23	07:52	08:23
554	L/K/D	100.0	100.0	98.9	200	98.9		04:56	05:41	06:20
555	BEDROOM	90.9	51.5	33.3	100	90.9		00:00	00:00	00:24
556	BEDROOM	70.6	37.4	23.5	100	70.6		00:00	00:00	00:23
557	L/K/D	16.8	6.4	2.3	200	2.3		00:00	00:00	00:23
558	BEDROOM	49.2	22.6	14.0	100	49.2		00:00	00:00	00:00
559	L/K/D	13.9	7.1	4.4	200	4.4		00:00	00:00	00:24
560	BEDROOM	53.2	23.8	13.0	100	53.2		00:00	00:00	00:00
561	L/K/D	18.5	8.6	4.8	200	4.8		00:00	00:00	00:00
562	BEDROOM	73.6	38.7	23.3	100	73.6		00:00	00:00	00:00
563	BEDROOM	66.8	33.2	19.8	100	66.8		00:00	00:00	00:00
564	BEDROOM	82.4	45.5	29.1	100	82.4		00:00	00:00	00:00
565	L/K/D	100.0	100.0	99.7	200	99.7		00:00	00:00	00:00
566	L/K/D	100.0	100.0	100.0	200	100.0		01:22	03:51	05:42
567	BEDROOM	100.0	78.2	57.3	100	100.0		00:34	02:32	05:14
568	BEDROOM	86.0	58.7	42.3	100	86.0		00:00	01:47	04:37

Table 29: Assessment Data

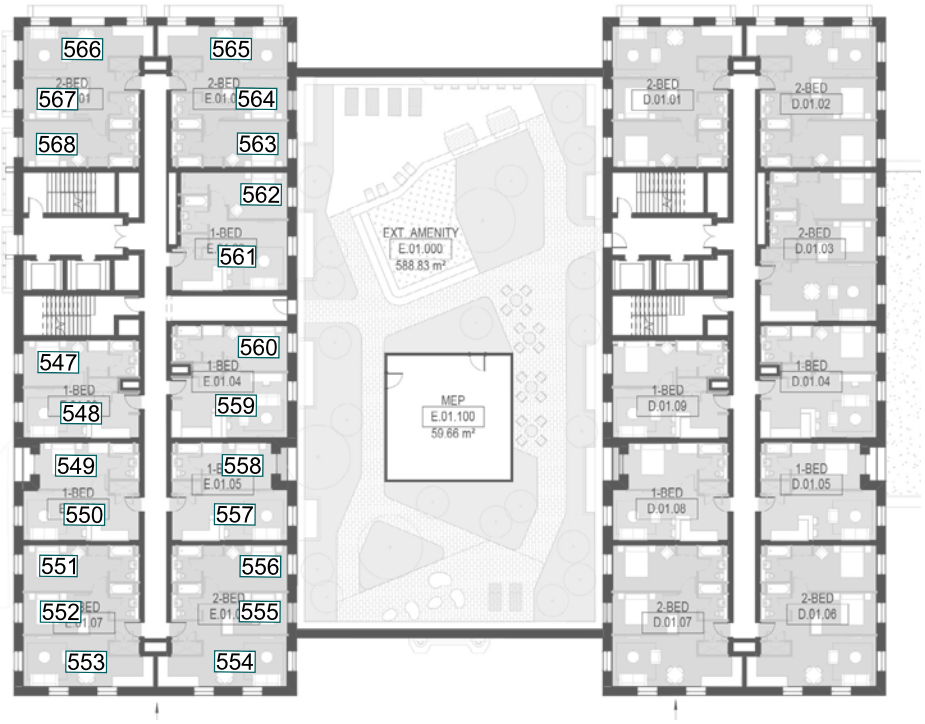


Fig. 38: Floor Plan



Block C - Level 02

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK C - LEVEL 02										
569	BEDROOM	58.7	38.1	29.6	100	58.7		00:00	00:34	01:41
570	L/K/D	26.3	18.2	14.4	200	14.4		00:12	00:45	01:31
571	BEDROOM	42.9	31.0	22.2	100	42.9		00:00	00:18	01:13
572	L/K/D	30.6	20.8	16.0	200	16.0		01:09	01:18	01:57
573	BEDROOM	77.5	47.6	34.9	100	77.5		01:44	01:44	02:12
574	BEDROOM	100.0	71.5	51.8	100	100.0		02:22	02:14	02:33
575	L/K/D	100.0	100.0	99.7	200	99.7		07:28	07:58	08:57
576	L/K/D	100.0	100.0	99.5	200	99.5		05:00	05:46	06:28
577	BEDROOM	100.0	67.9	44.2	100	100.0		00:00	00:00	00:36
578	BEDROOM	85.6	47.6	28.3	100	85.6		00:00	00:00	00:36
579	L/K/D	18.1	7.1	2.5	200	2.5		00:00	00:00	00:37
580	BEDROOM	51.7	26.6	16.7	100	51.7		00:00	00:00	00:00
581	L/K/D	16.8	9.1	5.8	200	5.8		00:00	00:00	00:26
582	BEDROOM	63.2	31.4	17.3	100	63.2		00:00	00:00	00:04
583	L/K/D	10.5	3.4	1.0	200	1.0		00:00	00:00	00:00
584	BEDROOM	98.7	47.3	27.3	100	98.7		00:00	00:00	00:00
585	BEDROOM	86.5	47.9	28.8	100	86.5		00:00	00:00	00:00
586	BEDROOM	75.4	40.1	24.1	100	75.4		00:00	00:00	00:00
587	BEDROOM	98.8	55.2	33.3	100	98.8		00:00	00:00	00:00
588	L/K/D	100.0	100.0	99.9	200	99.9		00:00	00:00	00:00
589	L/K/D	100.0	100.0	100.0	200	100.0		01:58	04:24	05:52
590	BEDROOM	100.0	90.9	66.1	100	100.0		00:51	04:02	05:51
591	BEDROOM	96.8	70.9	54.0	100	96.8		00:14	03:59	05:40

Table 30: Assessment Data

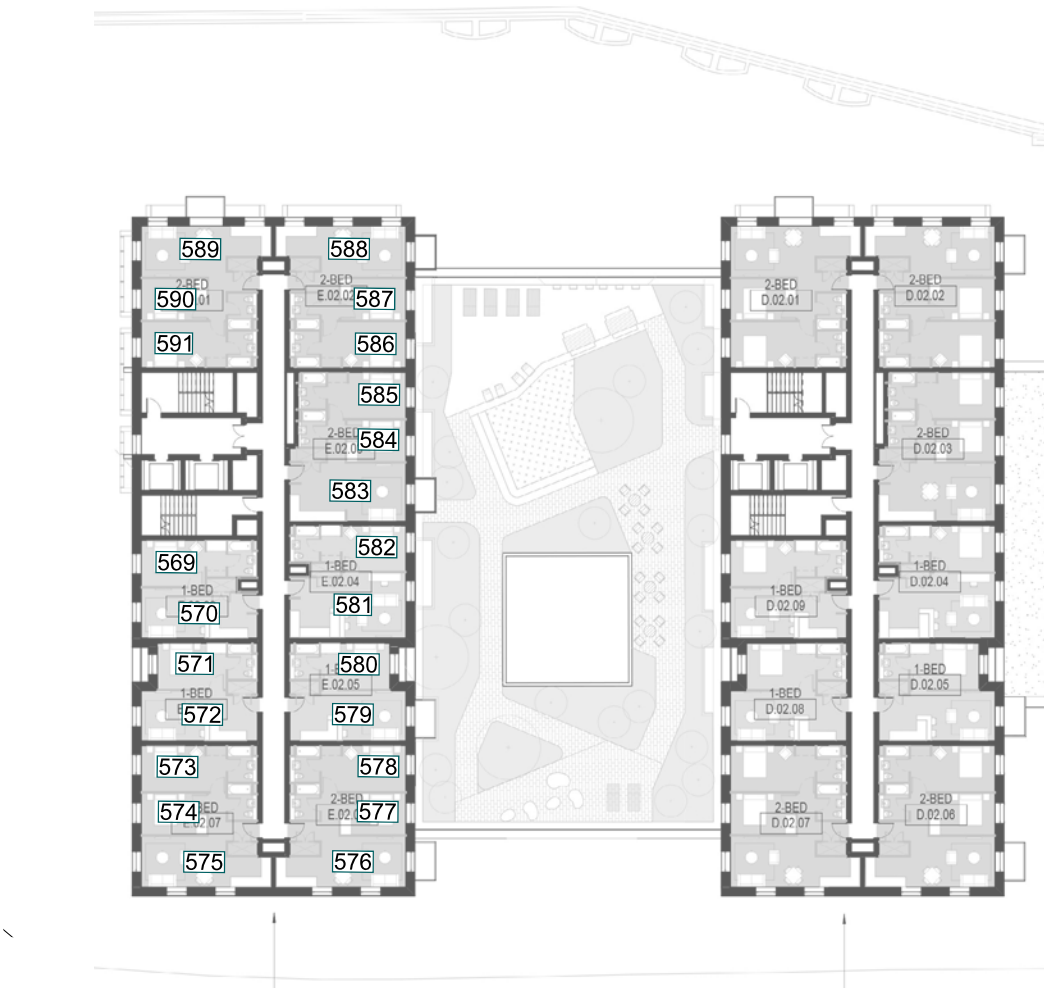


Fig. 39: Floor Plan



Block C - Level 03

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK C - LEVEL 03										
592	BEDROOM	82.3	60.3	47.6	100	82.3		00:52	01:57	03:24
593	L/K/D	40.7	30.4	23.3	200	23.3		01:05	01:53	02:45
594	BEDROOM	74.9	53.9	39.9	100	74.9		00:35	01:29	02:25
595	L/K/D	43.9	32.8	25.6	200	25.6		01:38	02:23	03:14
596	BEDROOM	98.4	74.6	57.1	100	98.4		02:02	02:37	03:27
597	BEDROOM	100.0	98.8	75.8	100	100.0		02:31	02:57	03:40
598	L/K/D	100.0	100.0	100.0	200	100.0		07:33	08:34	09:54
599	L/K/D	100.0	100.0	99.7	200	99.7		05:06	05:46	06:30
600	BEDROOM	100.0	78.2	50.3	100	100.0		00:00	00:00	00:46
601	BEDROOM	93.0	55.3	33.7	100	93.0		00:00	00:00	00:46
602	L/K/D	21.6	8.9	3.8	200	3.8		00:00	00:00	00:44
603	BEDROOM	64.5	33.5	21.7	100	64.5		00:00	00:00	00:00
604	L/K/D	19.8	10.6	7.1	200	7.1		00:00	00:00	00:26
605	BEDROOM	78.9	38.6	21.6	100	78.9		00:00	00:00	00:04
606	L/K/D	13.1	4.2	1.5	200	1.5		00:00	00:00	00:00
607	BEDROOM	100.0	58.0	33.3	100	100.0		00:00	00:00	00:00
608	BEDROOM	94.5	52.8	32.2	100	94.5		00:00	00:00	00:00
609	BEDROOM	82.9	46.0	27.3	100	82.9		00:00	00:00	00:00
610	BEDROOM	99.4	60.0	38.8	100	99.4		00:00	00:00	00:00
611	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:00
612	L/K/D	100.0	100.0	100.0	200	100.0		03:23	05:13	06:01
613	BEDROOM	100.0	100.0	80.6	100	100.0		03:12	04:54	06:00
614	BEDROOM	100.0	85.2	65.6	100	100.0		02:49	04:24	06:00

Table 31: Assessment Data

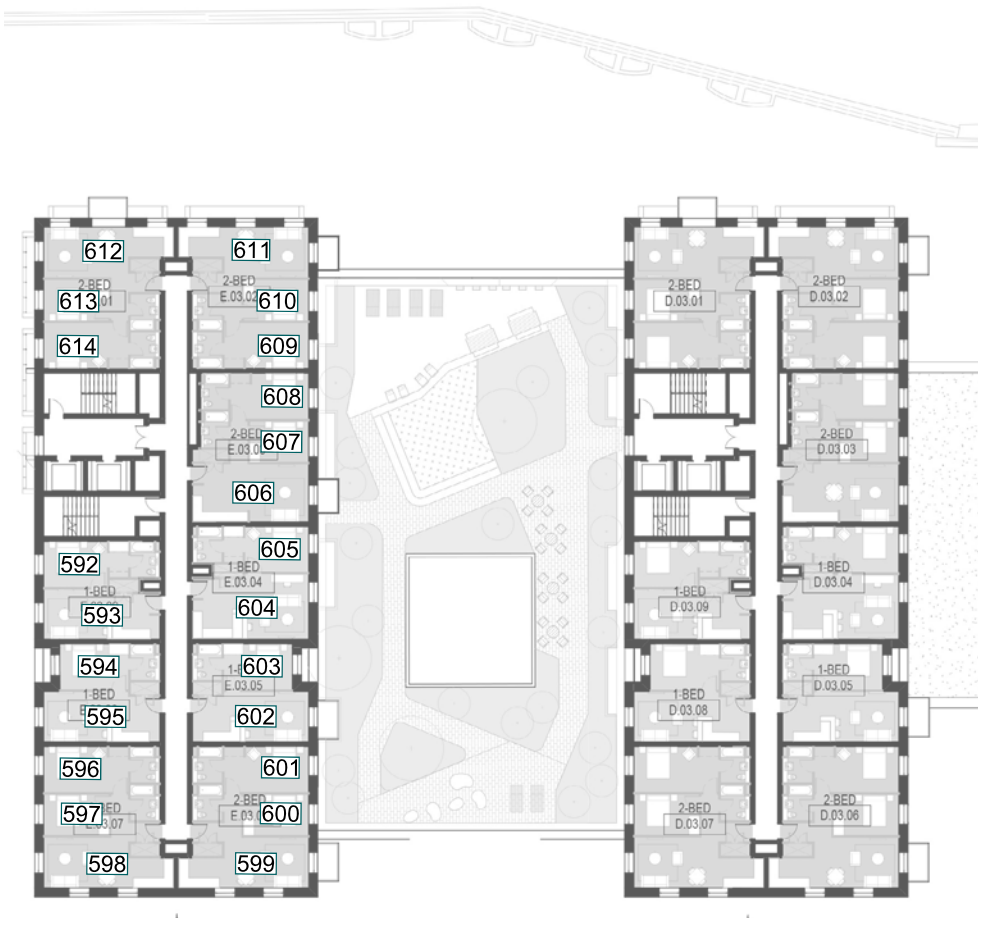


Fig. 40: Floor Plan



Block C - Level 04

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK C - LEVEL 04										
615	BEDROOM	100.0	95.2	71.7	100	100.0		02:41	04:16	05:22
616	L/K/D	62.1	46.3	36.2	200	36.2		02:46	03:32	05:14
617	BEDROOM	100.0	91.1	64.5	100	100.0		02:10	02:49	04:07
618	L/K/D	64.2	47.1	36.8	200	36.8		03:13	03:52	04:46
619	BEDROOM	100.0	99.5	81.5	100	100.0		03:23	04:02	04:56
620	BEDROOM	100.0	100.0	100.0	100	100.0		03:40	04:11	05:06
621	L/K/D	100.0	100.0	100.0	200	100.0		08:25	09:34	11:04
622	L/K/D	100.0	100.0	100.0	200	100.0		05:06	05:46	06:30
623	BEDROOM	100.0	86.7	56.4	100	100.0		00:00	00:00	00:46
624	BEDROOM	97.9	62.6	40.6	100	97.9		00:00	00:00	00:46
625	L/K/D	24.9	12.2	5.9	200	5.9		00:00	00:00	00:46
626	BEDROOM	76.8	42.4	27.6	100	76.8		00:00	00:00	00:00
627	L/K/D	25.0	12.5	8.5	200	8.5		00:00	00:00	00:26
628	BEDROOM	91.4	46.2	26.5	100	91.4		00:00	00:00	00:04
629	L/K/D	16.4	5.7	2.3	200	2.3		00:00	00:00	00:00
630	BEDROOM	100.0	68.3	40.7	100	100.0		00:00	00:00	00:00
631	BEDROOM	98.2	59.5	38.0	100	98.2		00:00	00:00	00:00
632	BEDROOM	89.3	50.8	31.3	100	89.3		00:00	00:00	00:00
633	BEDROOM	100.0	65.5	42.4	100	100.0		00:00	00:00	00:00
634	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:00
635	L/K/D	100.0	100.0	100.0	200	100.0		04:02	05:14	06:01
636	BEDROOM	100.0	100.0	95.8	100	100.0		03:30	05:14	06:01
637	BEDROOM	100.0	97.9	76.5	100	100.0		03:04	05:14	06:01

