

OCSC

O'CONNOR · SUTTON · CRONIN

MULTIDISCIPLINARY CONSULTING ENGINEERS

L395: ROYAL LIVER PHASE 2

DAYLIGHT, SUNLIGHT & OVERSHADOWING ASSESSMENT

For

Land Development Agency

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TABLE OF CONTENTS

1 EXECUTIVE SUMMARY 1
2 PROPOSED DEVELOPMENT 3
3 PROPOSED BUILDING DESIGN 5
BUILDING MATERIAL SELECTION 5
GLAZING TO WALL RATIO 6
4 GUIDELINES FOR DAYLIGHT AND SUNLIGHT 7
5 DAYLIGHT LEVELS WITHIN THE PROPOSED DEVELOPMENT 8
ASSESSMENT CRITERIA – INTERAL DAYLIGHT (2022 METHODOLOGY) 8
DAYLIGHT PARAMETERS 9
DAYLIGHT RESULTS – INTERNAL DAYLIGHT IN PROPOSED DWELLINGS 10
6 SUNLIGHT & OVERSHADOWING ASSESSMENT TO AMENITY SPACES WITHIN THE DEVELOPMENT 98
SUNLIGHT COMMUNAL AMENITY SPACES 98
7 SUNLIGHT ASSESSMENT WITHIN THE PROPOSED DEVELOPMENT (APSH) 100
SUNLIGHT ASSESSMENT 101
8 ASSESSING THE IMPACT ON SURROUNDING PROPERTIES 109
DAYLIGHT & SUNLIGHT IMPACT METHODOLOGY 109
IDENTIFYING SENSITIVE RECEPTORS 111
DAYLIGHT IMPACT ON SURROUNDING PROPERTIES 113
9 OVERSHADOWING IMPACT TO PROPERTIES 121
10 CONCLUSION 124
11 VERIFICATION 126

LIST OF FIGURES

Figure 1: Proposed Development Site Plan – Amended Development 4
Figure 2: Façade South View of Proposed Development (Block B1 & B2) 5
Figure 3: North Elevation Glazing to Wall Ratio (Block B1 & B2) 6
Figure 4: BRE Guide 3rd Edition – Daylight Analysis Methodology – Table A.1 8
Figure 5: Block B1 First Floor Legend 11
Figure 6: Block B1 2nd Floor Legend 13
Figure 7: Block B1 3rd Floor Legend 15
Figure 8: Block B1 4th Floor Legend 17
Figure 9: Block B1 5th Floor Legend 19
Figure 10: Block B1 6th Floor Legend 21
Figure 11: Block B1 7th Floor Legend 23
Figure 12: Block B1 8th Floor Legend 25
Figure 13: Block B1 9th Floor Legend 27
Figure 14: Block B2 1st Floor Legend 29
Figure 15: Block B2 2nd Floor Legend 31
Figure 16: Block B2 3rd Floor Legend 33
Figure 17: Block B2 4th Floor Legend 35
Figure 18: Block B2 5th Floor Legend 37
Figure 19: Block B2 6th Floor Legend 39
Figure 20: Block B2 7th Floor Legend 41
Figure 21: Block B2 8th Floor Legend 43
Figure 22: Block B2 9th Floor Legend 45
Figure 23: Block B2 First Floor Legend 47
Figure 24: Block C1 2ndFloor Legend 49
Figure 25: Block C1 3rdFloor Legend 51
Figure 26: Block C1 4th Floor Legend 53
Figure 27: Block C1 5th Floor Legend 55
Figure 28: Block C1 6th Floor Legend 57
Figure 29: Block C1 7th Floor Legend 59
Figure 30: Block C1 8th Floor Legend 61
Figure 31: Block C1 9th Floor Legend 63
Figure 32: Block C2 1st Floor Legend 65
Figure 33: Block C2 2nd Floor Legend 66
Figure 34: Block C2 3rd Floor Legend 67
Figure 35: Block C2 4th Floor Legend 68
Figure 36: Block C2 5th Floor Legend 69
Figure 37: Block C2 6th Floor Legend 70
Figure 38: Block C2 7th Floor Legend 71
Figure 39: Block C2 8th Floor Legend 72
Figure 40: Block C2 9th Floor Legend 73
Figure 41: Block D1 Ground Floor Legend 74
Figure 42: Block D1 First Floor Legend 75

Figure 43: Block D1 Second Floor Legend 77
Figure 44: Block D1 Third Floor Legend 79
Figure 45: Block D1 Fourth Floor Legend 81
Figure 46: Block D1 Fifth Floor Legend 83
Figure 47: Block D1 Sixth Floor Legend 85
Figure 48: Block D1 Seventh Floor Legend 87
Figure 49: Block D1 Eighth Floor Legend 89
Figure 50: Block D2 Ground Floor Legend 90
Figure 51: Block D2 First Floor Legend 91
Figure 52: Block D2 Second Floor Legend 92
Figure 53: Block D2 Third Floor Legend 93
Figure 54: Block D2 Fourth Floor Legend 94
Figure 55: Block D2 Fifth Floor Legend 95
Figure 56: Block D2 Sixth Floor Legend 96
Figure 57: Block D2 Seventh Floor Legend 97
Figure 58 Amenity Spaces - Hours of Sunlight on March 21st 98
Figure 59: Sunlight Exposure March 21st (2022 Methodology Min Level) – East Elevation 102
Figure 60: Sunlight Exposure March 21st (2022 Methodology Min Level) – South Elevation 102
Figure 61: Sunlight Exposure March 21st (2022 Methodology Min Level) – West Elevation 103
Figure 62: Sunlight Exposure March 21st (2022 Methodology Min Level) – North Elevation 103
Figure 63: Sunlight Exposure March 21st (2022 Methodology Medium Level) – East Elevation 104
Figure 64: Sunlight Exposure March 21st (2022 Methodology Medium Level) – South Elevation 104
Figure 65: Sunlight Exposure March 21st (2022 Methodology Medium Level) –West Elevation 105
Figure 66: Sunlight Exposure March 21st (2022 Methodology Medium Level) – North Elevation 105
Figure 67: Sunlight Exposure March 21st (2022 Methodology High Level) – East Elevation 106
Figure 68: Sunlight Exposure March 21st (2022 Methodology High Level) – South Elevation 106
Figure 69: Sunlight Exposure March 21st (2022 Methodology High Level) – West Elevation 107
Figure 70: Sunlight Exposure March 21st (2022 Methodology High Level) – North Elevation 107
Figure 71: Daylight Assessment Methodology for Adjacent Properties 109
Figure 72: Location of Sensitive Receptors 112
Figure 73: Location of sensitive receptors Block G – South Elevation – Ref. 1 114
Figure 74: Location of sensitive receptors Block F South Elevation– Ref. 2 115
Figure 75: Location of sensitive receptors Block E East Elevation – Ref. 3 116
Figure 76: Location of sensitive receptors adjacent residential – Ref. 4, 5, 6, & 7 118

LIST OF TABLES

Table 1: Surface Reflectance Values 9
Table 2: List of drawings referenced in the Daylight models 9
Table 3: BR209 Methodology Results (Block B1 First Floor) 12
Table 4: BR209 Methodology Results (Block B1 Second Floor) 14
Table 5: BR209 Methodology Results (Block B1 Third Floor) 16
Table 6: BR209 Methodology Results (Block B1 Fourth Floor) 18
Table 7: BR209 Methodology Results (Block B1 Fifth Floor) 20