Table 32: Assessment Data

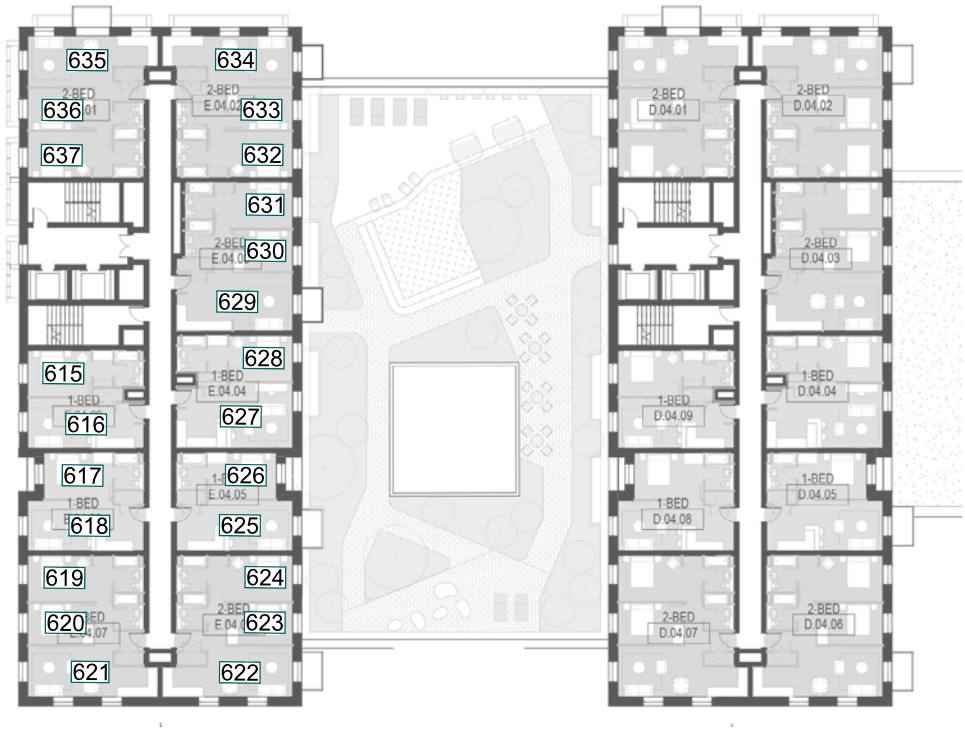


Fig. 41: Floor Plan



Block C - Level 05

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK C - LEVEL 05										
638	BEDROOM	100.0	100.0	95.8	100	100.0		03:53	05:07	06:01
639	L/K/D	74.5	57.0	44.6	200	44.6		03:52	05:14	05:49
640	BEDROOM	100.0	100.0	87.2	100	100.0		03:04	04:18	04:41
641	L/K/D	75.4	54.6	42.9	200	42.9		04:09	04:38	05:51
642	BEDROOM	100.0	100.0	94.2	100	100.0		04:18	04:27	06:01
643	BEDROOM	100.0	100.0	100.0	100	100.0		04:17	04:31	06:01
644	L/K/D	100.0	100.0	100.0	200	100.0		08:48	09:49	11:59
645	L/K/D	100.0	100.0	100.0	200	100.0		05:06	05:46	06:30
646	BEDROOM	100.0	95.2	66.1	100	100.0		00:00	00:00	00:46
647	BEDROOM	98.9	73.3	49.2	100	98.9		00:00	00:00	00:46
648	L/K/D	29.9	15.5	8.4	200	8.4		00:00	00:00	00:46
649	BEDROOM	93.6	53.2	34.5	100	93.6		00:00	00:00	00:00
650	L/K/D	29.3	15.2	10.0	200	10.0		00:00	00:00	00:26
651	BEDROOM	97.8	57.3	32.2	100	97.8		00:00	00:00	00:04
652	L/K/D	28.7	11.8	5.0	200	5.0		00:00	00:00	00:00
653	BEDROOM	100.0	84.0	47.3	100	100.0		00:00	00:00	00:00
654	BEDROOM	100.0	68.1	43.6	100	100.0		00:00	00:00	00:00
655	BEDROOM	96.3	57.2	35.8	100	96.3		00:00	00:00	00:00
656	BEDROOM	100.0	73.3	47.3	100	100.0		00:00	00:00	00:00
657	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:00
658	L/K/D	100.0	100.0	100.0	200	100.0		04:27	05:14	06:01
659	BEDROOM	100.0	100.0	100.0	100	100.0		04:10	05:14	06:01
660	BEDROOM	100.0	100.0	87.8	100	100.0		03:53	05:14	06:01

Table 33: Assessment Data

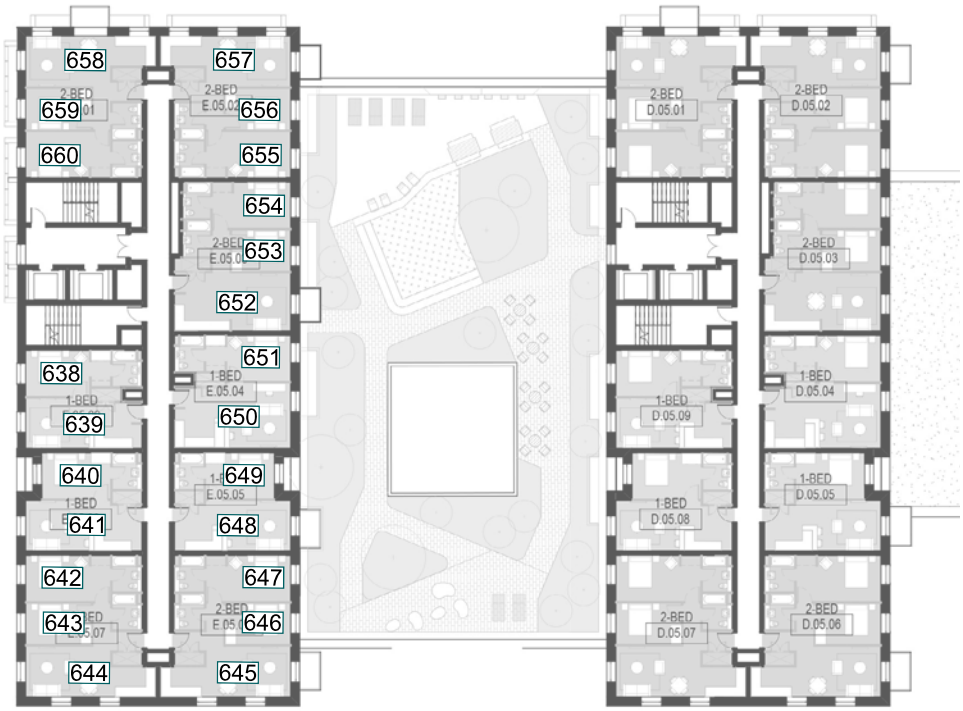


Fig. 42: Floor Plan



Block C - Level 06

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK C - LEVEL 06										
661	BEDROOM	100.0	100.0	99.5	100	100.0		04:12	05:14	06:01
662	L/K/D	81.7	61.5	48.2	200	48.2		04:01	05:14	06:01
663	BEDROOM	100.0	100.0	99.0	100	100.0		03:04	04:21	04:41
664	L/K/D	81.1	57.9	45.1	200	45.1		04:14	05:13	06:01
665	BEDROOM	100.0	100.0	97.9	100	100.0		04:20	04:56	06:01
666	BEDROOM	100.0	100.0	100.0	100	100.0		04:25	04:52	06:01
667	L/K/D	100.0	100.0	100.0	200	100.0		08:57	10:04	12:00
668	L/K/D	100.0	100.0	100.0	200	100.0		05:06	05:46	06:30
669	BEDROOM	100.0	100.0	78.2	100	100.0		00:00	00:00	00:46
670	BEDROOM	100.0	85.0	59.9	100	100.0		00:00	00:00	00:46
671	L/K/D	36.4	19.6	10.4	200	10.4		00:00	00:00	00:46
672	BEDROOM	99.5	66.5	41.9	100	99.5		00:00	00:00	00:00
673	L/K/D	36.1	18.1	11.8	200	11.8		00:00	00:00	00:26
674	BEDROOM	99.5	68.6	40.5	100	99.5		00:00	00:00	00:04
675	L/K/D	27.2	10.5	4.8	200	4.8		00:00	00:00	00:00
676	BEDROOM	100.0	96.7	57.3	100	100.0		00:00	00:00	00:00
677	BEDROOM	100.0	76.7	50.3	100	100.0		00:00	00:00	00:00
678	BEDROOM	99.5	64.2	40.1	100	99.5		00:00	00:00	00:00
679	BEDROOM	100.0	81.2	51.2	100	100.0		00:00	00:00	00:00
680	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:00
681	L/K/D	100.0	100.0	100.0	200	100.0		04:30	05:14	06:01
682	BEDROOM	100.0	100.0	100.0	100	100.0		04:30	05:14	06:01
683	BEDROOM	100.0	100.0	94.2	100	100.0		04:26	05:14	06:01

Table 34: Assessment Data



Fig. 43: Floor Plan



Block C - Level 07

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK C - LEVEL 07										
684	BEDROOM	100.0	100.0	100.0	100	100.0		04:12	05:14	06:01
685	L/K/D	87.0	64.5	50.4	200	50.4		04:12	05:14	06:01
686	BEDROOM	100.0	100.0	100.0	100	100.0		03:14	04:21	04:41
687	L/K/D	87.6	60.7	46.6	200	46.6		04:14	05:14	06:01
688	BEDROOM	100.0	100.0	99.5	100	100.0		04:25	05:14	06:01
689	BEDROOM	100.0	100.0	100.0	100	100.0		04:30	05:09	06:01
690	L/K/D	100.0	100.0	100.0	200	100.0		09:00	10:12	12:00
691	L/K/D	100.0	100.0	100.0	200	100.0		05:06	05:46	06:30
692	BEDROOM	100.0	100.0	93.9	100	100.0		00:00	00:00	00:46
693	BEDROOM	100.0	94.1	69.0	100	100.0		00:00	00:00	00:46
694	L/K/D	42.0	23.9	12.7	200	12.7		00:00	00:00	00:46
695	BEDROOM	100.0	80.8	51.2	100	100.0		00:00	00:00	00:00
696	L/K/D	43.2	20.8	13.9	200	13.9		00:00	00:00	00:26
697	BEDROOM	100.0	81.6	48.1	100	100.0		00:00	00:00	00:13
698	L/K/D	31.4	13.2	5.9	200	5.9		00:00	00:00	00:12
699	BEDROOM	100.0	100.0	66.3	100	100.0		00:00	00:00	00:12
700	BEDROOM	100.0	86.5	53.7	100	100.0		00:00	00:00	00:03
701	BEDROOM	100.0	71.1	44.4	100	100.0		00:00	00:00	00:01
702	BEDROOM	100.0	88.8	54.5	100	100.0		00:00	00:00	00:01
703	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:00
704	L/K/D	100.0	100.0	100.0	200	100.0		04:30	05:14	06:01
705	BEDROOM	100.0	100.0	100.0	100	100.0		04:30	05:14	06:01
706	BEDROOM	100.0	100.0	97.9	100	100.0		04:30	05:14	06:01

Table 35: Assessment Data

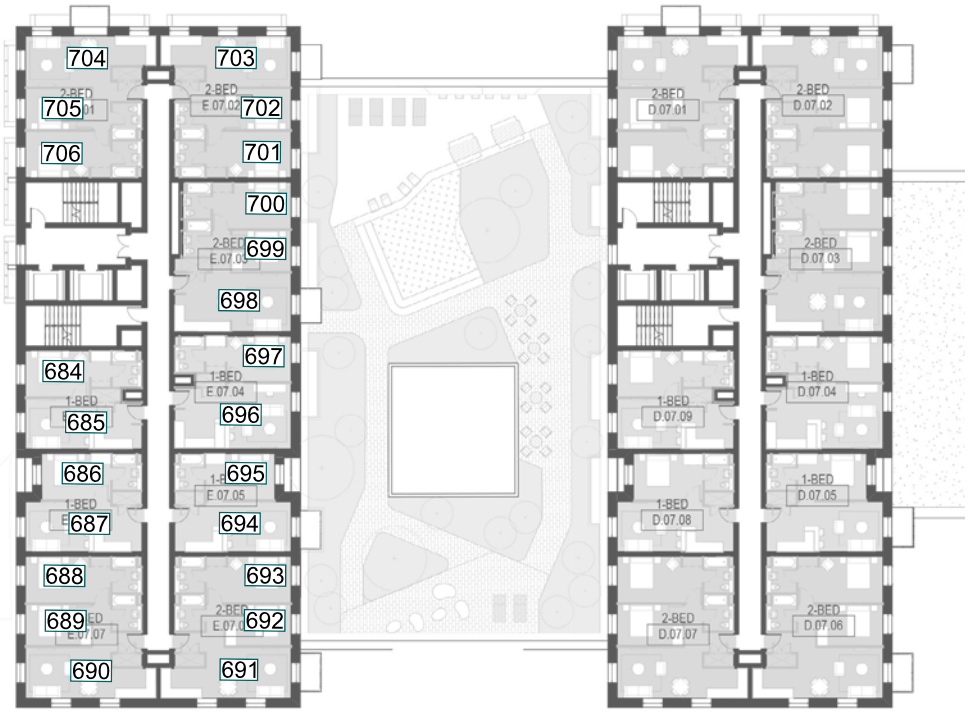


Fig. 44: Floor Plan



Block C - Level 08

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK C - LEVEL 08										
707	BEDROOM	100.0	100.0	100.0	100	100.0		04:12	05:14	06:01
708	L/K/D	91.1	66.7	52.0	200	52.0		04:12	05:14	06:01
709	BEDROOM	100.0	100.0	100.0	100	100.0		03:14	04:21	04:41
710	L/K/D	94.2	63.0	47.6	200	47.6		04:14	05:14	06:01
711	BEDROOM	100.0	100.0	100.0	100	100.0		04:25	05:14	06:01
712	BEDROOM	100.0	100.0	100.0	100	100.0		04:30	05:14	06:01
713	L/K/D	100.0	100.0	100.0	200	100.0		09:00	10:28	12:00
714	L/K/D	100.0	100.0	100.0	200	100.0		05:06	05:46	06:30
715	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:46
716	BEDROOM	100.0	98.4	80.7	100	100.0		00:00	00:00	00:46
717	L/K/D	47.7	28.4	15.3	200	15.3		00:00	00:00	00:46
718	BEDROOM	100.0	96.1	63.1	100	100.0		00:00	00:00	00:00
719	L/K/D	49.9	24.5	16.4	200	16.4		00:00	00:00	00:46
720	BEDROOM	100.0	92.6	57.4	100	100.0		00:00	00:00	00:46
721	L/K/D	35.9	15.5	7.4	200	7.4		00:00	00:00	00:40
722	BEDROOM	100.0	100.0	75.8	100	100.0		00:00	00:00	00:29
723	BEDROOM	100.0	90.3	57.0	100	100.0		00:00	00:00	00:29
724	BEDROOM	100.0	74.3	46.0	100	100.0		00:00	00:00	00:29
725	BEDROOM	100.0	97.6	57.9	100	100.0		00:00	00:00	00:07
726	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:00
727	L/K/D	100.0	100.0	100.0	200	100.0		04:30	05:14	06:01
728	BEDROOM	100.0	100.0	100.0	100	100.0		04:30	05:14	06:01
729	BEDROOM	100.0	100.0	98.9	100	100.0		04:30	05:14	06:01

Table 36: Assessment Data

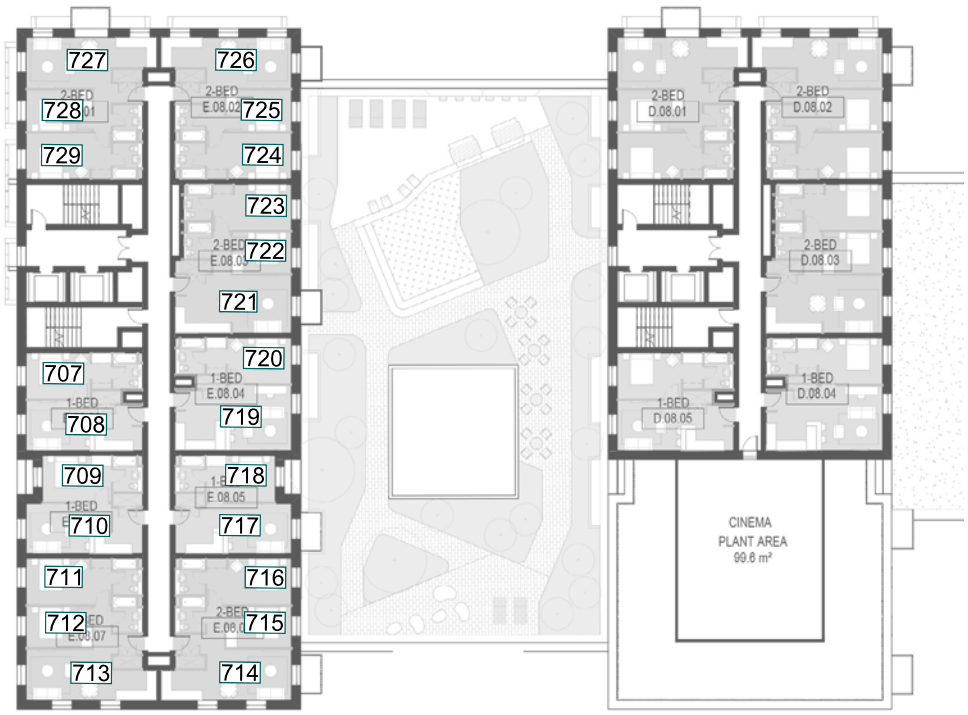


Fig. 45: Floor Plan



Block C - Level 09

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK C - LEVEL 09										
730	BEDROOM	100.0	100.0	100.0	100	100.0		04:30	05:14	06:01
731	L/K/D	93.8	67.5	53.7	200	53.7		04:23	05:14	06:01
732	BEDROOM	100.0	100.0	100.0	100	100.0		03:14	04:21	04:41
733	L/K/D	97.2	65.2	49.6	200	49.6		04:14	05:14	06:01
734	BEDROOM	100.0	100.0	100.0	100	100.0		04:25	05:14	06:01
735	BEDROOM	100.0	100.0	100.0	100	100.0		04:30	05:14	06:01
736	L/K/D	100.0	100.0	100.0	200	100.0		09:00	10:28	12:00
737	L/K/D	100.0	100.0	100.0	200	100.0		05:06	05:46	06:30
738	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:46
739	BEDROOM	100.0	100.0	86.9	100	100.0		00:00	00:00	00:46
740	L/K/D	51.4	30.9	16.7	200	16.7		00:00	00:00	00:46
741	BEDROOM	100.0	99.5	77.3	100	100.0		00:00	00:00	00:00
742	L/K/D	55.5	28.9	19.5	200	19.5		00:00	00:00	00:46
743	BEDROOM	100.0	98.9	68.3	100	100.0		00:00	00:00	00:46
744	L/K/D	38.3	18.8	9.2	200	9.2		00:00	00:00	00:46
745	BEDROOM	100.0	100.0	90.9	100	100.0		00:00	00:00	00:46
746	BEDROOM	100.0	95.8	66.7	100	100.0		00:00	00:00	00:46
747	BEDROOM	100.0	76.5	54.0	100	100.0		00:00	00:00	00:29
748	BEDROOM	100.0	98.8	62.4	100	100.0		00:00	00:00	00:07
749	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:00
750	L/K/D	100.0	100.0	100.0	200	100.0		04:30	05:14	06:01
751	BEDROOM	100.0	100.0	100.0	100	100.0		04:30	05:14	06:01
752	BEDROOM	100.0	100.0	100.0	100	100.0		04:30	05:14	06:01

Table 37: Assessment Data

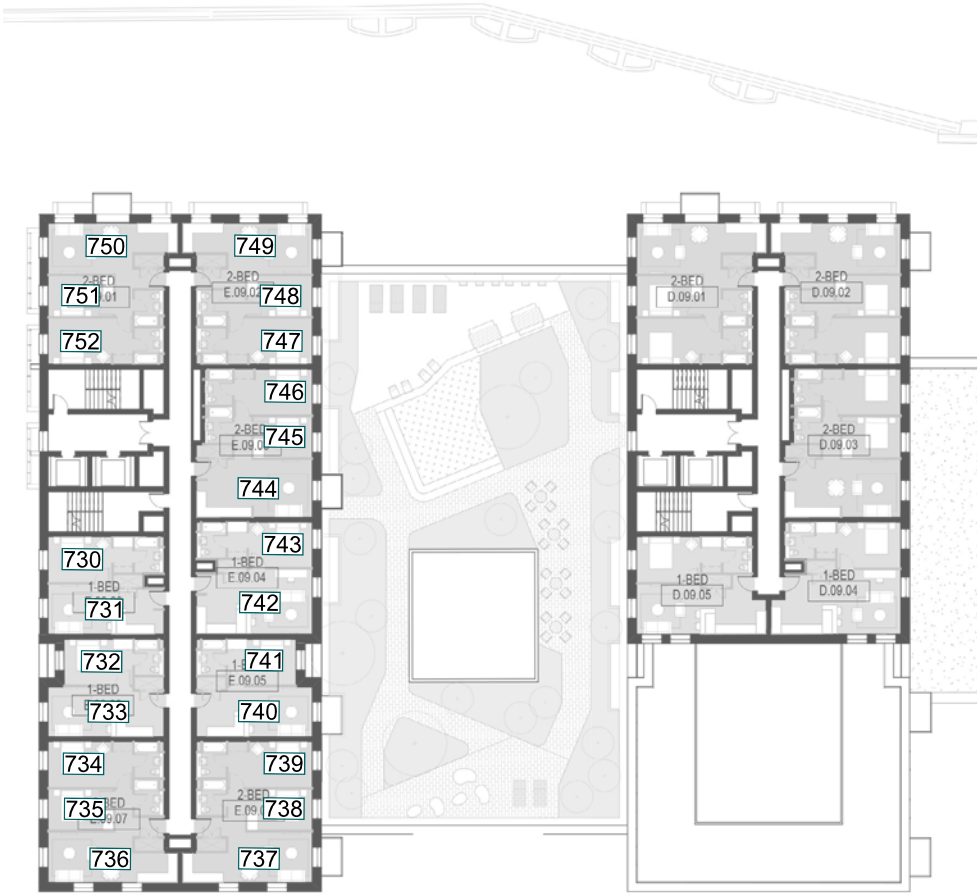


Fig. 46: Floor Plan



Block C - Level 10

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK C - LEVEL 10										
753	BEDROOM	100.0	100.0	100.0	100	100.0		04:30	05:14	06:01
754	L/K/D	95.9	68.8	54.7	200	54.7		04:30	05:14	06:01
755	BEDROOM	100.0	100.0	100.0	100	100.0		03:27	04:21	04:41
756	L/K/D	99.2	67.7	50.6	200	50.6		04:14	05:14	06:01
757	BEDROOM	100.0	100.0	100.0	100	100.0		04:25	05:14	06:01
758	BEDROOM	100.0	100.0	100.0	100	100.0		04:30	05:14	06:01
759	L/K/D	100.0	100.0	100.0	200	100.0		09:00	10:28	12:00
760	L/K/D	100.0	100.0	100.0	200	100.0		05:06	05:46	06:30
761	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:46
762	BEDROOM	100.0	100.0	92.2	100	100.0		00:00	00:00	00:46
763	L/K/D	72.9	49.4	35.9	200	35.9		00:00	00:00	00:46
764	BEDROOM	100.0	100.0	90.1	100	100.0		00:00	00:00	00:00
765	L/K/D	59.9	34.2	22.2	200	22.2		00:00	00:00	00:46
766	BEDROOM	100.0	100.0	79.5	100	100.0		00:00	00:00	00:46
767	L/K/D	43.5	23.2	11.7	200	11.7		00:00	00:00	00:46
768	BEDROOM	100.0	100.0	98.7	100	100.0		00:00	00:00	00:46
769	BEDROOM	100.0	100.0	81.2	100	100.0		00:00	00:00	00:46
770	BEDROOM	100.0	89.3	65.8	100	100.0		00:00	00:00	00:29
771	BEDROOM	100.0	100.0	75.8	100	100.0		00:00	00:00	00:15
772	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:07
773	L/K/D	100.0	100.0	100.0	200	100.0		04:30	05:14	06:01
774	BEDROOM	100.0	100.0	100.0	100	100.0		04:30	05:14	06:01
775	BEDROOM	100.0	100.0	100.0	100	100.0		04:30	05:14	06:01

Table 38: Assessment Data

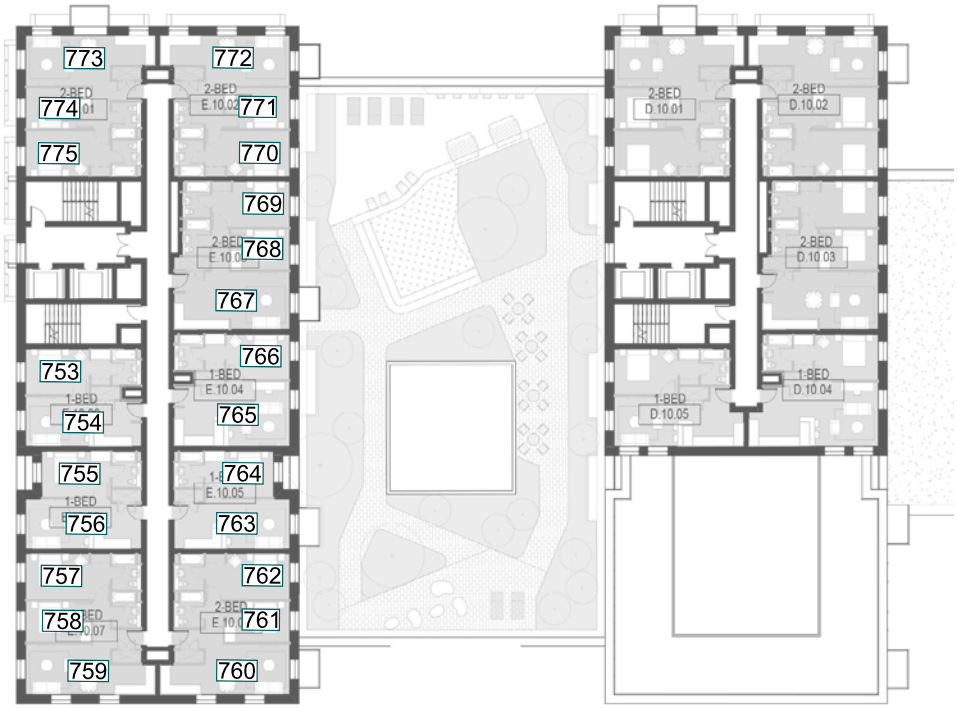


Fig. 47: Floor Plan



Block C - Level 11

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK C - LEVEL 11										
776	BEDROOM	100.0	100.0	100.0	100	100.0		04:30	05:14	06:01
777	L/K/D	100.0	100.0	99.7	200	99.7		08:14	09:11	10:18
778	L/K/D	100.0	98.0	85.3	200	85.3		04:47	05:45	06:28
779	BEDROOM	100.0	100.0	93.4	100	100.0		00:00	00:00	00:46
780	L/K/D	57.5	44.3	31.1	200	31.1		00:00	00:00	00:46
781	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:46
782	BEDROOM	100.0	100.0	94.5	100	100.0		00:00	00:00	00:46
783	BEDROOM	100.0	99.5	78.1	100	100.0		00:00	00:00	00:43
784	BEDROOM	100.0	100.0	93.9	100	100.0		00:00	00:00	00:43
785	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:32
786	L/K/D	100.0	100.0	100.0	200	100.0		04:30	05:14	06:01
787	BEDROOM	100.0	100.0	100.0	100	100.0		04:30	05:14	06:01
788	BEDROOM	100.0	100.0	100.0	100	100.0		04:30	05:14	06:01

Table 39: Assessment Data



Fig. 48: Floor Plan



Block C - Level 12

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK C - LEVEL 12										
789	BEDROOM	100.0	100.0	100.0	100	100.0		04:30	05:14	06:01
790	L/K/D	100.0	100.0	98.7	200	98.7		09:00	10:28	11:57
791	L/K/D	100.0	98.9	89.2	200	89.2		05:04	05:45	06:28
792	BEDROOM	100.0	100.0	98.9	100	100.0		00:00	00:00	00:46
793	L/K/D	64.1	51.6	39.2	200	39.2		00:00	00:00	00:46
794	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:46
795	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:46
796	BEDROOM	100.0	100.0	89.8	100	100.0		00:00	00:00	00:46
797	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:46
798	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:32
799	L/K/D	100.0	100.0	100.0	200	100.0		04:30	05:14	06:01
800	BEDROOM	100.0	100.0	100.0	100	100.0		04:30	05:14	06:01
801	BEDROOM	100.0	100.0	100.0	100	100.0		04:30	05:14	06:01