Table 8: BR209 Methodology Results (Block B1 Sixth Floor) 22
Table 9: BR209 Methodology Results (Block B1 Seventh Floor) 24
Table 10: BR209 Methodology Results (Block B1 Eighth Floor) 26
Table 11: BR209 Methodology Results (Block B1 Ninth Floor) 28
Table 12: BR209 Methodology Results (Block B2 First Floor) 30
Table 13: BR209 Methodology Results (Block B2 Second Floor) 32
Table 14: BR209 Methodology Results (Block B2 Third Floor) 34
Table 15: BR209 Methodology Results (Block B2 Fourth Floor) 36
Table 16: BR209 Methodology Results (Block B2 Fifth Floor) 38
Table 17: BR209 Methodology Results (Block B2 Sixth Floor) 40
Table 18: BR209 Methodology Results (Block B2 Seventh Floor) 42
Table 19: BR209 Methodology Results (Block B2 Eighth Floor) 44
Table 20: BR209 Methodology Results (Block B2 Ninth Floor) 46
Table 21: BR209 Methodology Results (Block C1 First Floor) 48
Table 22: BR209 Methodology Results (Block C1 Second Floor) 50
Table 23: BR209 Methodology Results (Block C1 Third Floor) 52
Table 24: BR209 Methodology Results (Block C1 Fourth Floor) 54
Table 25: BR209 Methodology Results (Block C1 Fifth Floor) 56
Table 26: BR209 Methodology Results (Block C1 Sixth Floor) 58
Table 27: BR209 Methodology Results (Seventh Floor) 60
Table 28: BR209 Methodology Results (Eighth Floor) 62
Table 29: BR209 Methodology Results (Ninth Floor) 64
Table 30: BR209 Methodology Results (Block C2-First Floor) 65
Table 31: BR209 Methodology Results (Block C2-Second Floor) 66
Table 32: BR209 Methodology Results (Block C2-Third Floor) 67
Table 33: BR209 Methodology Results (Block C2-Fourth Floor) 68
Table 34: BR209 Methodology Results (Block C2-Fifth Floor) 69
Table 35: BR209 Methodology Results (Block C2-Sixth Floor) 70
Table 36: BR209 Methodology Results (Block C2-Seventh Floor) 71
Table 37: BR209 Methodology Results (Block C2-Eighth Floor) 72
Table 38: BR209 Methodology Results (Block C2-Ninth Floor) 73
Table 39: BR209 Methodology Results (Block D1-Ground Floor) 74
Table 40: BR209 Methodology Results (Block D1-First Floor) 76
Table 41: BR209 Methodology Results (Block D1-Second Floor) 78
Table 42: BR209 Methodology Results (Block D1-Third Floor) 80
Table 43: BR209 Methodology Results (Block D1-Fourth Floor) 82
Table 44: BR209 Methodology Results (Block D1-Fifth Floor) 84
Table 45: BR209 Methodology Results (Block D1-Sixth Floor) 86
Table 46: BR209 Methodology Results (Block D1-Seventh Floor) 88
Table 47: BR209 Methodology Results (Block D1-Eighth Floor) 89
Table 48: BR209 Methodology Results (Block D2-Ground Floor) 90
Table 49: BR209 Methodology Results (Block D2-First Floor) 91
Table 50: BR209 Methodology Results (Block D2-Second Floor) 92
Table 51: BR209 Methodology Results (Block D2-Third Floor) 93

Table 52: BR209 Methodology Results (Block D2-Fourth Floor) 94
Table 53: BR209 Methodology Results (Block D2-Fifth Floor)..... 95
Table 54: BR209 Methodology Results (Block D2-Sixth Floor)..... 96
Table 55: BR209 Methodology Results (Block D2-Seventh Floor) 97
Table 56: Amenity Space Sunlight Results 99
Table 57: Sunlight Analysis 3rd Edition Results (Window Specific Summary) 101
Table 58: Sensitive Receptors Surrounding the Proposed Development 111
Table 59: VSC Results (Ref. 1) 114
Table 60: VSC Results (Ref. 2) 115
Table 61: VSC Results (Ref. 3) 117
Table 62: VSC Results (Ref. 4, 5, 6, & 7)..... 118

1 EXECUTIVE SUMMARY

OCSC (M&E) have been appointed to carry out a Daylight, Sunlight & Overshadowing Assessment for the Royal Liver residential development Phase 2 – New Proposed Amended Development. The new proposed amendment development comprises revisions to the originally permitted development, including changes to the number of storeys and overall building heights across all blocks the new proposed amended development results in an overall reduction in building heights compared to the originally permitted development, which is expected to improve daylight and sunlight conditions for adjacent existing and permitted properties, while also enhancing sunlight access to the proposed amenity spaces. Details of the new proposed amendments are provided in Section 2 of this report.

The aim of the study is to record and analyse the results for the following:

- The internal daylight levels within the living/dining/kitchen and bedroom spaces;
- The quality of amenity space being provided as part of the development, in relation to sunlight;
- The impact of the amended development on adjacent permitted and existing properties.

The results presented in Section 5 indicate that 99.31% for criterion 1 and 96.94% for criterion 2 of all the spaces assessed within the proposed development comply with internal daylight levels when each space was assessed under the third edition of BRE guide - Site Layout Planning for Daylight and Sunlight: A Good Practice Guide" by PJ Littlefair, 2022 (BR209).
It is important to note that the performance targets which are included should be used with a degree of flexibility as per the extract below from the BRE Guide:

"The advice given here is not mandatory and this document should not be seen as an instrument of planning policy. Its aim is to help rather than constrain the designer. Although it gives numeral guidelines these should be interpreted flexibly because natural lighting is only one of the many factors in site layout design."

Internal Daylight

The analysis confirms that the majority of spaces not only meet but greatly exceed the recommendations outlined within The BRE Guidance, 99.31% for Criterion 1 and 96.94% for Criterion 2 within the new proposed amended development has been achieved.

Throughout the development, comfortable and desirable spaces have been designed to enhance the opportunity for improved daylight levels and extensive glazing to every room enabling deep daylight penetration and providing enhanced views to landscaped open spaces.

Sunlight

In relation to amenity space sunlight, the overall amenity space provided in the development shows compliance with The BRE Guidance, with more than 50% of the total amenity space receiving more than 2 hours of sunlight on March 21st test day. Furthermore, as the heights of all blocks have been reduced in the new proposed

amended development compared to the originally permitted development, sunlight access to the amenity spaces will be improved, resulting in a positive impact.

Overshadowing

The change in the overshadowing is positive or negligible when compared to the originally permitted development, as the heights of all blocks have been reduced. Consequently, the proposed development results in a positive or negligible impact on surrounding properties and amenity spaces when assessed on the 21st March test day.

Impact to neighbouring properties

The Vertical Sky Component (VSC) at all assessed windows within the surrounding existing and permitted properties has been analysed. The results indicate that the VSC values for the new proposed amended development remain at or above 100% of the corresponding values achieved under the originally permitted development. This improvement is attributable to the reduction in overall building heights across all blocks within the new proposed amended development. Therefore, the new proposed amended development is not expected to result in any adverse impact on the daylight conditions of the surrounding existing and permitted properties when compared to the originally permitted development.

2 PROPOSED DEVELOPMENT

The development will consist of amendments to a previously permitted mixed-use development (DCC Reg. Ref.: 4238/19; ABP Ref. PL29S.307804, as amended by DCC Ref.: 4436/23 and DCC Reg. Ref.: 5050/26). The proposed amendments relate solely to the permitted Blocks B1, B2, C1, C2, D1 and D2 (identified as Phase 2). No amendments are proposed to any other permitted blocks.

1. The proposed alterations result in an overall increase of 2 no. units increasing the total overall units from 1196 to 1198. The proposed amended residential development of Block B1, B2, C1, C2, D1 and D2 will consist of a total of 635 no. residential apartments (an increase from 633 no. as permitted), which includes 38 No. Studios, 269 No. 1-Bed, 288 No. 2-Bed- 4-Person and 40 No. 3-Bed- 5-Person, units as follows:
    - Alteration of Block B1 from a permitted 11-12-storey building providing for 90 no. apartment units to a 10-storey building providing for 107 no. apartments.
    - Alteration of Block B2 from a permitted 10 storey building providing for 90 no. apartment units to a 10-storey building providing for 89 no. apartments.
    - Alteration of Block C1 from a permitted 10-storey building providing for 171 no. apartment units to a 10-storey building providing for 144 no. apartments.
    - Alteration of Block C2 from a permitted 10-storey building providing for 89 no. apartment units to a 10-storey building providing for 98 no. apartments.
    - Alteration of Block D1 from a permitted 9-storey building providing for 87 no. apartment units to a 9-storey building providing for 123 no. apartments.
    - Alteration of Block D2 from a permitted 8-storey building providing for 106 no. apartment units to an 8-storey building providing for 74 no. apartments.
2. The reconfiguration of internal layouts of each of the blocks has resulted in the minor shift in the block footprints. The permitted podium between Block B2 and Block C1 is removed with additional public realm and connection to the south proposed. The block amendments result in amendments to permitted communal amenity space with the removal of roof terraces on Blocks C1, C2 and D1 and amendment to roof terraces on Block B1 and B2.
3. Façade modifications are proposed to respond to the revised internal layouts including minor relocation of windows, balconies etc. and a revised approach to the Naas Rd frontage.
4. Alteration of the permitted uses and facade at ground floor level and removal of permitted BTR tenant amenity spaces located in Blocks B1, B2, C1 & C2 to provide for a ground floor level that includes:
    - Blocks B1-B2: 1 no. retail/café/restaurant unit, 1 no. café unit, 1 no. community unit, a creche (relocated from Block D1) and associated cycle parking, plant areas and entrances.
    - Block C1-C2-D1-D2: 1 no. retail unit, 2 no. retail/cafe/restaurant units, own door residential units, undercroft parking and associated cycle parking, plant areas and entrances.
5. Alterations to the permitted undercroft and basement parking areas under Blocks B1, B2, C1, C2, D1 & D2 to include for alterations to permitted layouts of car parking, cycle parking, plant, waste stores and substation locations.