Table 40: Assessment Data

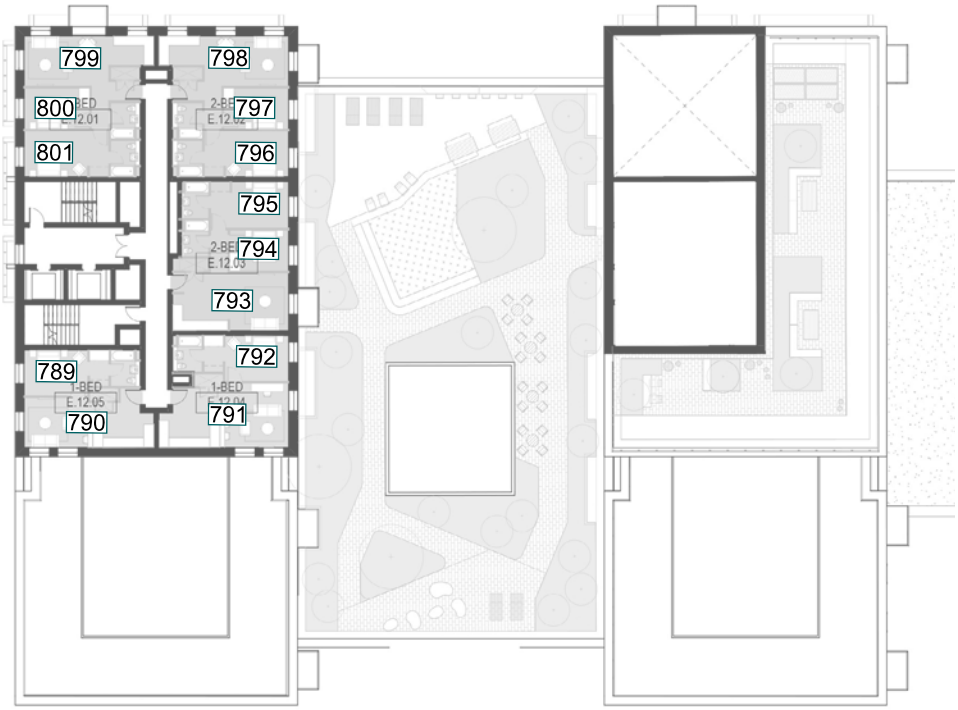


Fig. 49: Floor Plan



Block C - Level 13

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK C - LEVEL 13										
802	BEDROOM	100.0	100.0	100.0	100	100.0		04:30	05:14	06:01
803	L/K/D	100.0	100.0	100.0	200	100.0		09:00	10:28	11:57
804	STUDIO	98.0	86.2	78.3	200	78.3		05:04	05:45	06:28
805	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:46
806	L/K/D	66.1	48.3	35.3	200	35.3		00:00	00:00	00:46
807	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:46
808	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:46
809	BEDROOM	100.0	100.0	95.2	100	100.0		00:00	00:00	00:46
810	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:46
811	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:46
812	L/K/D	100.0	100.0	100.0	200	100.0		04:30	05:14	06:01
813	BEDROOM	100.0	100.0	100.0	100	100.0		04:30	05:14	06:01
814	BEDROOM	100.0	100.0	100.0	100	100.0		04:30	05:14	06:01

Table 41: Assessment Data

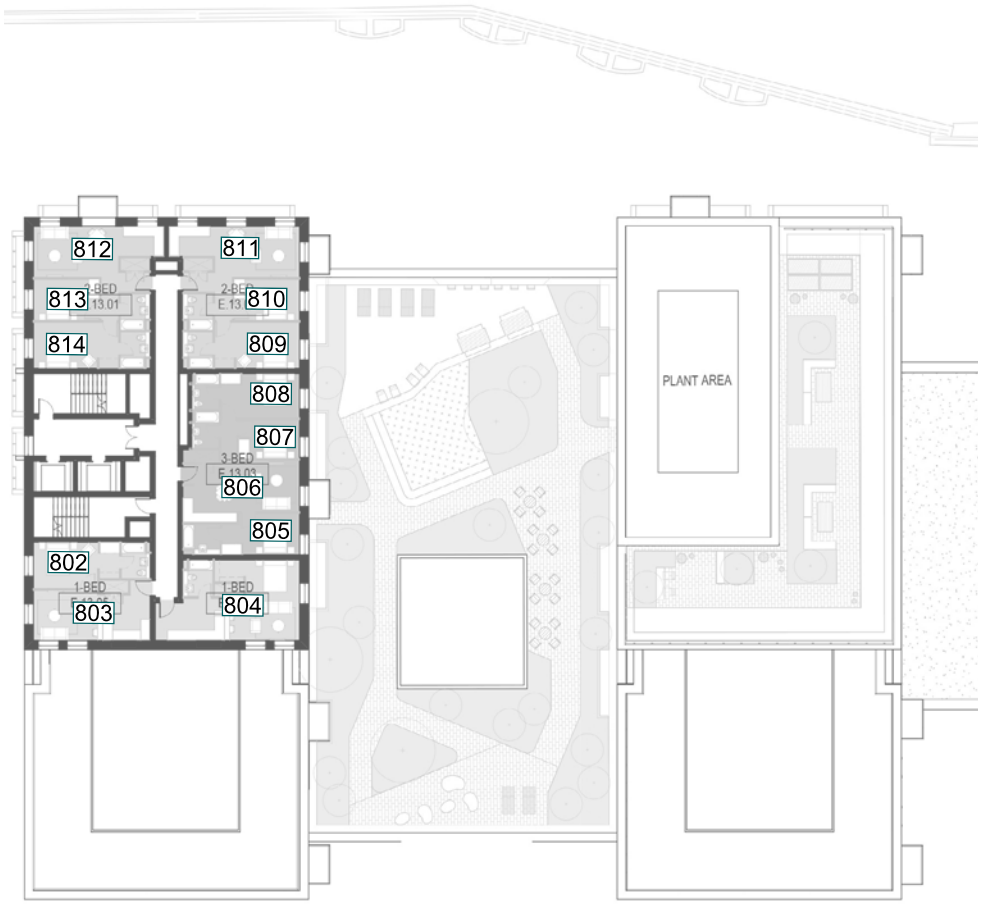


Fig. 50: Floor Plan



Block D - Level 01

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK D - LEVEL 01										
815	BEDROOM	94.2	63.5	41.8	100	94.2		00:00	00:00	00:28
816	BEDROOM	100.0	98.2	69.1	100	100.0		00:00	00:00	00:24
817	L/K/D	100.0	100.0	99.2	200	99.2		04:48	05:09	06:03
818	L/K/D	100.0	100.0	97.6	200	97.6		04:49	05:31	05:55
819	BEDROOM	95.8	55.2	35.8	100	95.8		02:19	02:06	01:52
820	BEDROOM	75.0	40.4	24.5	100	75.0		01:46	01:36	01:24
821	L/K/D	32.0	17.8	10.9	200	10.9		01:17	01:09	01:01
822	BEDROOM	50.5	22.6	11.3	100	50.5		00:01	00:00	00:00
823	L/K/D	27.4	14.1	7.3	200	7.3		00:30	00:26	00:23
824	BEDROOM	54.5	28.0	14.3	100	54.5		00:10	00:11	00:10
825	BEDROOM	72.3	37.2	22.3	100	72.3		00:00	00:05	01:14
826	BEDROOM	93.3	53.3	35.2	100	93.3		00:00	00:45	01:51
827	L/K/D	100.0	100.0	100.0	200	100.0		00:30	01:25	02:27
828	L/K/D	100.0	100.0	99.7	200	99.7		00:00	00:00	00:00
829	BEDROOM	90.9	56.4	41.2	100	90.9		00:00	00:00	00:00
830	BEDROOM	69.1	45.7	31.4	100	69.1		00:00	00:00	00:00
831	BEDROOM	78.8	53.3	36.4	100	78.8		00:00	00:00	00:00
832	BEDROOM	84.3	50.7	33.3	100	84.3		00:00	00:00	00:00
833	L/K/D	10.1	4.2	1.8	200	1.8		00:00	00:00	00:00
834	BEDROOM	57.1	36.5	23.8	100	57.1		00:00	00:00	00:00
835	L/K/D	17.3	10.7	7.6	200	7.6		00:00	00:00	00:19
836	BEDROOM	59.1	38.7	25.3	100	59.1		00:00	00:00	00:00
837	L/K/D	21.4	9.2	4.1	200	4.1		00:00	00:00	00:26

Table 42: Assessment Data

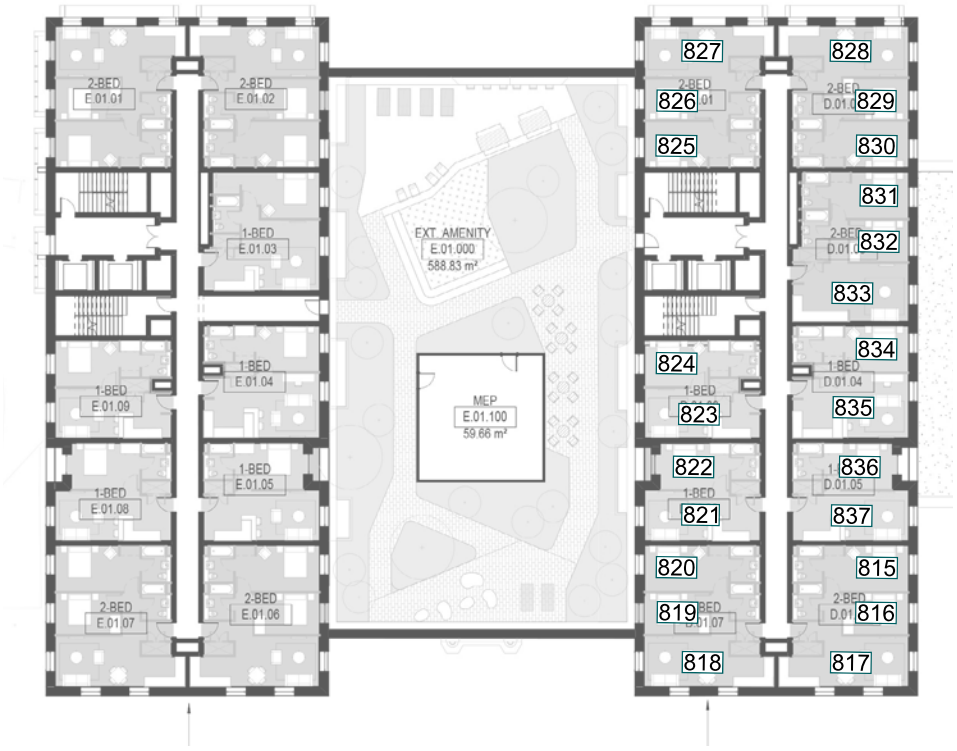


Fig. 51: Floor Plan



Block D - Level 02

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK D - LEVEL 02										
838	BEDROOM	97.9	77.8	54.0	100	97.9		00:00	00:00	00:34
839	BEDROOM	100.0	100.0	81.2	100	100.0		00:00	00:00	00:38
840	L/K/D	100.0	100.0	100.0	200	100.0		05:00	05:30	06:17
841	L/K/D	100.0	100.0	99.5	200	99.5		07:25	07:49	08:03
842	BEDROOM	100.0	72.7	46.1	100	100.0		02:19	02:06	01:52
843	BEDROOM	84.6	48.4	27.7	100	84.6		01:46	01:36	01:24
844	L/K/D	35.0	19.8	11.9	200	11.9		01:17	01:09	01:01
845	BEDROOM	51.9	24.0	12.0	100	51.9		00:01	00:00	00:00
846	L/K/D	30.3	16.3	9.0	200	9.0		00:30	00:26	00:23
847	BEDROOM	60.3	31.7	17.5	100	60.3		00:10	00:11	00:10
848	BEDROOM	77.1	42.0	24.5	100	77.1		00:00	00:14	01:22
849	BEDROOM	100.0	62.4	39.4	100	100.0		00:00	00:54	02:00
850	L/K/D	100.0	100.0	100.0	200	100.0		00:31	01:34	02:36
851	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:00
852	BEDROOM	100.0	75.2	53.9	100	100.0		00:00	00:00	00:00
853	BEDROOM	93.6	63.0	43.1	100	93.6		00:00	00:00	00:00
854	BEDROOM	100.0	72.1	52.1	100	100.0		00:00	00:00	00:00
855	BEDROOM	100.0	75.3	50.7	100	100.0		00:00	00:00	00:00
856	L/K/D	20.0	9.0	4.4	200	4.4		00:00	00:00	00:00
857	BEDROOM	84.1	55.0	36.0	100	84.1		00:00	00:00	00:00
858	L/K/D	26.3	16.0	11.1	200	11.1		00:00	00:00	00:24
859	BEDROOM	76.4	50.2	34.0	100	76.4		00:00	00:00	00:00
860	L/K/D	28.5	14.2	6.9	200	6.9		00:00	00:00	00:31

Table 43: Assessment Data

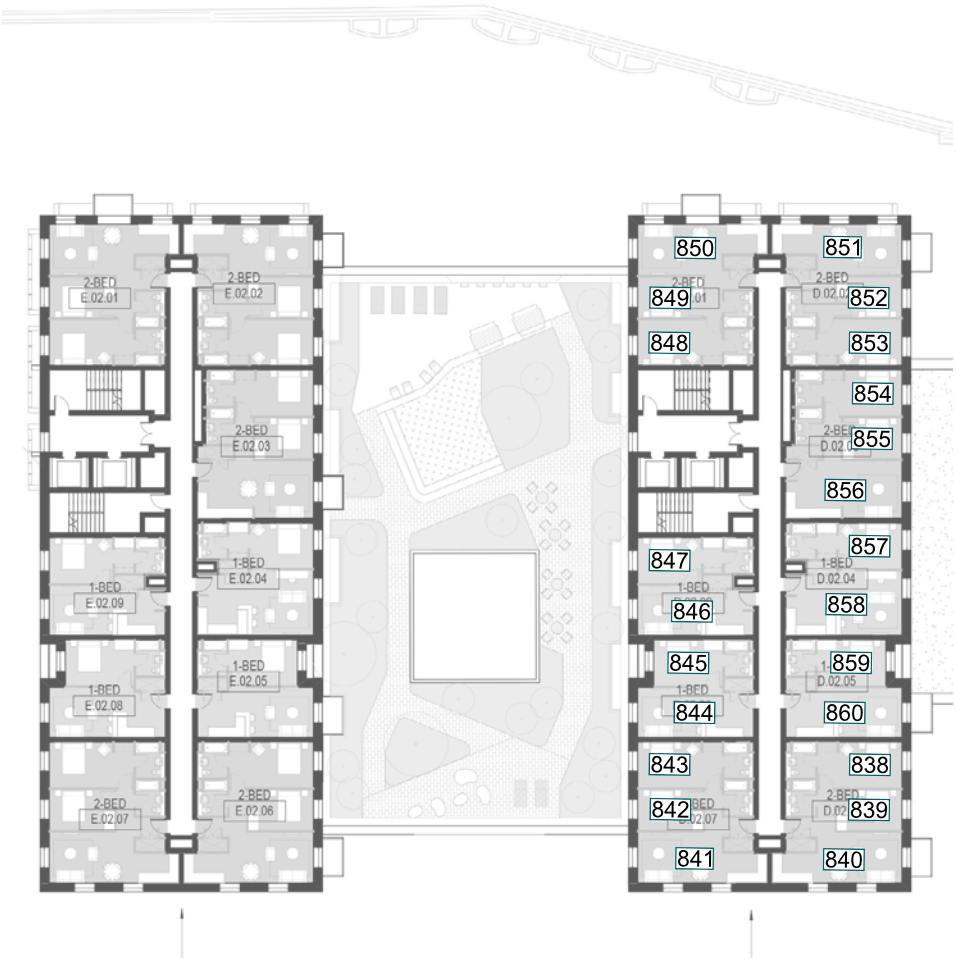


Fig. 52: Floor Plan



Block D - Level 03

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK D - LEVEL 03										
861	BEDROOM	100.0	92.1	66.7	100	100.0		00:00	00:00	00:39
862	BEDROOM	100.0	100.0	94.5	100	100.0		00:00	00:00	00:43
863	L/K/D	100.0	100.0	100.0	200	100.0		05:04	05:45	06:25
864	L/K/D	100.0	100.0	100.0	200	100.0		07:29	07:57	08:21
865	BEDROOM	100.0	78.2	50.0	100	100.0		02:19	02:06	01:52
866	BEDROOM	88.6	52.1	29.8	100	88.6		01:46	01:36	01:24
867	L/K/D	37.7	21.8	12.9	200	12.9		01:17	01:09	01:01
868	BEDROOM	57.2	26.0	13.9	100	57.2		00:01	00:00	00:00
869	L/K/D	33.2	17.8	10.3	200	10.3		00:30	00:26	00:23
870	BEDROOM	69.3	37.0	20.1	100	69.3		00:10	00:11	00:12
871	BEDROOM	80.9	45.7	26.6	100	80.9		00:00	00:16	01:43
872	BEDROOM	100.0	66.1	43.3	100	100.0		00:00	00:56	02:11
873	L/K/D	100.0	100.0	100.0	200	100.0		00:32	01:36	02:42
874	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:11
875	BEDROOM	100.0	100.0	70.3	100	100.0		00:00	00:00	00:00
876	BEDROOM	100.0	83.2	59.8	100	100.0		00:00	00:00	00:00
877	BEDROOM	100.0	95.2	69.7	100	100.0		00:00	00:00	00:00
878	BEDROOM	100.0	100.0	74.7	100	100.0		00:00	00:00	00:00
879	L/K/D	33.3	14.9	7.9	200	7.9		00:00	00:00	00:01
880	BEDROOM	100.0	78.8	52.4	100	100.0		00:00	00:00	00:15
881	L/K/D	39.3	21.8	15.1	200	15.1		00:00	00:00	00:28
882	BEDROOM	100.0	70.4	48.3	100	100.0		00:00	00:00	00:00
883	L/K/D	39.7	22.1	11.2	200	11.2		00:00	00:00	00:35

Table 44: Assessment Data

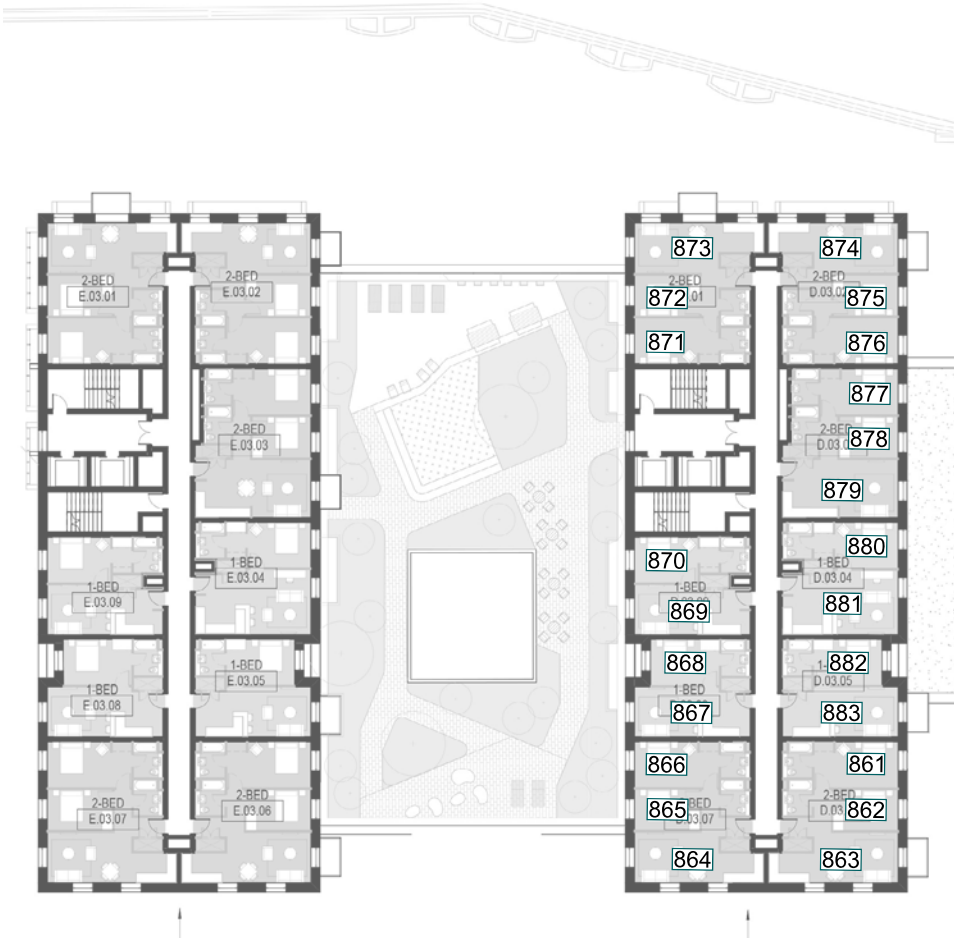


Fig. 53: Floor Plan



Block D - Level 04

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK D - LEVEL 04										
884	BEDROOM	100.0	98.4	75.7	100	100.0		00:00	00:00	00:45
885	BEDROOM	100.0	100.0	99.4	100	100.0		00:00	00:00	00:48
886	L/K/D	100.0	100.0	100.0	200	100.0		05:04	05:45	06:28
887	L/K/D	100.0	100.0	100.0	200	100.0		07:29	07:57	08:21
888	BEDROOM	100.0	86.7	53.9	100	100.0		02:19	02:06	01:52
889	BEDROOM	93.4	59.6	33.5	100	93.4		01:46	01:36	01:24
890	L/K/D	40.1	24.0	14.5	200	14.5		01:17	01:09	01:01
891	BEDROOM	65.6	31.7	17.3	100	65.6		00:01	00:00	00:00
892	L/K/D	37.5	20.5	11.7	200	11.7		00:30	00:26	00:32
893	BEDROOM	77.2	42.3	24.3	100	77.2		00:10	00:11	00:32
894	BEDROOM	84.0	49.7	29.8	100	84.0		00:00	00:17	01:51
895	BEDROOM	100.0	70.9	46.1	100	100.0		00:00	00:57	02:16
896	L/K/D	100.0	100.0	100.0	200	100.0		00:32	01:37	02:47
897	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:47
898	BEDROOM	100.0	100.0	89.4	100	100.0		00:00	00:00	00:46
899	BEDROOM	100.0	96.3	69.7	100	100.0		00:00	00:00	00:44
900	BEDROOM	100.0	100.0	84.8	100	100.0		00:00	00:00	00:44
901	BEDROOM	100.0	100.0	99.3	100	100.0		00:00	00:00	00:44
902	L/K/D	42.8	20.0	10.1	200	10.1		00:00	00:00	00:44
903	BEDROOM	100.0	99.5	69.3	100	100.0		00:00	00:00	00:44
904	L/K/D	52.3	28.6	18.3	200	18.3		00:00	00:00	00:49
905	BEDROOM	100.0	98.0	63.5	100	100.0		00:00	00:00	00:00
906	L/K/D	46.8	27.5	14.5	200	14.5		00:00	00:00	00:49

Table 45: Assessment Data

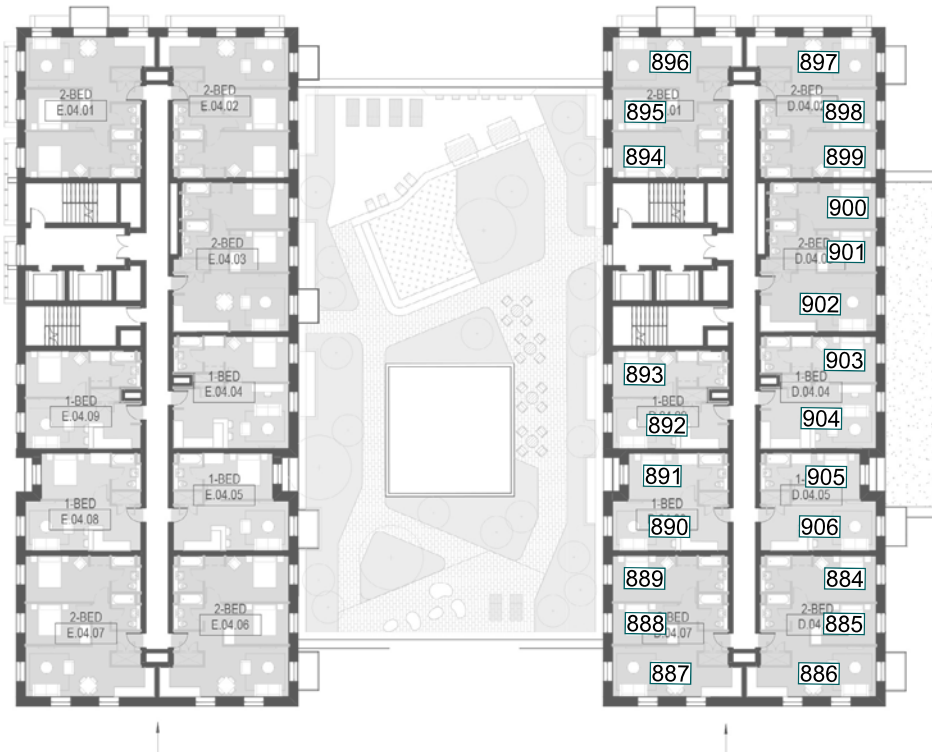


Fig. 54: Floor Plan



Block D - Level 05

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK D - LEVEL 05										
907	BEDROOM	100.0	99.5	77.2	100	100.0		00:00	00:00	00:49
908	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:49
909	L/K/D	100.0	100.0	100.0	200	100.0		05:04	05:45	06:28
910	L/K/D	100.0	100.0	100.0	200	100.0		07:29	07:57	08:21
911	BEDROOM	100.0	93.6	58.2	100	100.0		02:19	02:06	01:52
912	BEDROOM	96.8	62.8	38.3	100	96.8		01:46	01:36	01:24
913	L/K/D	42.1	26.1	16.5	200	16.5		01:17	01:09	01:06
914	BEDROOM	75.5	37.5	21.6	100	75.5		00:01	00:00	00:29
915	L/K/D	41.3	23.4	13.6	200	13.6		00:30	00:26	01:05
916	BEDROOM	86.8	48.7	29.6	100	86.8		00:10	00:11	01:05
917	BEDROOM	90.4	53.2	33.0	100	90.4		00:00	00:19	01:51
918	BEDROOM	100.0	75.2	47.9	100	100.0		00:00	01:04	02:16
919	L/K/D	100.0	100.0	100.0	200	100.0		00:32	01:37	02:47
920	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:51
921	BEDROOM	100.0	100.0	95.8	100	100.0		00:00	00:00	00:49
922	BEDROOM	100.0	98.9	73.4	100	100.0		00:00	00:00	00:49
923	BEDROOM	100.0	100.0	89.7	100	100.0		00:00	00:00	00:49
924	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:49
925	L/K/D	44.5	21.6	10.7	200	10.7		00:00	00:00	00:49
926	BEDROOM	100.0	100.0	75.1	100	100.0		00:00	00:00	00:49
927	L/K/D	56.8	30.0	19.5	200	19.5		00:00	00:00	00:49
928	BEDROOM	100.0	100.0	68.5	100	100.0		00:00	00:00	00:00
929	L/K/D	48.2	28.8	14.8	200	14.8		00:00	00:00	00:49

Table 46: Assessment Data

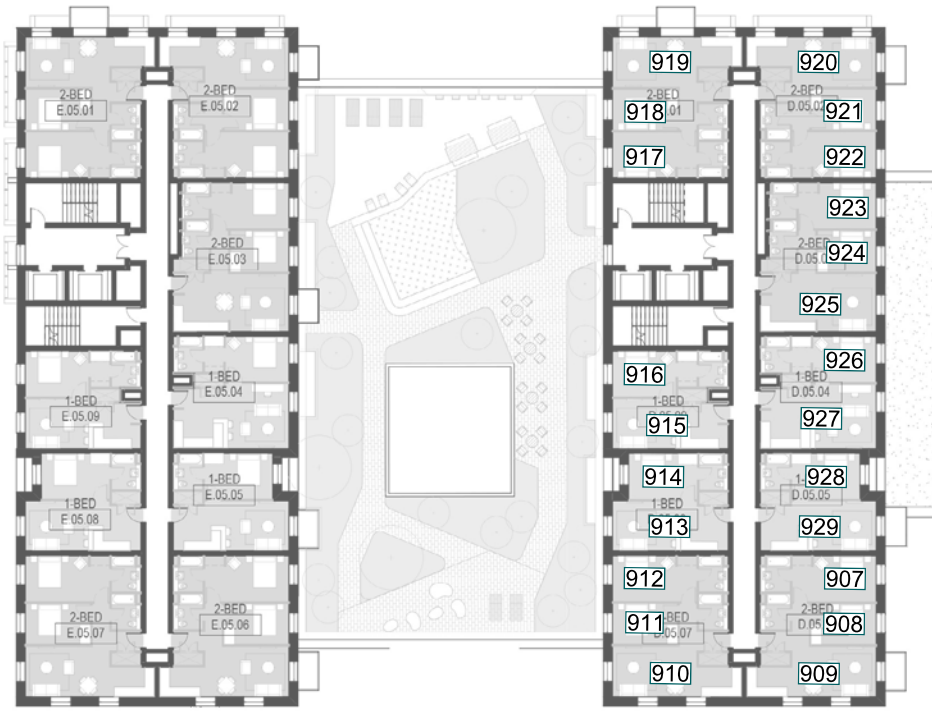


Fig. 55: Floor Plan



Block D - Level 06

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK D - LEVEL 06										
930	BEDROOM	100.0	98.9	79.6	100	100.0		00:00	00:00	00:49
931	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:49
932	L/K/D	100.0	100.0	100.0	200	100.0		05:04	05:45	06:28
933	L/K/D	100.0	100.0	100.0	200	100.0		07:29	07:57	08:21
934	BEDROOM	100.0	98.8	63.0	100	100.0		02:19	02:06	01:52
935	BEDROOM	100.0	68.9	43.6	100	100.0		01:46	01:36	01:44
936	L/K/D	45.8	29.1	19.7	200	19.7		01:17	01:09	01:44
937	BEDROOM	88.2	45.2	27.9	100	88.2		00:01	00:00	01:11
938	L/K/D	45.1	26.9	17.7	200	17.7		00:30	00:37	01:47
939	BEDROOM	95.2	53.4	34.9	100	95.2		00:10	00:35	01:51
940	BEDROOM	95.2	58.5	37.2	100	95.2		00:00	00:39	01:51
941	BEDROOM	100.0	81.2	52.1	100	100.0		00:00	01:04	02:19
942	L/K/D	100.0	100.0	100.0	200	100.0		00:32	01:37	02:55
943	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:51
944	BEDROOM	100.0	100.0	97.6	100	100.0		00:00	00:00	00:49
945	BEDROOM	100.0	99.5	75.5	100	100.0		00:00	00:00	00:49
946	BEDROOM	100.0	100.0	92.6	100	100.0		00:00	00:00	00:49
947	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:49
948	L/K/D	45.6	22.7	11.4	200	11.4		00:00	00:00	00:49
949	BEDROOM	100.0	100.0	78.8	100	100.0		00:00	00:00	00:49
950	L/K/D	59.0	31.7	19.8	200	19.8		00:00	00:00	00:49
951	BEDROOM	100.0	100.0	73.4	100	100.0		00:00	00:00	00:00
952	L/K/D	48.9	29.5	15.5	200	15.5		00:00	00:00	00:49