6. Amendment of Condition 3 (a) of the parent permission (DCC Reg. Ref.: 4238/19; ABP Ref. PL29S.307804) relating to the Build to Rent (BTR) covenant, and its removal as it relates to Blocks B1, B2, C1, C2 & D1.

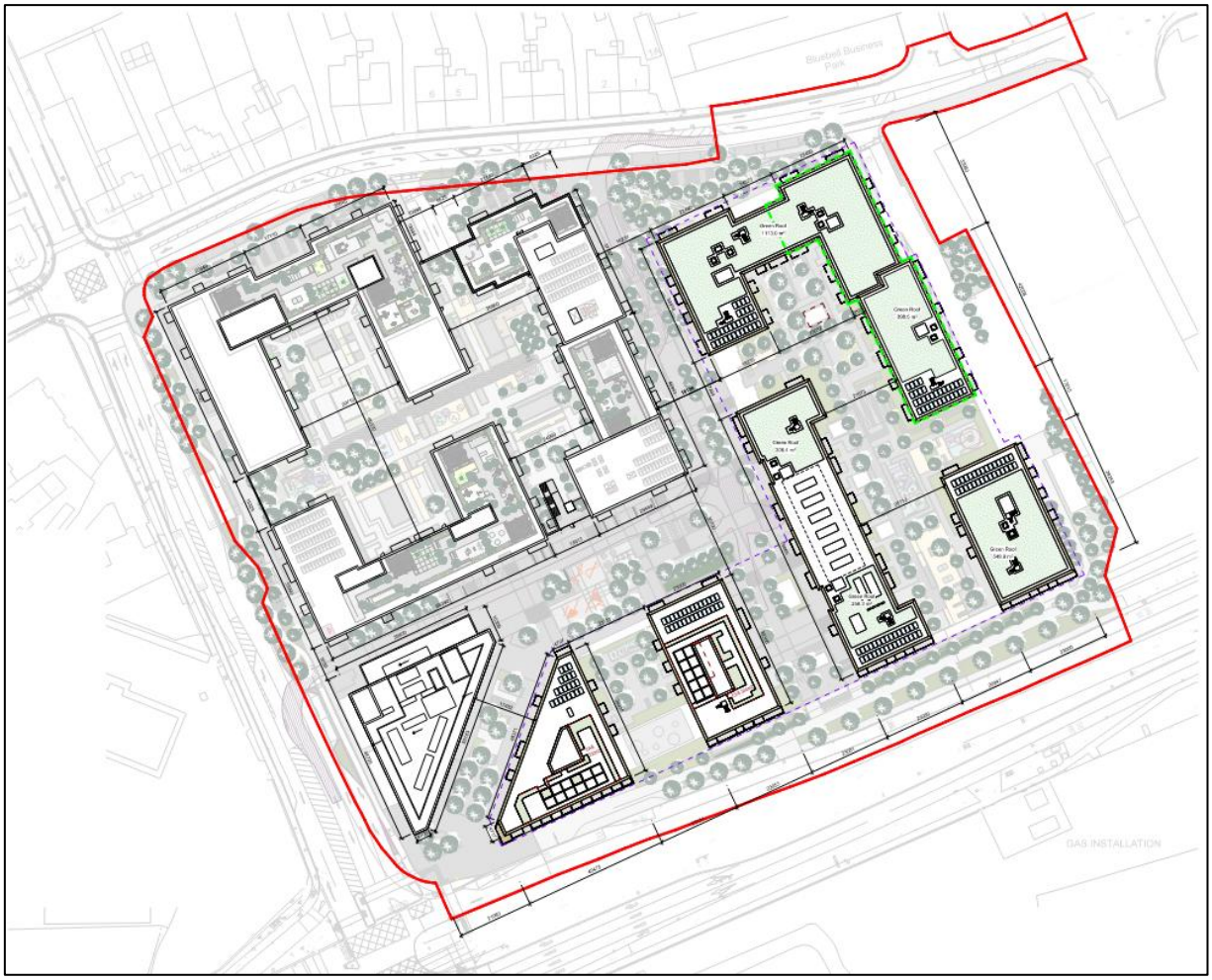


Figure 1: Proposed Development Site Plan – Amended Development

3 PROPOSED BUILDING DESIGN

To ensure that daylight levels were maximised for the development, several key design strategies were incorporated during the new proposed amended design.

BUILDING MATERIAL SELECTION

The selection of materials play an important role in ambient daylight levels. The façade of the new proposed amended development has been carefully selected to promote a sense of brightness. This will ensure light is reflected throughout the development. The inclusion of greenery to the amenity spaces will help to improve the sense of light and brightness within the dwellings.

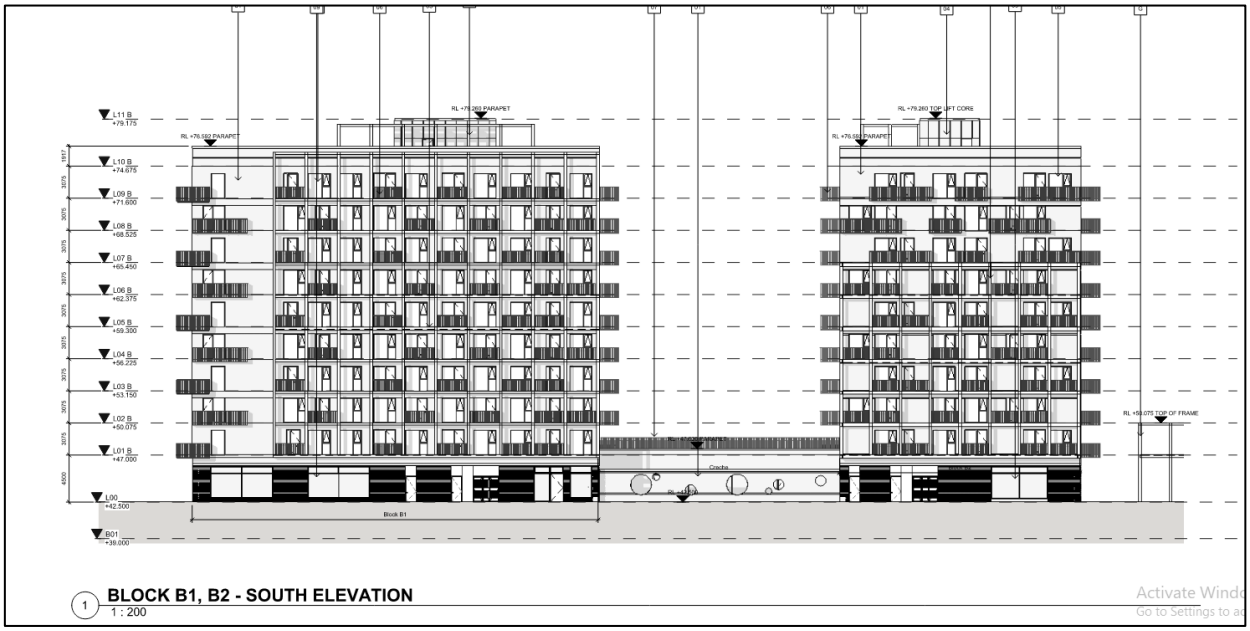


Figure 2: Façade South View of Proposed Development (Block B1 & B2)

GLAZING TO WALL RATIO

The primary function of the glazing to wall ratio is to maximise daylight within the space while reducing excessive solar gains within a given development. The other advantage, in conjunction with appropriate materials, is that the lighter coloured, reflective materials used externally, the more ambient daylight will be reflected to the surrounding areas. Extensive analysis was undertaken on all building façades to ensure glazing widths were maximised to promote access to daylight. The image below illustrates the glazing to wall ratio of the proposed development.

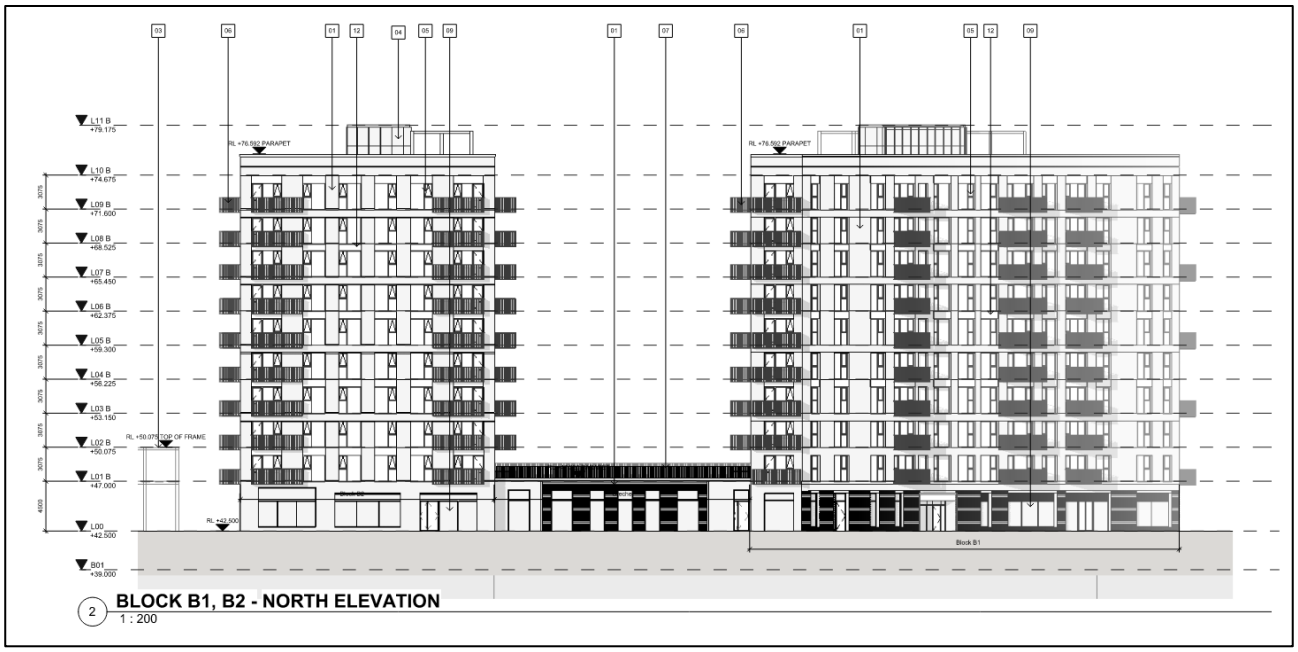


Figure 3: North Elevation Glazing to Wall Ratio (Block B1 & B2)

4 GUIDELINES FOR DAYLIGHT AND SUNLIGHT

The analysis of the development's daylight potential and the quality of amenity spaces have been based on the Building Research Establishment (BRE) guidelines on "Site Layout Planning for Daylight and Sunlight: A Good Practice Guide" by PJ Littlefair, 2022 (BR209).

The guidelines provide the criteria and methodology for calculations pertaining to daylight and sunlight and is the primary reference for this matter. The guide gives simple rules for analysing sites where the geometry of the surroundings is straightforward, supplementing them with graphical methods for complex sites.

However, it is important to note that the performance targets which are included should be used with a degree of flexibility as per the extract below from the BRE guidance:

"The advice given here is not mandatory and this document should not be seen as an instrument of planning policy. Its aim is to help rather than constrain the designer. Although it gives numeral guidelines these should be interpreted flexibly because natural lighting is only one of the many factors in site layout design."

5 DAYLIGHT LEVELS WITHIN THE PROPOSED DEVELOPMENT

ASSESSMENT CRITERIA – INTERAL DAYLIGHT (2022 METHODOLOGY)

The originally permitted development was assessed and granted planning permission under the previous edition of the BRE guidelines, which primarily evaluated internal daylight provision using the Average Daylight Factor (ADF) methodology.

The new proposed amended development's daylight levels have been tested to the more recently published the BRE guidance. The Methodology standard goes beyond the average daylight levels within a space, and accounts for the distribution of light within a space. As BRE 206 has been superseded by the Third Edition of the BRE Guide (BR 209), the proposed amendments to Blocks B1, B2, C1, C2, D1 and D2 have been assessed using the current methodology. It should be noted that the difference between the assessment of the originally permitted development and the new proposed amended development relates to the methodology used to assess daylight provision, rather than indicating a difference in the actual level of daylight available to the apartments.

Level of recommendation for vertical and inclined daylight opening	Target illuminance E_T lx	Fraction of space for target level $F_{plane,\%}$	Minimum target illuminance E_{TM} lx	Fraction of space for minimum target level $F_{plane,\%}$	Fraction of daylight hours $F_{time,\%}$
Minimum	300	50 %	100	95 %	50 %
Medium	500	50 %	300	95 %	50 %
High	750	50 %	500	95 %	50 %
NOTE Table A.3 gives target daylight factor (D_T) and minimum target daylight factor (D_{TM}) corresponding to target illuminance level and minimum target illuminance, respectively, for the CEN capital cities.					

Figure 4: BRE Guide 3rd Edition – Daylight Analysis Methodology – Table A.1

The BRE Guidance calculation method using illuminance level features two daylight criteria for compliance:

- Criterion I recommends that in the analysed space an illuminance of ≥ 100 lux must be achieved for half of the daylight time in a year (2,190 hours), across ≥ 95% of the floor area of the given space;
- Criterion II recommends that in the analysed space an illuminance of ≥ 300 lux must be achieved for half of the daylight time in a year (2,190 hours), across ≥ 50% of the floor area of the given space.

In order to analyse the daylight performance for the new proposed amended development in this regard, detailed 3D model was generated of the entire development and adjacent properties. A number of computer simulations were then undertaken in IES VE to ascertain the lux levels achieved within all units of the new proposed amended development.

DAYLIGHT PARAMETERS

The surface reflectance values outlined in Table 1 have been used in the analysis, as per the BR209 document (Third edition).

Surface Type	Reflectance (%)
External Wall	20
Internal Partitions	50
Ceiling	70
Floor	20
Adjacent Buildings	20
Glazing Transmittance	70

Table 1: Surface Reflectance Values

The lux calculations are carried out in a working plane that lies 850mm above the floor and it is offset 500mm from the perimeter of the room. A grid of 250mm is used to calculate all different points within the room and the average of these points determines Lux levels achieved.

Unit assessed are based on the following drawings provided by Henry J Lyons Architect:

Job No.	Drawing No.	Drawing Type
L395	PRL-HJL-02-ZZ-DR-A-1050A	Floor Plans
L395	PRL-HJL-02-ZZ-DR-A-1051A	Floor Plans
L395	PRL-HJL-02-ZZ-DR-A-1052A	Typical Floor Plans
L395	PRL-HJL-03-00-DR-A-1061A	Floor Plans
L395	PRL-HJL-03-01-DR-A-1062A	Floor Plans
L395	PRL-HJL-03-02-DR-A-1063A	Typical Floor Plans
L395	PRL-HJL-03-03-DR-A-1064A	Typical Floor Plans
L395	PRL-HJL-03-08-DR-A-1069A	Floor Plans
L395	PRL-HJL-P2-ZZ-DR-A-2110-BLOCKS B ELEVATIONS	Elevations
L395	PRL-HJL-P2-ZZ-DR-A-2111-BLOCKS B ELEVATIONS	Elevations
L395	PRL-HJL-P2-ZZ-DR-A-2120-BLOCKS C ELEVATIONS	Elevations
L395	PRL-HJL-P2-ZZ-DR-A-2121-BLOCKS C ELEVATIONS	Elevations
L395	PRL-HJL-P2-ZZ-DR-A-2130-BLOCKS D ELEVATIONS	Elevations

Table 2: List of drawings referenced in the Daylight models

DAYLIGHT RESULTS – INTERNAL DAYLIGHT IN PROPOSED DWELLINGS

This section outlines the assessment of internal daylight levels in the Royal Liver Phase 2 residential development.