Table 47: Assessment Data

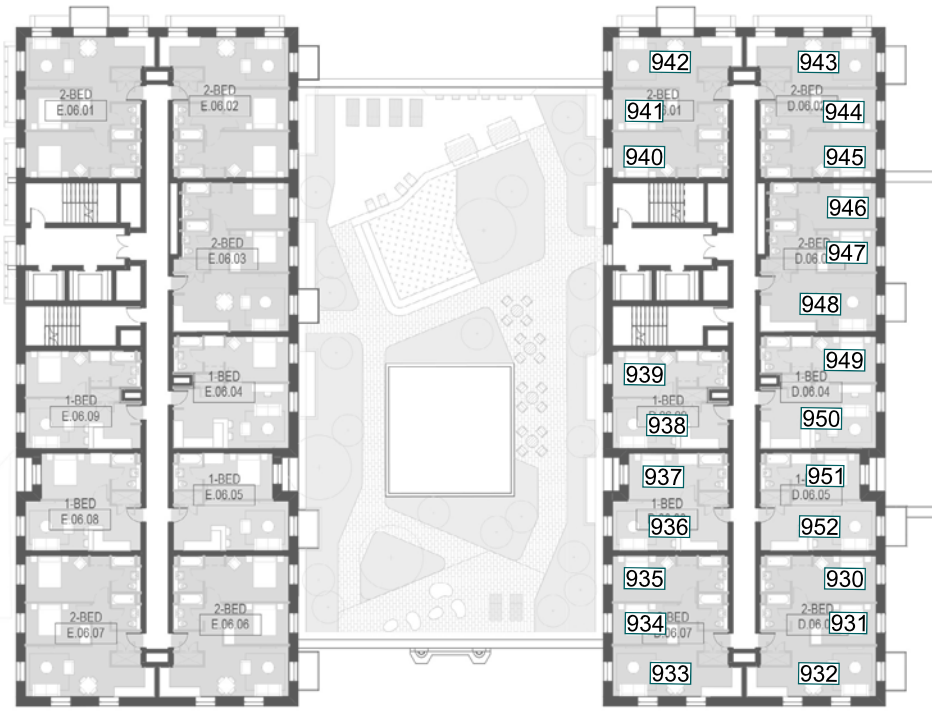


Fig. 56: Floor Plan



Block D - Level 07

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK D - LEVEL 07										
953	BEDROOM	100.0	99.5	82.5	100	100.0		00:00	00:00	00:49
954	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:49
955	L/K/D	100.0	100.0	100.0	200	100.0		05:04	05:45	06:28
956	L/K/D	100.0	100.0	100.0	200	100.0		07:29	07:57	08:35
957	BEDROOM	100.0	100.0	72.1	100	100.0		02:19	02:06	02:35
958	BEDROOM	100.0	77.1	53.2	100	100.0		01:46	01:36	02:30
959	L/K/D	50.3	32.7	23.9	200	23.9		01:17	01:25	02:30
960	BEDROOM	98.8	57.0	37.5	100	98.8		00:01	00:42	01:57
961	L/K/D	49.5	31.5	21.2	200	21.2		00:30	01:20	02:24
962	BEDROOM	99.5	61.6	41.8	100	99.5		00:20	01:20	01:53
963	BEDROOM	97.9	63.3	41.8	100	97.9		00:11	00:39	02:04
964	BEDROOM	100.0	89.1	57.6	100	100.0		00:07	01:04	02:42
965	L/K/D	100.0	100.0	100.0	200	100.0		00:32	01:37	03:19
966	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:51
967	BEDROOM	100.0	100.0	98.8	100	100.0		00:00	00:00	00:49
968	BEDROOM	100.0	100.0	77.1	100	100.0		00:00	00:00	00:49
969	BEDROOM	100.0	100.0	93.9	100	100.0		00:00	00:00	00:49
970	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:49
971	L/K/D	46.3	23.6	11.6	200	11.6		00:00	00:00	00:49
972	BEDROOM	100.0	100.0	81.5	100	100.0		00:00	00:00	00:49
973	L/K/D	60.6	32.3	20.6	200	20.6		00:00	00:00	00:49
974	BEDROOM	100.0	100.0	78.8	100	100.0		00:00	00:00	00:00
975	L/K/D	69.1	46.3	34.6	200	34.6		00:00	00:00	00:49

Table 48: Assessment Data

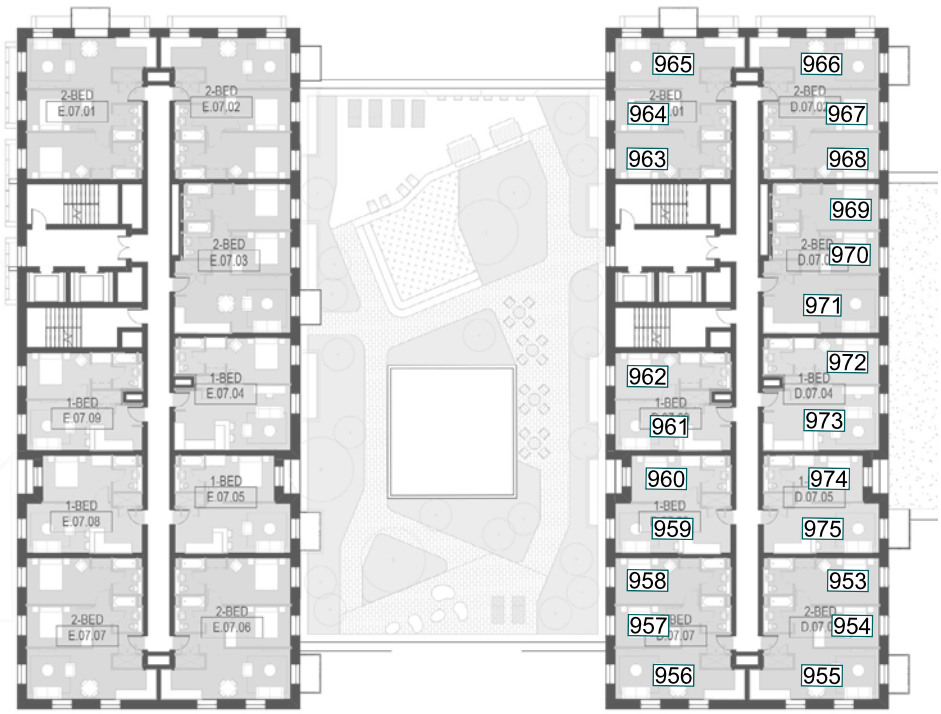


Fig. 57: Floor Plan

Block D - Level 08

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK D - LEVEL 08										
976	L/K/D	54.9	37.5	26.5	200	26.5		01:12	02:12	02:24
977	BEDROOM	100.0	75.1	51.1	100	100.0		01:04	02:08	01:53
978	BEDROOM	100.0	69.7	46.3	100	100.0		00:24	00:39	02:34
979	BEDROOM	100.0	98.2	64.2	100	100.0		00:07	01:04	03:11
980	L/K/D	100.0	100.0	100.0	200	100.0		00:32	01:37	03:48
981	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:51
982	BEDROOM	100.0	100.0	99.4	100	100.0		00:00	00:00	00:49
983	BEDROOM	100.0	100.0	79.3	100	100.0		00:00	00:00	00:49
984	BEDROOM	100.0	100.0	95.8	100	100.0		00:00	00:00	00:49
985	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:49
986	L/K/D	51.1	33.7	19.3	200	19.3		00:00	00:00	00:49
987	BEDROOM	100.0	100.0	86.0	100	100.0		00:00	00:00	00:49
988	L/K/D	61.9	33.3	21.2	200	21.2		00:00	00:00	00:49

Table 49: Assessment Data



Fig. 58: Floor Plan



Block D - Level 09

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK D - LEVEL 09										
989	L/K/D	100.0	89.6	77.2	200	77.2		06:33	07:56	08:23
990	BEDROOM	100.0	89.9	60.8	100	100.0		02:03	02:08	01:53
991	BEDROOM	100.0	78.2	53.2	100	100.0		00:24	00:51	03:05
992	BEDROOM	100.0	100.0	70.3	100	100.0		00:07	01:31	03:43
993	L/K/D	100.0	100.0	100.0	200	100.0		00:32	02:11	04:20
994	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:51
995	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:49
996	BEDROOM	100.0	100.0	80.9	100	100.0		00:00	00:00	00:49
997	BEDROOM	100.0	100.0	95.8	100	100.0		00:00	00:00	00:49
998	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:49
999	L/K/D	60.2	46.7	32.5	200	32.5		00:00	00:00	00:49
1000	BEDROOM	100.0	100.0	87.3	100	100.0		00:00	00:00	00:49
1001	L/K/D	100.0	97.0	86.3	200	86.3		05:06	05:46	06:30

Table 50: Assessment Data

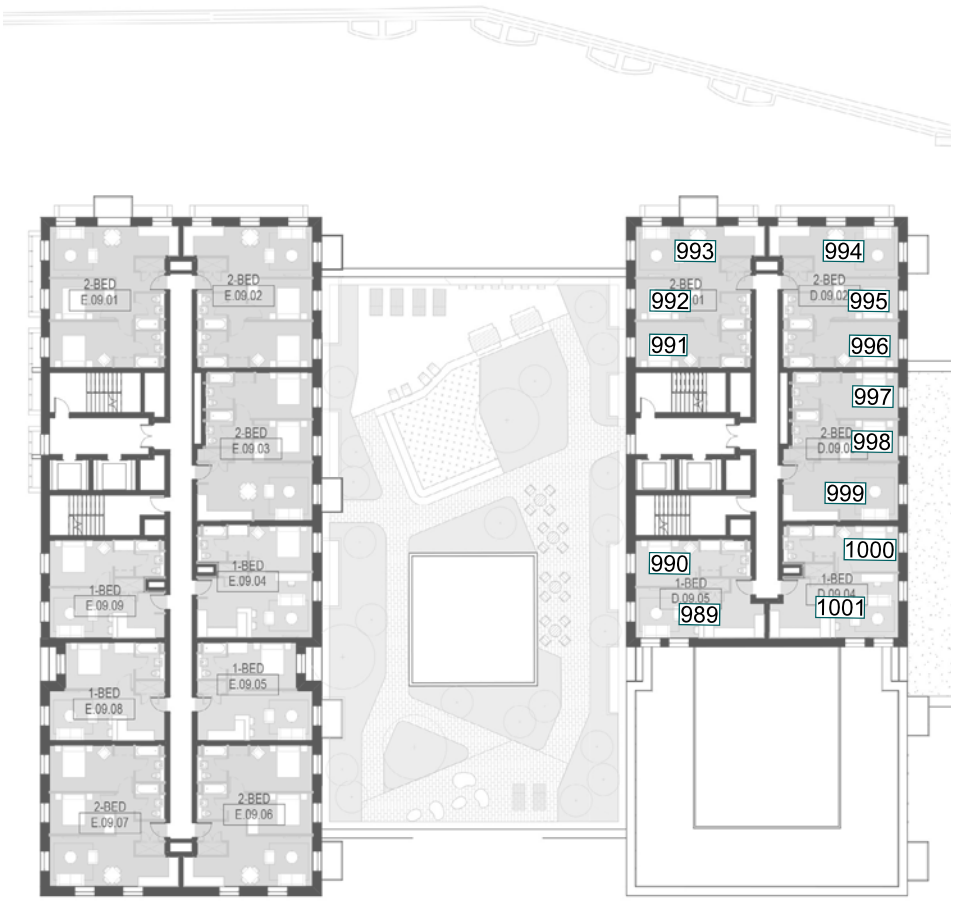


Fig. 59: Floor Plan



Block D - Level 10

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK D - LEVEL 10										
1002	L/K/D	100.0	93.3	80.5	200	80.5		07:29	07:56	08:37
1003	BEDROOM	100.0	99.5	70.9	100	100.0		02:21	02:08	02:37
1004	BEDROOM	100.0	88.8	60.1	100	100.0		00:24	01:38	03:40
1005	BEDROOM	100.0	100.0	81.2	100	100.0		00:13	02:07	04:18
1006	L/K/D	100.0	100.0	100.0	200	100.0		00:37	02:36	04:55
1007	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:51
1008	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:49
1009	BEDROOM	100.0	100.0	83.5	100	100.0		00:00	00:00	00:49
1010	BEDROOM	100.0	100.0	97.0	100	100.0		00:00	00:00	00:49
1011	BEDROOM	100.0	100.0	100.0	100	100.0		00:00	00:00	00:49
1012	L/K/D	60.7	47.1	33.3	200	33.3		00:00	00:00	00:49
1013	BEDROOM	100.0	100.0	88.4	100	100.0		00:00	00:00	00:49
1014	L/K/D	100.0	98.1	87.5	200	87.5		05:06	05:46	06:30

Table 51: Assessment Data

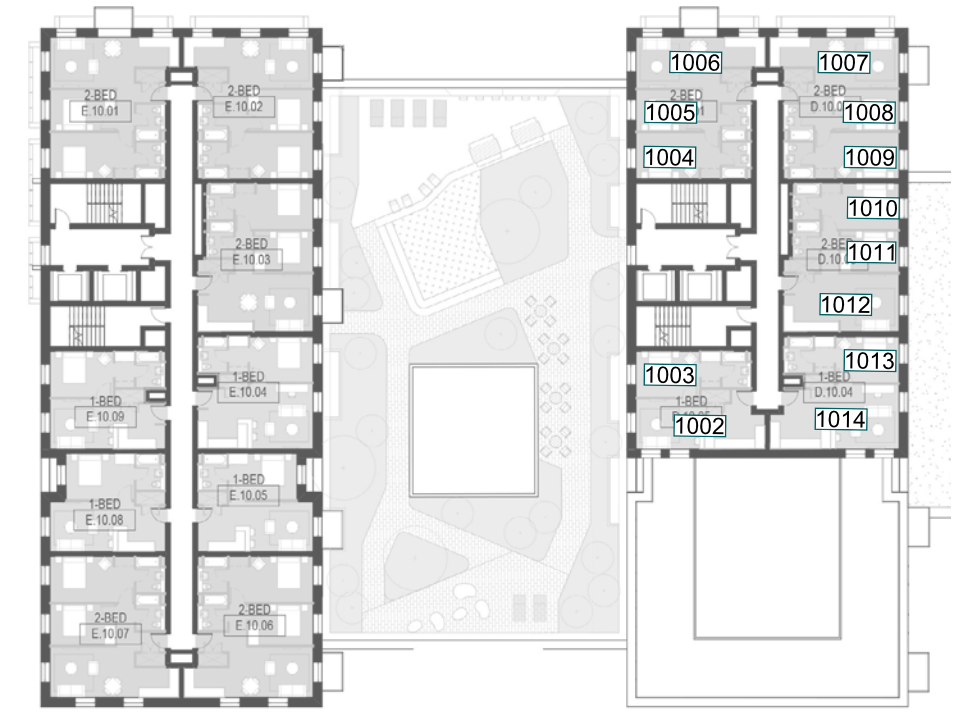


Fig. 60: Floor Plan



Block E - Level 00M

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK E - LEVEL 00										
1015	L/K/D	3.8	1.4	0.0	200	0.0		00:00	00:00	00:00
1016	BEDROOM	10.6	4.8	1.6	100	10.6		00:00	00:00	00:00
1017	BEDROOM	100.0	100.0	94.0	100	100.0		03:44	04:04	05:36
1018	BEDROOM	100.0	100.0	95.6	100	100.0		03:31	04:03	05:35
1019	L/K/D	53.2	40.6	27.7	200	27.7		03:22	04:14	05:31
1020	L/K/D	55.1	40.0	28.2	200	28.2		03:15	04:06	05:29
1021	BEDROOM	100.0	100.0	97.8	100	100.0		03:09	04:04	05:25
1022	BEDROOM	100.0	91.1	71.7	100	100.0		03:02	04:11	05:37
1023	BEDROOM	100.0	78.3	47.1	100	100.0		00:00	00:00	00:35
1024	L/K/D	42.0	28.5	18.5	200	18.5		00:00	00:00	00:36
1025	BEDROOM	91.4	54.0	29.9	100	91.4		00:00	00:00	00:41
1026	L/K/D	52.0	34.6	22.5	200	22.5		00:00	00:00	00:42
1027	BEDROOM	77.5	37.2	21.4	100	77.5		00:00	00:00	00:39
1028	BEDROOM	100.0	87.9	58.2	100	100.0		00:00	00:00	00:36
1029	BEDROOM	100.0	96.4	67.2	100	100.0		00:00	00:00	00:35
1030	L/K/D	100.0	99.6	87.7	200	87.7		00:00	00:00	00:33
1031	BEDROOM	100.0	59.5	29.8	100	100.0		00:00	00:00	00:00
1032	L/K/D	99.6	89.9	53.2	200	53.2		00:00	00:28	01:26
1033	BEDROOM	40.6	23.0	14.5	100	40.6		00:00	00:00	00:42
1034	BEDROOM	21.9	11.2	4.8	100	21.9		00:00	00:00	00:03