In summary, 99.31% for criterion 1 and 96.94% for criterion 2 of proposed development achieve the recommended Lux levels outlined under the BRE Guidance.

In all cases, generous floor to ceiling heights have been designed into the project with glazing areas being increased to amplify the quality of daylight received. Careful consideration has been given to room layout design, generally aiming to allocate storage and circulation areas to the back of rooms, and living spaces to the front - where the highest level of daylight is expected. The results of the analysis are outlined in the accompanying tables.

This review will seek to improve daylight performance through design refinements where feasible and/or identify appropriate compensatory measures to mitigate any shortfalls.

Legends

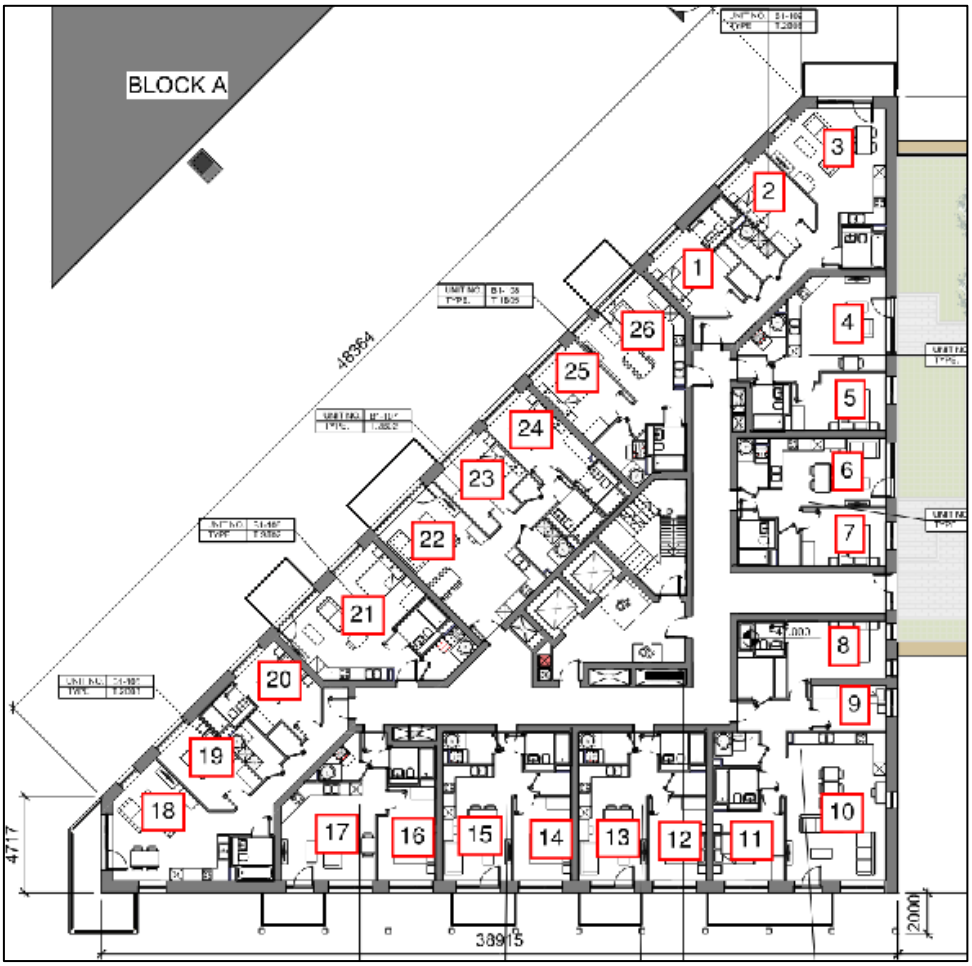


Figure 5: Block B1 First Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom	100%	Y	56%	Y
2	Bedroom	100%	Y	55%	Y
3	Living/Kitchen	100%	Y	65%	Y
4	Living/Kitchen	100%	Y	81%	Y
5	Bedroom	100%	Y	48%	N
6	Living/Kitchen	100%	Y	59%	Y
7	Bedroom	100%	Y	66%	Y
8	Bedroom	100%	Y	86%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
9	Bedroom	100%	Y	95%	Y
10	Living/Kitchen	100%	Y	100%	Y
11	Bedroom	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y
13	Living/Kitchen	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y
15	Living/Kitchen	100%	Y	100%	Y
16	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
17	Living/Kitchen	100%	Y	100%	Y
18	Living/Kitchen	100%	Y	100%	Y
19	Bedroom	99%	Y	79%	Y
20	Bedroom	100%	Y	54%	Y
21	Studio	100%	Y	66%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
22	Living/Kitchen	99%	Y	41%	N
23	Bedroom	100%	Y	57%	Y
24	Bedroom	100%	Y	60%	Y
25	Bedroom	100%	Y	62%	Y
26	Living/Kitchen	100%	Y	40%	N

Table 3: BR209 Methodology Results (Block B1 First Floor)

Legends

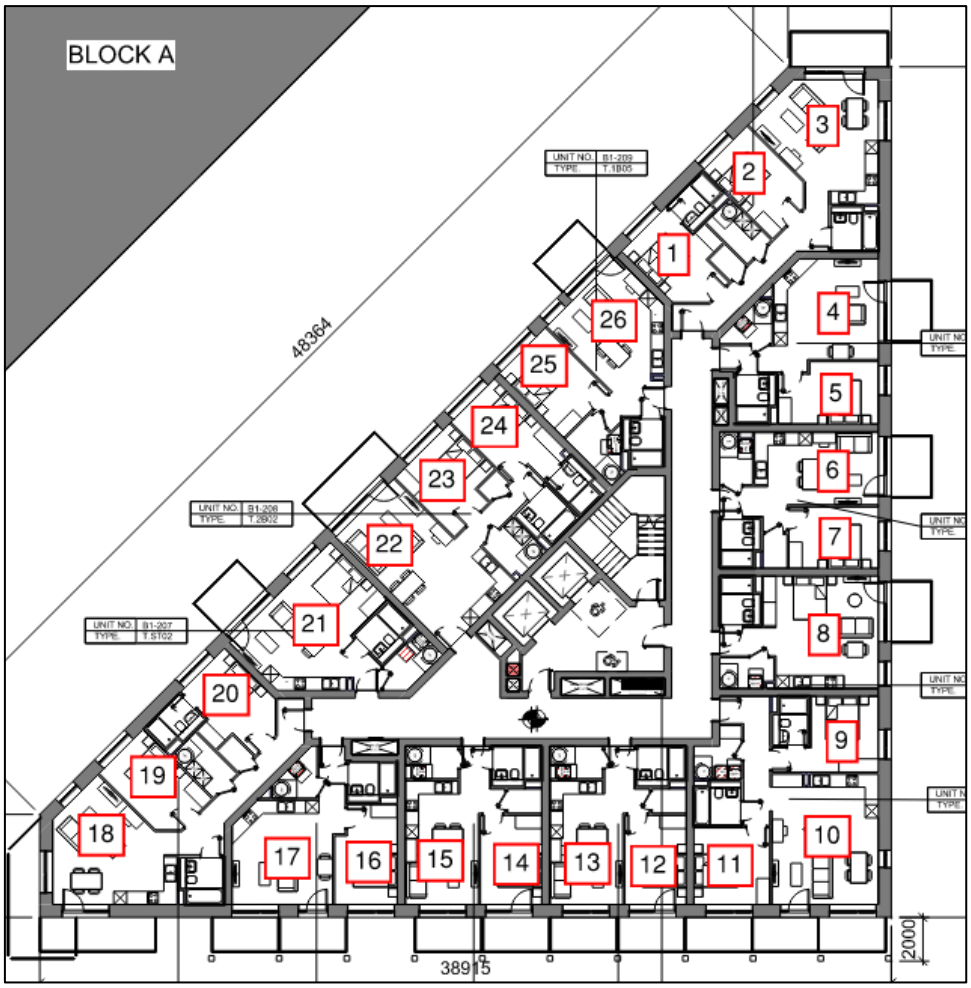


Figure 6: Block B1 2nd Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom	100%	Y	52%	Y
2	Bedroom	100%	Y	54%	Y
3	Living/Kitchen	100%	Y	100%	Y
4	Living/Kitchen	100%	Y	91%	Y
5	Bedroom	100%	Y	65%	Y
6	Living/Kitchen	100%	Y	67%	Y
7	Bedroom	100%	Y	80%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
8	Studio	100%	Y	97%	Y
9	Bedroom	100%	Y	75%	Y
10	Living/Kitchen	100%	Y	100%	Y
11	Bedroom	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y
13	Living/Kitchen	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
15	Living/Kitchen	100%	Y	100%	Y
16	Bedroom	100%	Y	100%	Y
17	Living/Kitchen	100%	Y	100%	Y
18	Living/Kitchen	100%	Y	100%	Y
19	Bedroom	99%	Y	78%	Y
20	Bedroom	100%	Y	56%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
21	Studio	100%	Y	58%	Y
22	Living/Kitchen	97%	Y	42%	N
23	Bedroom	100%	Y	53%	Y
24	Bedroom	100%	Y	57%	Y
25	Bedroom	100%	Y	56%	Y
26	Living/Kitchen	100%	Y	41%	N

Table 4: BR209 Methodology Results (Block B1 Second Floor)

Legends

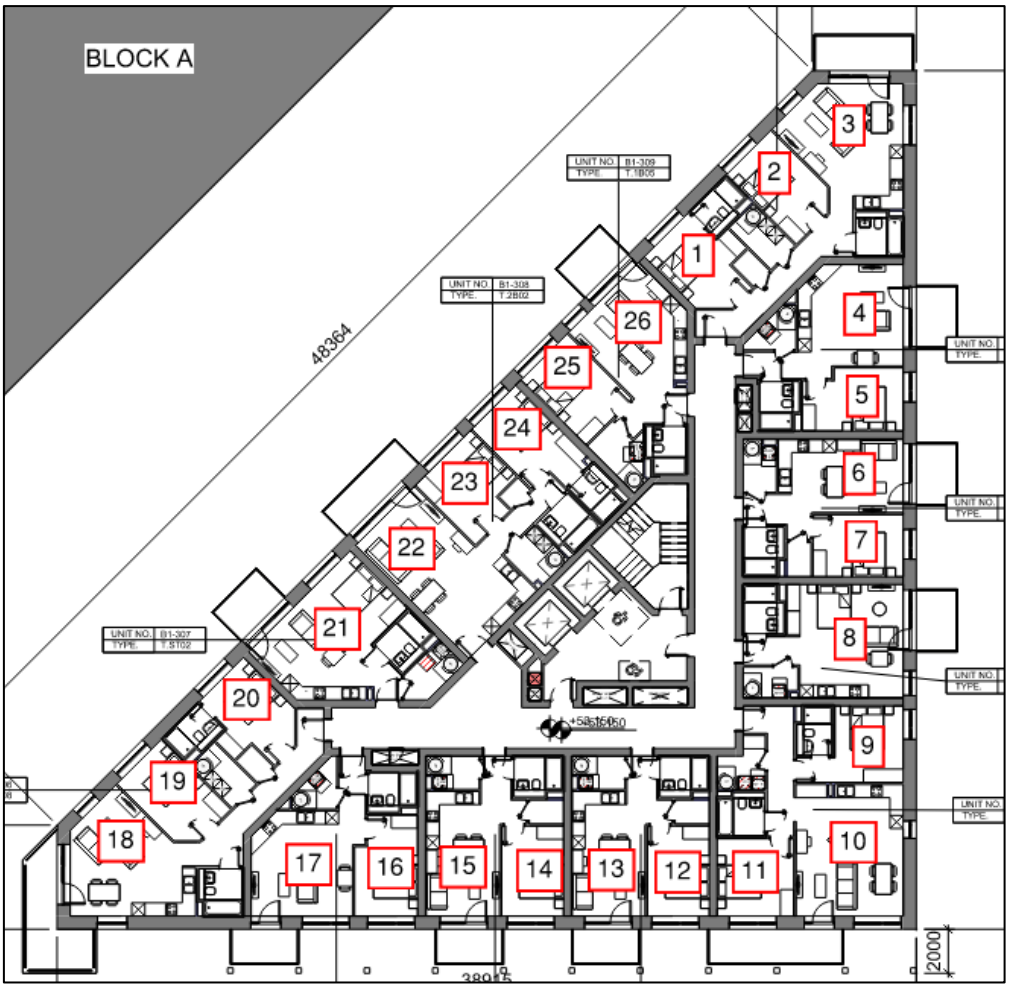


Figure 7: Block B1 3rd Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom	100%	Y	59%	Y
2	Bedroom	100%	Y	59%	Y
3	Living/Kitchen	100%	Y	100%	Y
4	Living/Kitchen	100%	Y	66%	Y
5	Bedroom	100%	Y	63%	Y
6	Living/Kitchen	100%	Y	59%	Y
7	Bedroom	100%	Y	84%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
8	Studio	100%	Y	83%	Y
9	Bedroom	100%	Y	60%	Y
10	Living/Kitchen	100%	Y	100%	Y
11	Bedroom	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y
13	Living/Kitchen	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
15	Living/Kitchen	100%	Y	100%	Y
16	Bedroom	100%	Y	100%	Y
17	Living/Kitchen	100%	Y	100%	Y
18	Living/Kitchen	100%	Y	100%	Y
19	Bedroom	99%	Y	71%	Y
20	Bedroom	100%	Y	53%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
21	Studio	100%	Y	60%	Y
22	Living/Kitchen	98%	Y	43%	N
23	Bedroom	100%	Y	53%	Y
24	Bedroom	100%	Y	63%	Y
25	Bedroom	100%	Y	62%	Y
26	Living/Kitchen	100%	Y	41%	N

Table 5: BR209 Methodology Results (Block B1 Third Floor)