Table 52: Assessment Data



Fig. 61: Floor Plan



Block E - Level 01

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK E - LEVEL 01										
1035	L/K/D	6.2	2.6	0.7	200	0.7		00:00	00:00	00:00
1036	BEDROOM	16.9	8.5	3.7	100	16.9		00:00	00:00	00:00
1037	BEDROOM	100.0	100.0	97.9	100	100.0		03:49	04:37	05:44
1038	BEDROOM	100.0	100.0	98.5	100	100.0		03:45	04:29	05:41
1039	L/K/D	55.8	43.6	30.8	200	30.8		03:40	04:27	05:38
1040	L/K/D	57.5	43.3	31.0	200	31.0		03:34	04:32	05:45
1041	BEDROOM	100.0	100.0	99.3	100	100.0		03:32	04:45	05:56
1042	BEDROOM	100.0	100.0	100.0	100	100.0		03:39	04:42	06:21
1043	BEDROOM	100.0	89.4	55.0	100	100.0		00:00	00:00	00:41
1044	L/K/D	45.1	31.6	20.9	200	20.9		00:00	00:00	00:44
1045	BEDROOM	96.3	57.0	32.1	100	96.3		00:00	00:00	00:46
1046	L/K/D	55.8	37.8	24.7	200	24.7		00:00	00:00	00:43
1047	BEDROOM	81.9	39.9	22.9	100	81.9		00:00	00:00	00:41
1048	BEDROOM	100.0	98.2	64.8	100	100.0		00:00	00:00	00:39
1049	BEDROOM	100.0	100.0	75.2	100	100.0		00:00	00:00	00:39
1050	L/K/D	100.0	100.0	93.4	200	93.4		00:00	00:00	00:37
1051	BEDROOM	100.0	65.3	34.7	100	100.0		00:00	00:00	00:00
1052	L/K/D	100.0	94.7	65.2	200	65.2		00:00	00:34	01:33
1053	BEDROOM	50.3	29.1	18.8	100	50.3		00:00	00:00	00:49
1054	BEDROOM	32.6	16.6	8.6	100	32.6		00:00	00:00	00:09

Table 53: Assessment Data

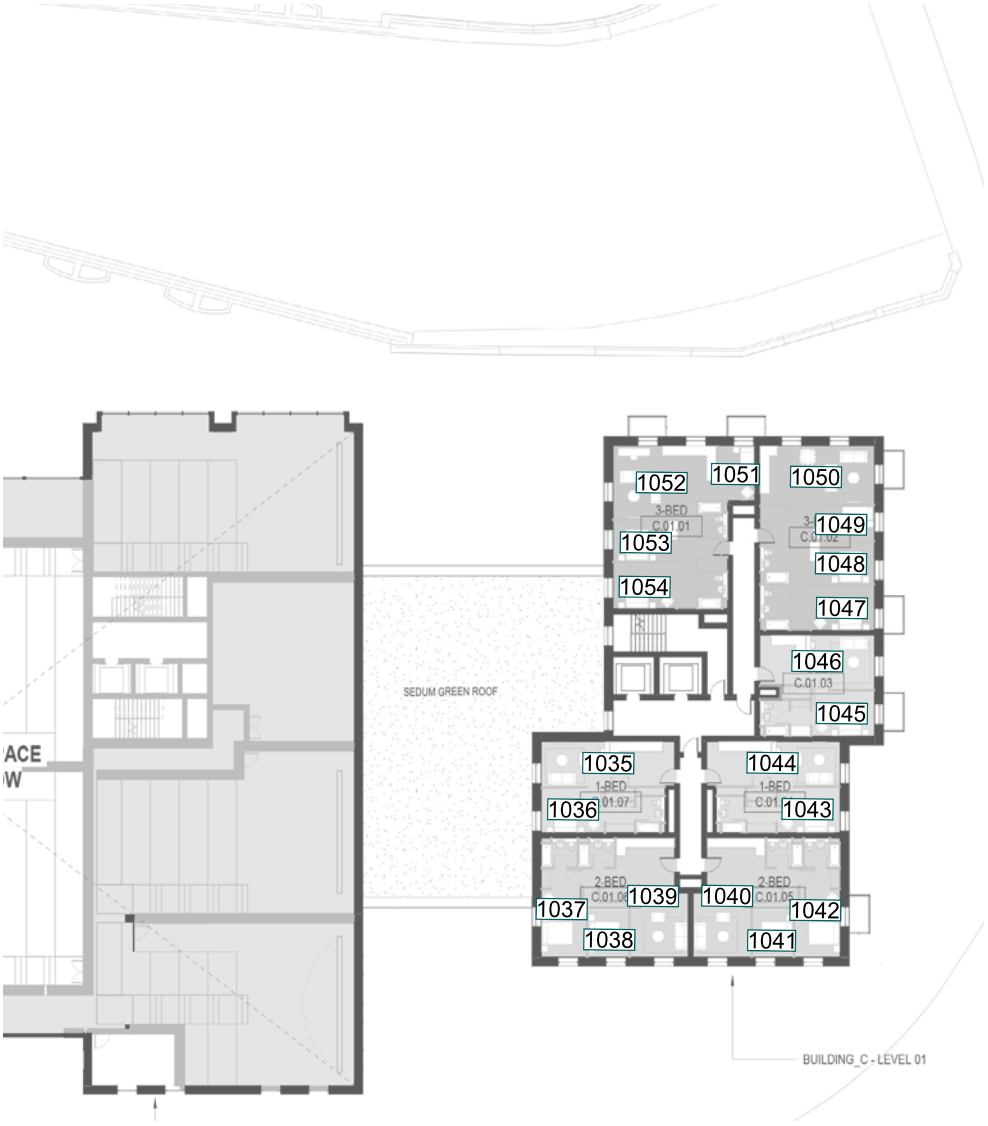


Fig. 62: Floor Plan



Block E - Level 02

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK E - LEVEL 02										
1055	L/K/D	8.6	4.0	1.7	200	1.7		00:00	00:00	00:00
1056	BEDROOM	22.8	11.1	5.8	100	22.8		00:00	00:00	00:00
1057	BEDROOM	100.0	100.0	100.0	100	100.0		04:10	04:48	05:49
1058	BEDROOM	100.0	100.0	100.0	100	100.0		04:06	04:51	05:51
1059	L/K/D	58.2	46.4	33.3	200	33.3		04:03	05:04	06:00
1060	L/K/D	59.0	45.8	32.7	200	32.7		04:08	05:05	06:12
1061	BEDROOM	100.0	100.0	100.0	100	100.0		04:11	05:06	06:27
1062	BEDROOM	100.0	100.0	100.0	100	100.0		03:57	05:12	06:26
1063	BEDROOM	100.0	95.0	61.4	100	100.0		00:00	00:00	00:49
1064	L/K/D	47.0	33.0	22.6	200	22.6		00:00	00:00	00:49
1065	BEDROOM	98.9	61.2	35.8	100	98.9		00:00	00:00	00:47
1066	L/K/D	57.6	39.4	26.3	200	26.3		00:00	00:00	00:46
1067	BEDROOM	87.2	43.1	24.5	100	87.2		00:00	00:00	00:44
1068	BEDROOM	100.0	100.0	72.7	100	100.0		00:00	00:00	00:43
1069	BEDROOM	100.0	100.0	82.5	100	100.0		00:00	00:00	00:41
1070	L/K/D	100.0	100.0	97.4	200	97.4		00:00	00:00	00:40
1071	BEDROOM	100.0	75.2	38.8	100	100.0		00:00	00:00	00:00
1072	L/K/D	100.0	97.2	75.5	200	75.5		00:00	00:38	01:37
1073	BEDROOM	59.4	34.2	21.2	100	59.4		00:00	00:00	00:56
1074	BEDROOM	42.2	20.9	11.2	100	42.2		00:00	00:00	00:16

Table 54: Assessment Data

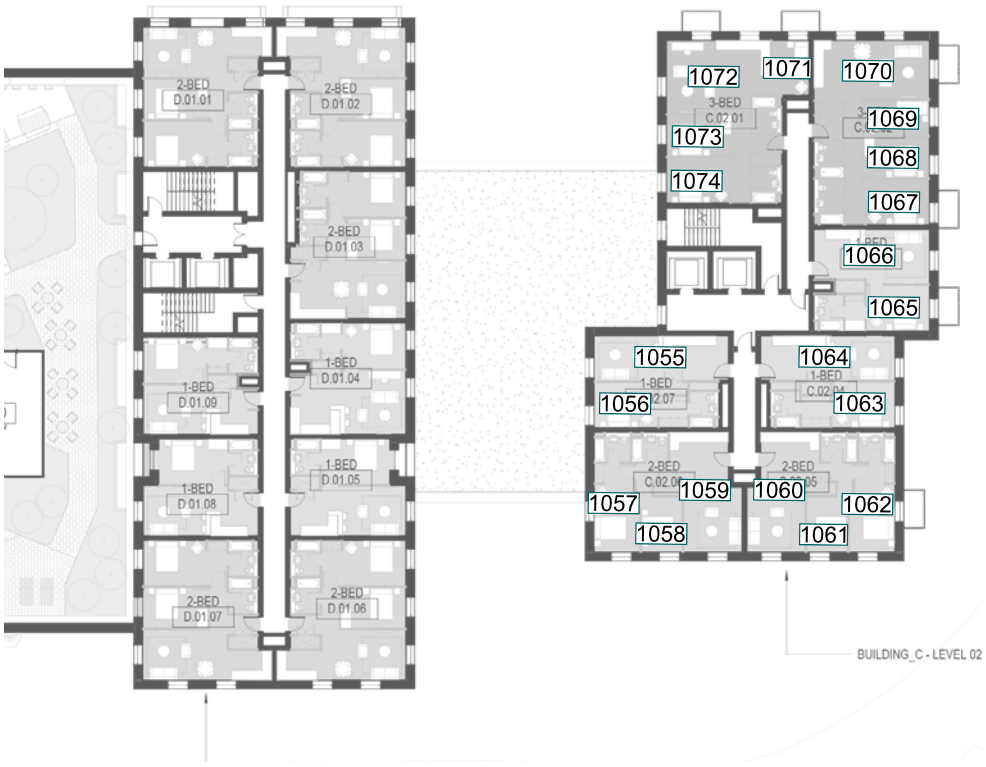


Fig. 63: Floor Plan



Block E - Level 03

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK E - LEVEL 03										
1075	L/K/D	10.9	5.2	2.6	200	2.6		00:00	00:00	00:00
1076	BEDROOM	30.2	14.3	7.9	100	30.2		00:00	00:00	00:00
1077	BEDROOM	100.0	100.0	100.0	100	100.0		04:33	05:17	06:02
1078	BEDROOM	100.0	100.0	100.0	100	100.0		04:34	05:25	06:11
1079	L/K/D	59.8	48.2	34.9	200	34.9		04:34	05:25	06:28
1080	L/K/D	60.4	48.3	34.6	200	34.6		04:24	05:26	06:28
1081	BEDROOM	100.0	100.0	100.0	100	100.0		04:19	05:26	06:28
1082	BEDROOM	100.0	100.0	100.0	100	100.0		04:21	05:25	06:30
1083	BEDROOM	100.0	96.8	65.1	100	100.0		00:00	00:00	00:49
1084	L/K/D	48.9	34.7	24.0	200	24.0		00:00	00:00	00:49
1085	BEDROOM	100.0	97.9	71.7	100	100.0		00:00	00:00	00:49
1086	L/K/D	60.8	42.4	28.7	200	28.7		00:00	00:00	00:49
1087	BEDROOM	100.0	86.2	54.5	100	100.0		00:00	00:00	00:48
1088	BEDROOM	100.0	100.0	78.2	100	100.0		00:00	00:00	00:46
1089	BEDROOM	100.0	100.0	87.6	100	100.0		00:00	00:00	00:45
1090	L/K/D	100.0	100.0	99.6	200	99.6		00:00	00:00	00:44
1091	BEDROOM	100.0	100.0	94.2	100	100.0		00:00	00:00	00:00
1092	L/K/D	100.0	99.8	94.8	200	94.8		00:00	00:43	01:37
1093	BEDROOM	72.1	40.6	24.5	100	72.1		00:00	00:00	01:00
1094	BEDROOM	50.8	25.7	13.9	100	50.8		00:00	00:00	00:33