Legends

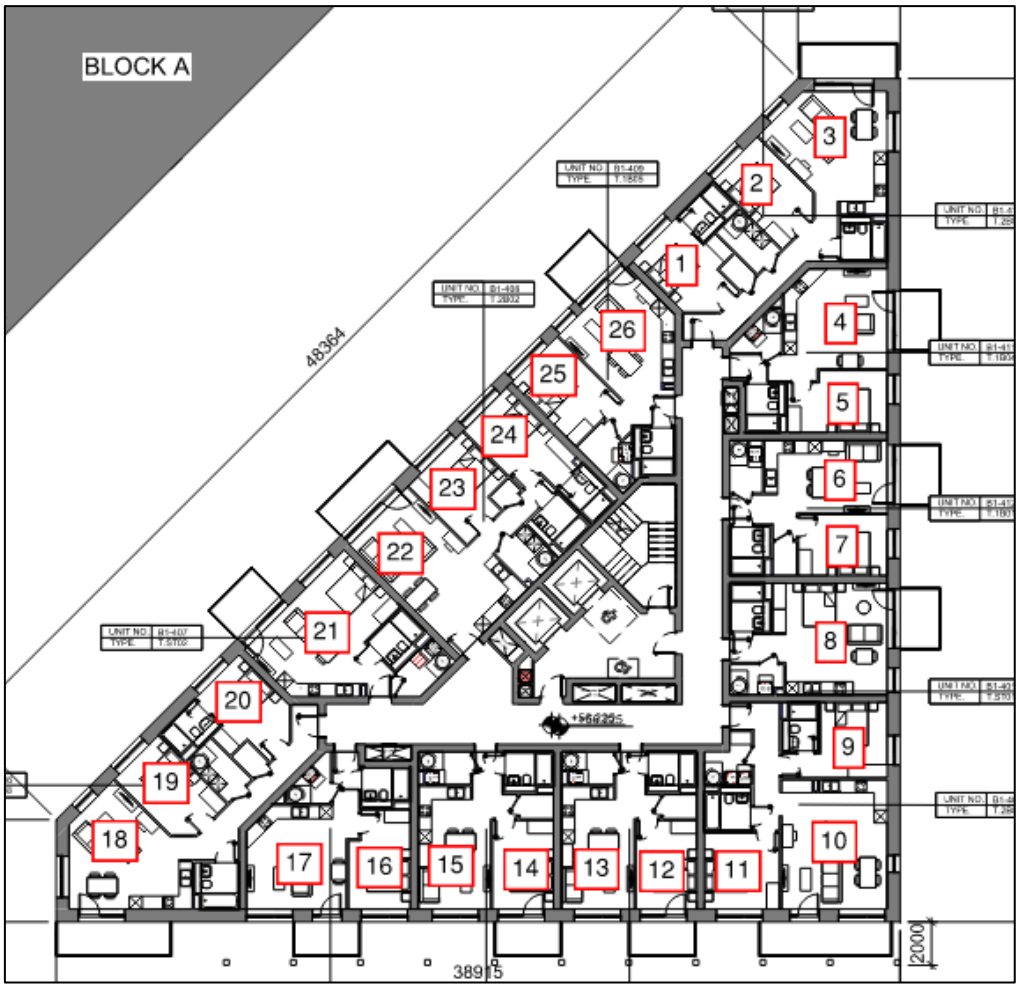


Figure 8: Block B1 4th Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom	100%	Y	60%	Y
2	Bedroom	100%	Y	64%	Y
3	Living/Kitchen	100%	Y	87%	Y
4	Living/Kitchen	100%	Y	71%	Y
5	Bedroom	100%	Y	70%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
6	Living/Kitchen	100%	Y	61%	Y
7	Bedroom	100%	Y	75%	Y
8	Studio	100%	Y	87%	Y
9	Bedroom	100%	Y	74%	Y
10	Living/Kitchen	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
11	Bedroom	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y
13	Living/Kitchen	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y
15	Living/Kitchen	100%	Y	100%	Y
16	Bedroom	100%	Y	100%	Y
17	Living/Kitchen	100%	Y	100%	Y
18	Living/Kitchen	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
19	Bedroom	99%	Y	77%	Y
20	Bedroom	100%	Y	52%	Y
21	Studio	100%	Y	65%	Y
22	Living/Kitchen	98%	Y	44%	N
23	Bedroom	100%	Y	54%	Y
24	Bedroom	100%	Y	61%	Y
25	Bedroom	100%	Y	57%	Y
26	Living/Kitchen	100%	Y	42%	N

Table 6: BR209 Methodology Results (Block B1 Fourth Floor)

Legends

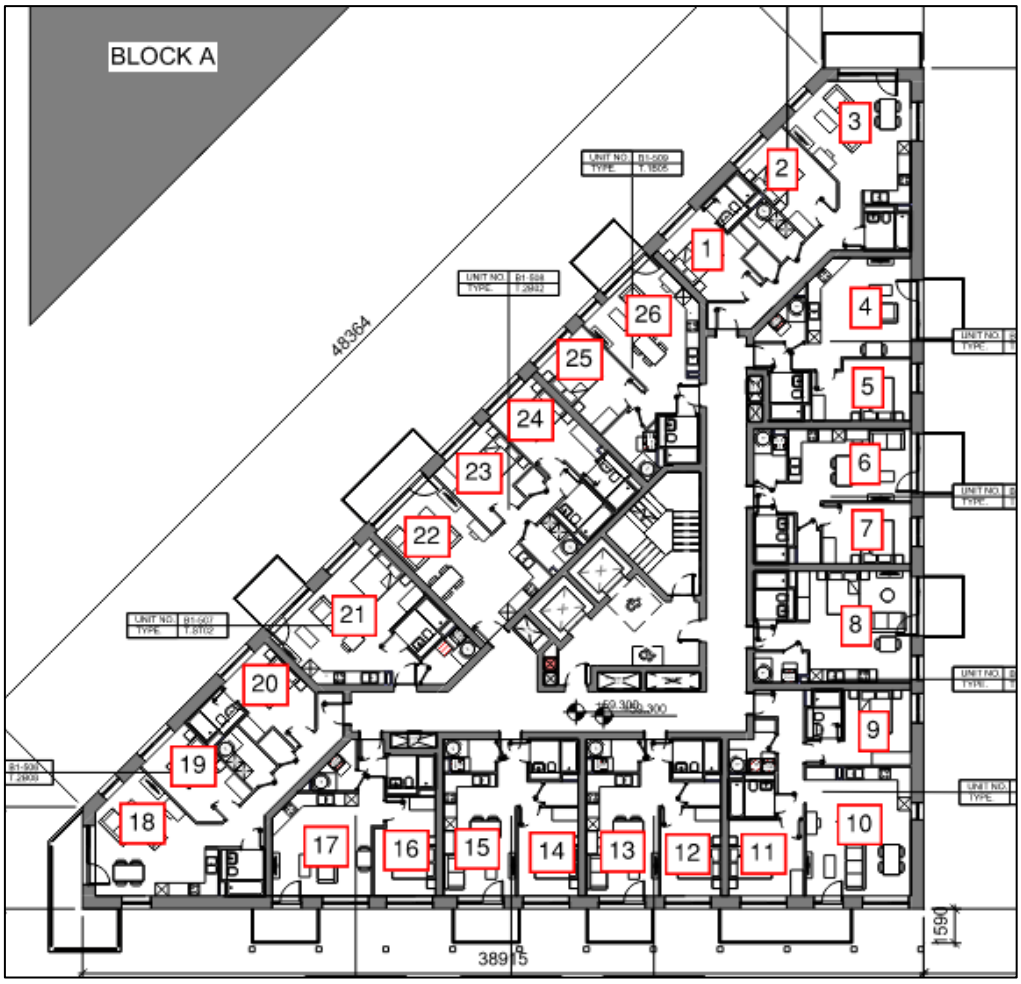


Figure 9: Block B1 5th Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom	100%	Y	64%	Y
2	Bedroom	100%	Y	64%	Y
3	Living/Kitchen	100%	Y	87%	Y
4	Living/Kitchen	100%	Y	77%	Y
5	Bedroom	100%	Y	76%	Y
6	Living/Kitchen	100%	Y	63%	Y
7	Bedroom	100%	Y	86%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
8	Studio	100%	Y	91%	Y
9	Bedroom	100%	Y	63%	Y
10	Living/Kitchen	100%	Y	100%	Y
11	Bedroom	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y
13	Living/Kitchen	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
15	Living/Kitchen	100%	Y	100%	Y
16	Bedroom	100%	Y	100%	Y
17	Living/Kitchen	100%	Y	100%	Y
18	Living/Kitchen	100%	Y	100%	Y
19	Bedroom	99%	Y	78%	Y
20	Bedroom	100%	Y	56%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
21	Studio	100%	Y	61%	Y
22	Living/Kitchen	98%	Y	46%	N
23	Bedroom	100%	Y	52%	Y
24	Bedroom	100%	Y	60%	Y
25	Bedroom	100%	Y	57%	Y
26	Living/Kitchen	100%	Y	45%	N

Table 7: BR209 Methodology Results (Block B1 Fifth Floor)