Table 55: Assessment Data

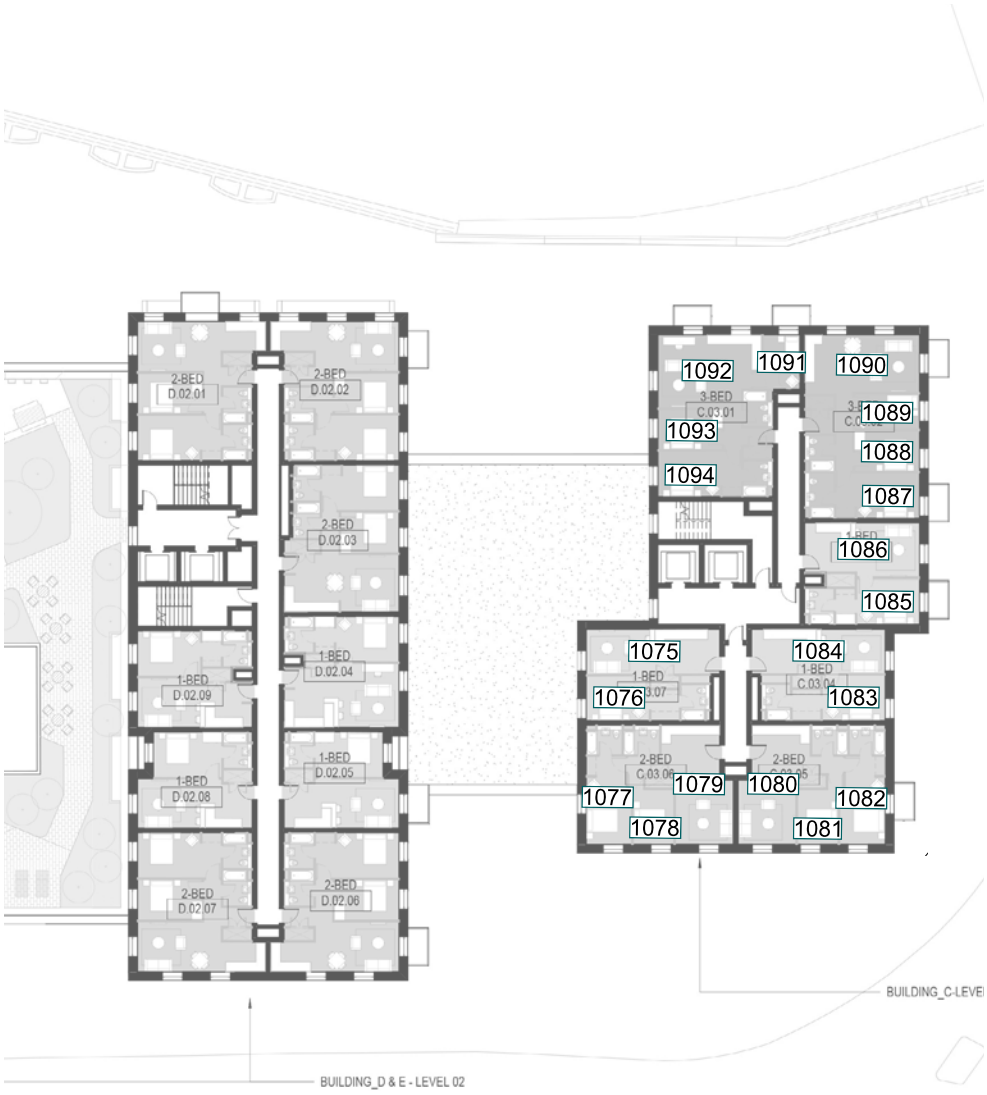


Fig. 64: Floor Plan



Block E - Level 04

ROOM REF.	ROOM USE	DAYLIGHT						SUNLIGHT		
		EN SPATIAL DAYLIGHT AUTONOMY % of room achieving target illuminance for 2190 hrs 50% of daylit hours						HOURS:MIN		
		100	150	200	TARGET	RELEVANT ENSDA		1 FEB	25 FEB	21 MAR
BLOCK E - LEVEL 04										
1095	L/K/D	14.7	6.9	3.6	200	3.6		00:00	00:00	00:00
1096	BEDROOM	41.8	19.0	11.1	100	41.8		00:00	00:00	00:00
1097	BEDROOM	100.0	100.0	100.0	100	100.0		04:58	05:42	06:28
1098	BEDROOM	100.0	100.0	100.0	100	100.0		04:52	05:39	06:28
1099	L/K/D	61.2	49.8	37.1	200	37.1		04:43	05:39	06:28
1100	L/K/D	61.6	49.7	36.9	200	36.9		04:44	05:39	06:28
1101	BEDROOM	100.0	100.0	100.0	100	100.0		04:51	05:38	06:28
1102	BEDROOM	100.0	100.0	100.0	100	100.0		05:02	05:34	06:30
1103	BEDROOM	100.0	98.4	68.3	100	100.0		00:00	00:00	00:49
1104	L/K/D	50.1	36.1	25.2	200	25.2		00:00	00:00	00:49
1105	BEDROOM	100.0	100.0	79.7	100	100.0		00:00	00:00	00:49
1106	L/K/D	62.7	43.5	30.4	200	30.4		00:00	00:00	00:49
1107	BEDROOM	100.0	93.4	62.2	100	100.0		00:00	00:00	00:49
1108	BEDROOM	100.0	100.0	84.8	100	100.0		00:00	00:00	00:49
1109	BEDROOM	100.0	100.0	93.4	100	100.0		00:00	00:00	00:49
1110	L/K/D	100.0	100.0	100.0	200	100.0		00:00	00:00	00:49
1111	BEDROOM	100.0	100.0	99.2	100	100.0		00:00	00:00	00:00
1112	L/K/D	100.0	100.0	97.2	200	97.2		00:00	00:49	01:37
1113	BEDROOM	90.3	47.3	29.7	100	90.3		00:00	00:01	01:00
1114	BEDROOM	59.9	31.0	17.6	100	59.9		00:00	00:00	00:37

Table 56: Assessment Data

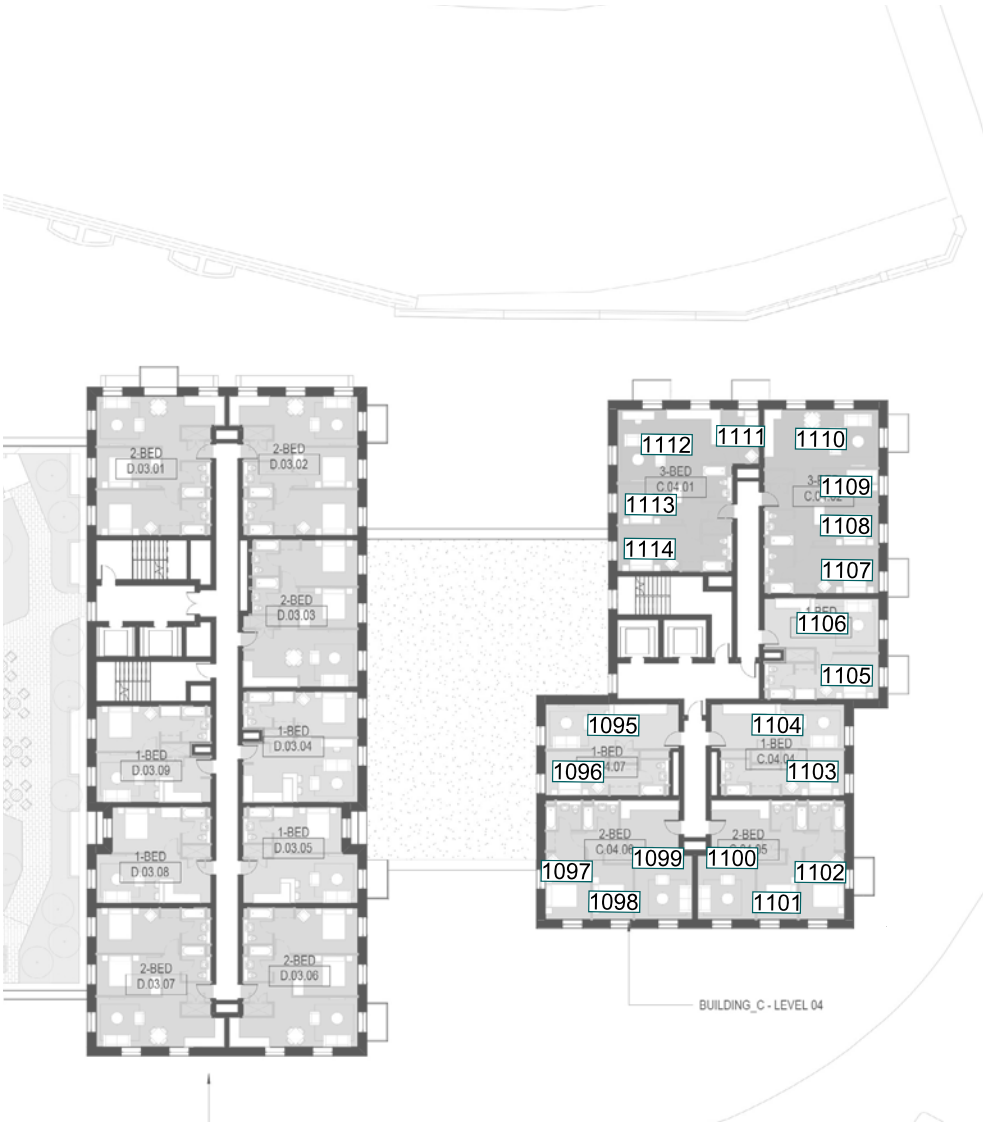


Fig. 65: Floor Plan



9 OVERSHADOWING ASSESSMENTS

BRE TEST

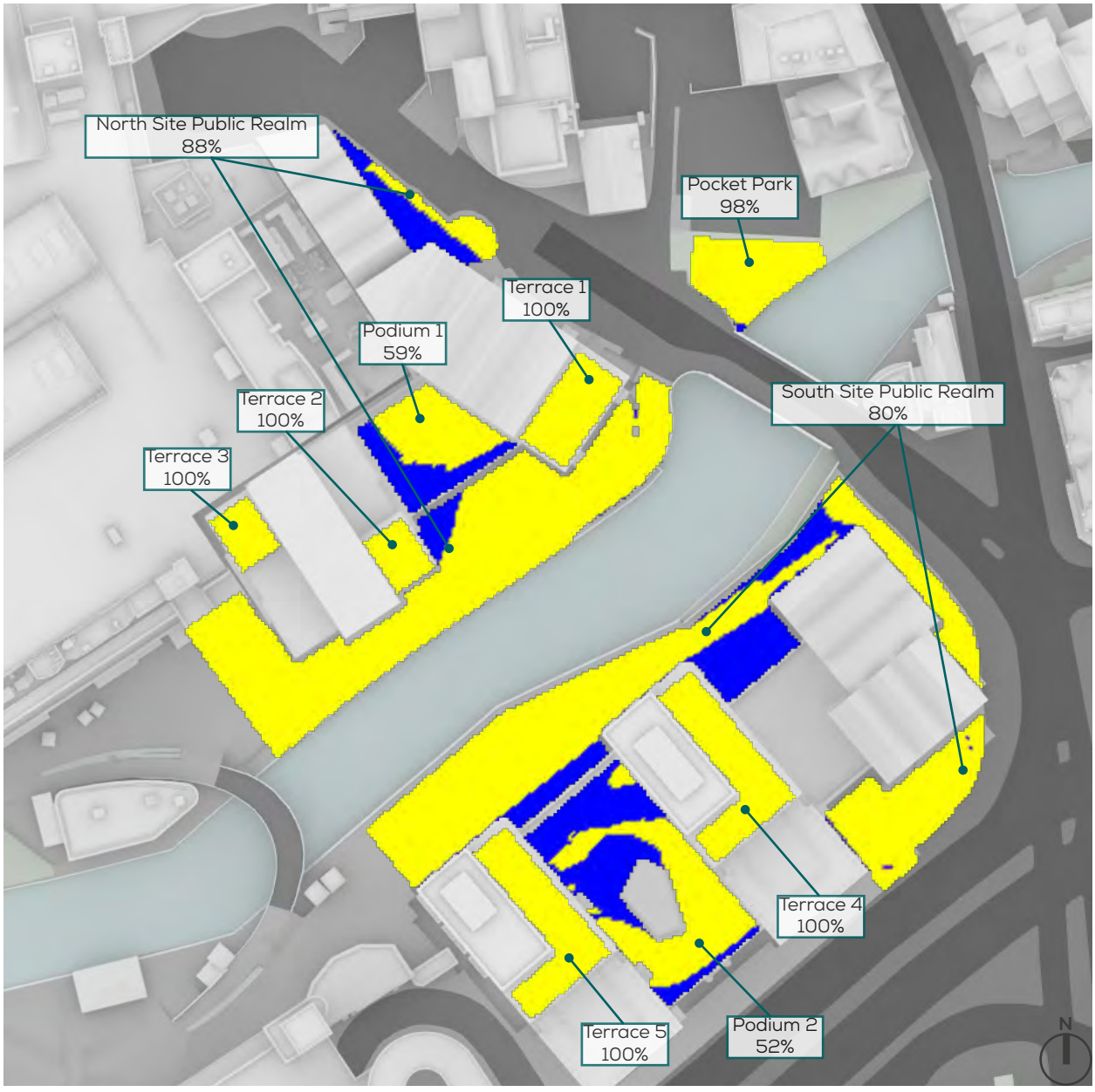


Fig. 66: BRE Test - Proposed Scenario

(BRE RECOMMENDS 2+ HOURS OF SUNLIGHT ON 21ST MARCH FOR AT LEAST 50% OF THE OPEN SPACE)

SUN HOURS ON GROUND
BRE TEST - 21ST MARCH

<2 | 2+

INTENTIONALLY BLANK PAGE

SUN EXPOSURE - 21ST MARCH

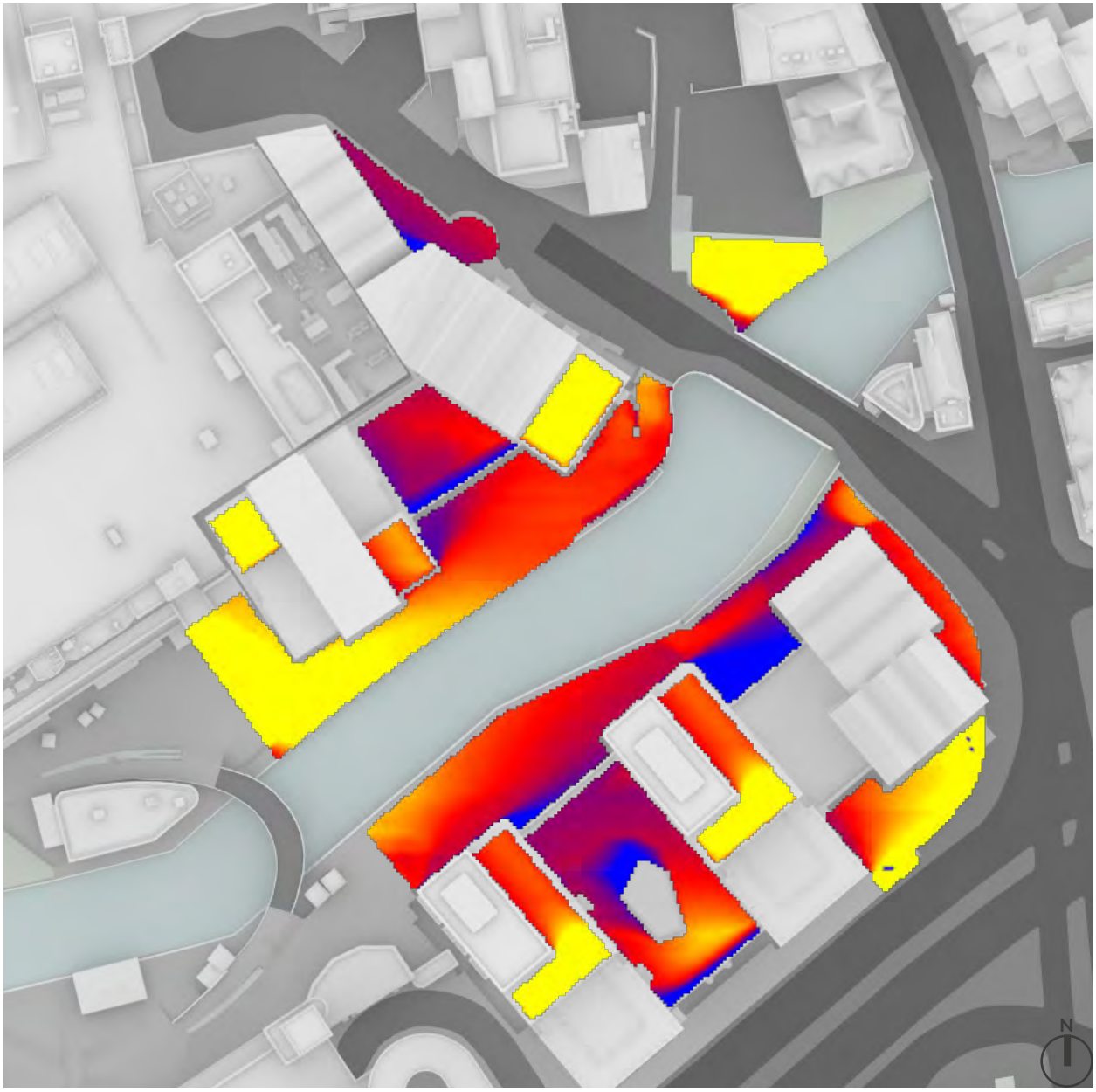


Fig. 67: Sun Exposure - Proposed Scenario

SUN EXPOSURE
TOTAL HOURS



21st MARCH (SPRING EQUINOX)

READING

Latitude:	51.5
Longitude:	0.0
Sunrise:	06:05 GMT
Sunset:	18:18 GMT

Total Available Sunlight:
12hrs 13mins

SUN EXPOSURE - 21ST JUNE



Fig. 68: Sun Exposure - Proposed Scenario

SUN EXPOSURE
TOTAL HOURS



21st JUNE (SUMMER SOLSTICE)

READING

Latitude:	51.5
Longitude:	0.0
Sunrise:	04:46 BST
Sunset:	21:24 BST

Total Available Sunlight:
16hrs 38mins

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