Legends

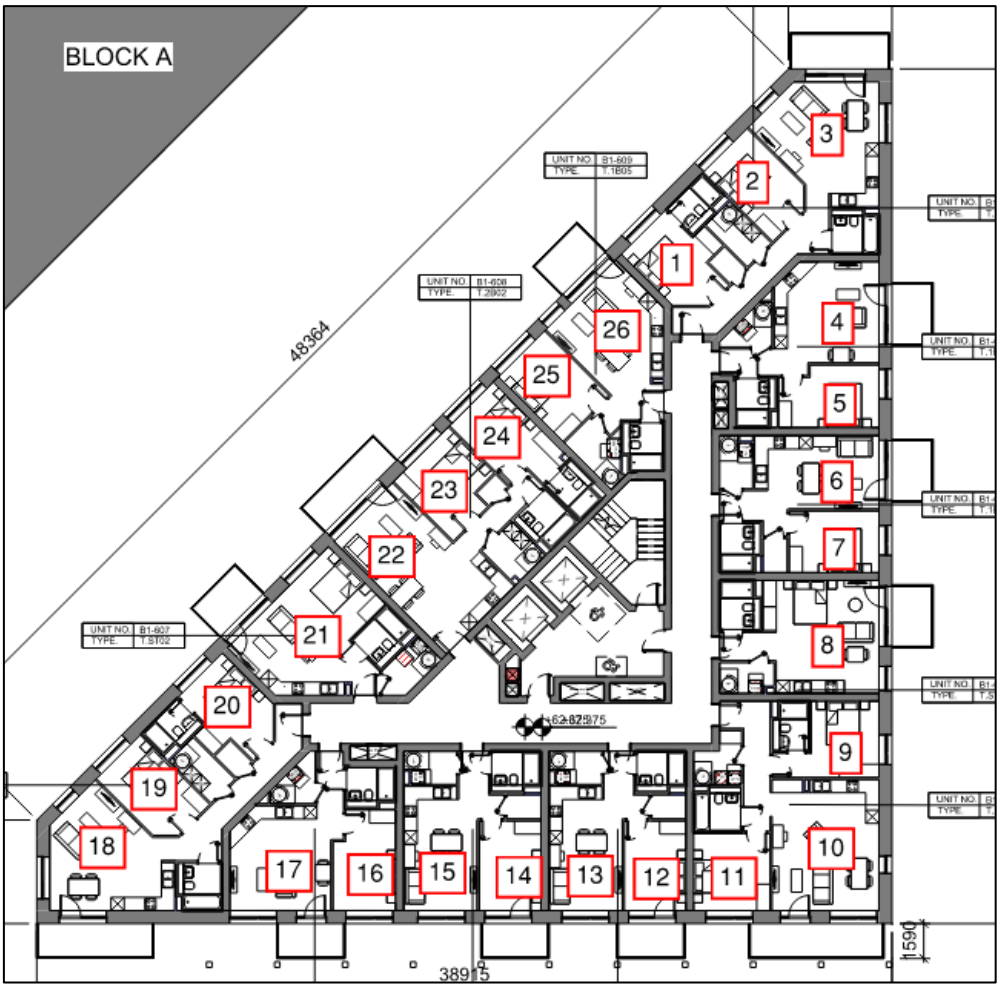


Figure 10: Block B1 6th Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom	100%	Y	60%	Y
2	Bedroom	100%	Y	54%	Y
3	Living/Kitchen	100%	Y	91%	Y
4	Living/Kitchen	100%	Y	85%	Y
5	Bedroom	100%	Y	90%	Y
6	Living/Kitchen	100%	Y	68%	Y
7	Bedroom	100%	Y	98%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
8	Studio	100%	Y	94%	Y
9	Bedroom	100%	Y	81%	Y
10	Living/Kitchen	100%	Y	100%	Y
11	Bedroom	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y
13	Living/Kitchen	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
15	Living/Kitchen	100%	Y	100%	Y
16	Bedroom	100%	Y	100%	Y
17	Living/Kitchen	100%	Y	100%	Y
18	Living/Kitchen	100%	Y	100%	Y
19	Bedroom	99%	Y	82%	Y
20	Bedroom	100%	Y	60%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
21	Studio	100%	Y	64%	Y
22	Living/Kitchen	98%	Y	46%	N
23	Bedroom	100%	Y	58%	Y
24	Bedroom	100%	Y	64%	Y
25	Bedroom	100%	Y	59%	Y
26	Living/Kitchen	100%	Y	46%	N

Table 8: BR209 Methodology Results (Block B1 Sixth Floor)

Legends

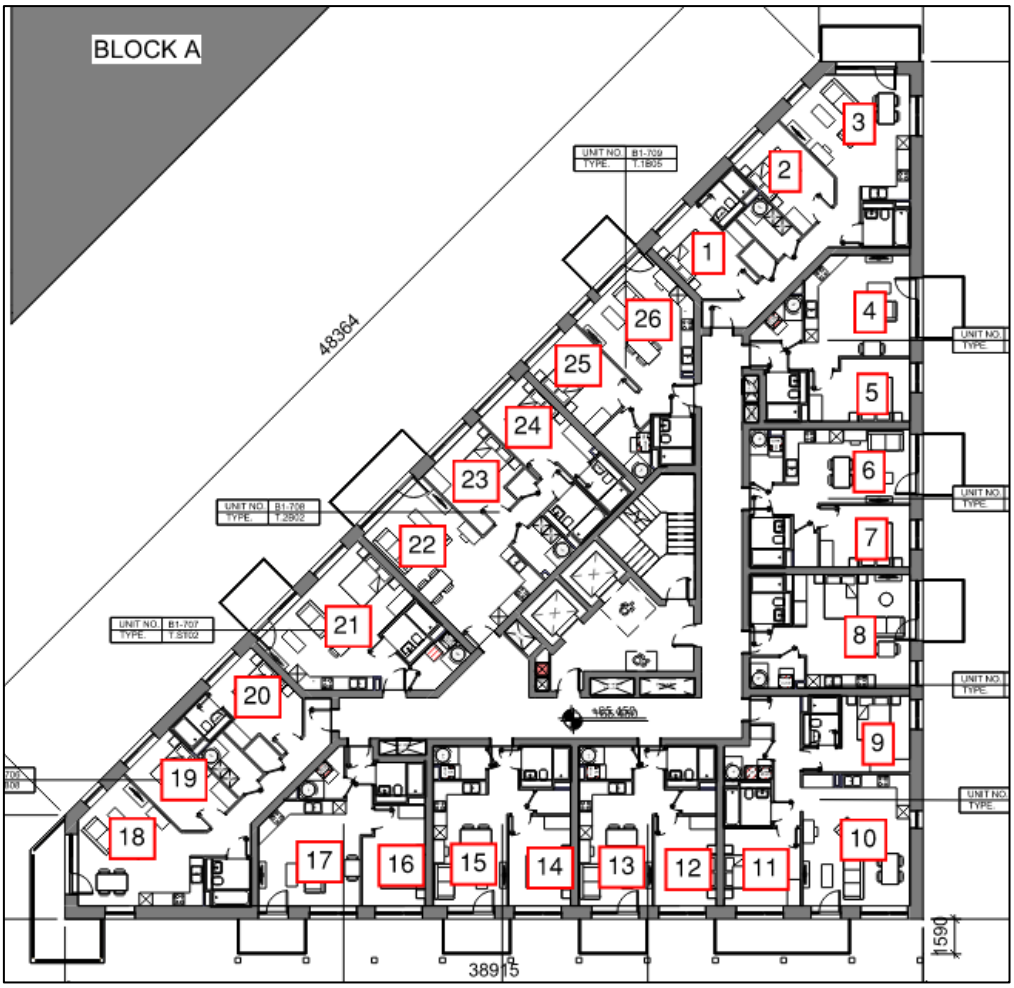


Figure 11: Block B1 7th Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom	100%	Y	55%	Y
2	Bedroom	100%	Y	59%	Y
3	Living/Kitchen	100%	Y	94%	Y
4	Living/Kitchen	100%	Y	97%	Y
5	Bedroom	100%	Y	96%	Y
6	Living/Kitchen	100%	Y	77%	Y
7	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
8	Studio	100%	Y	99%	Y
9	Bedroom	100%	Y	75%	Y
10	Living/Kitchen	100%	Y	100%	Y
11	Bedroom	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y
13	Living/Kitchen	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
15	Living/Kitchen	100%	Y	100%	Y
16	Bedroom	100%	Y	100%	Y
17	Living/Kitchen	100%	Y	100%	Y
18	Living/Kitchen	100%	Y	100%	Y
19	Bedroom	99%	Y	77%	Y
20	Bedroom	100%	Y	62%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
21	Studio	100%	Y	65%	Y
22	Living/Kitchen	99%	Y	50%	Y
23	Bedroom	100%	Y	59%	Y
24	Bedroom	100%	Y	66%	Y
25	Bedroom	100%	Y	67%	Y
26	Living/Kitchen	100%	Y	49%	N

Table 9: BR209 Methodology Results (Block B1 Seventh Floor)

Legends

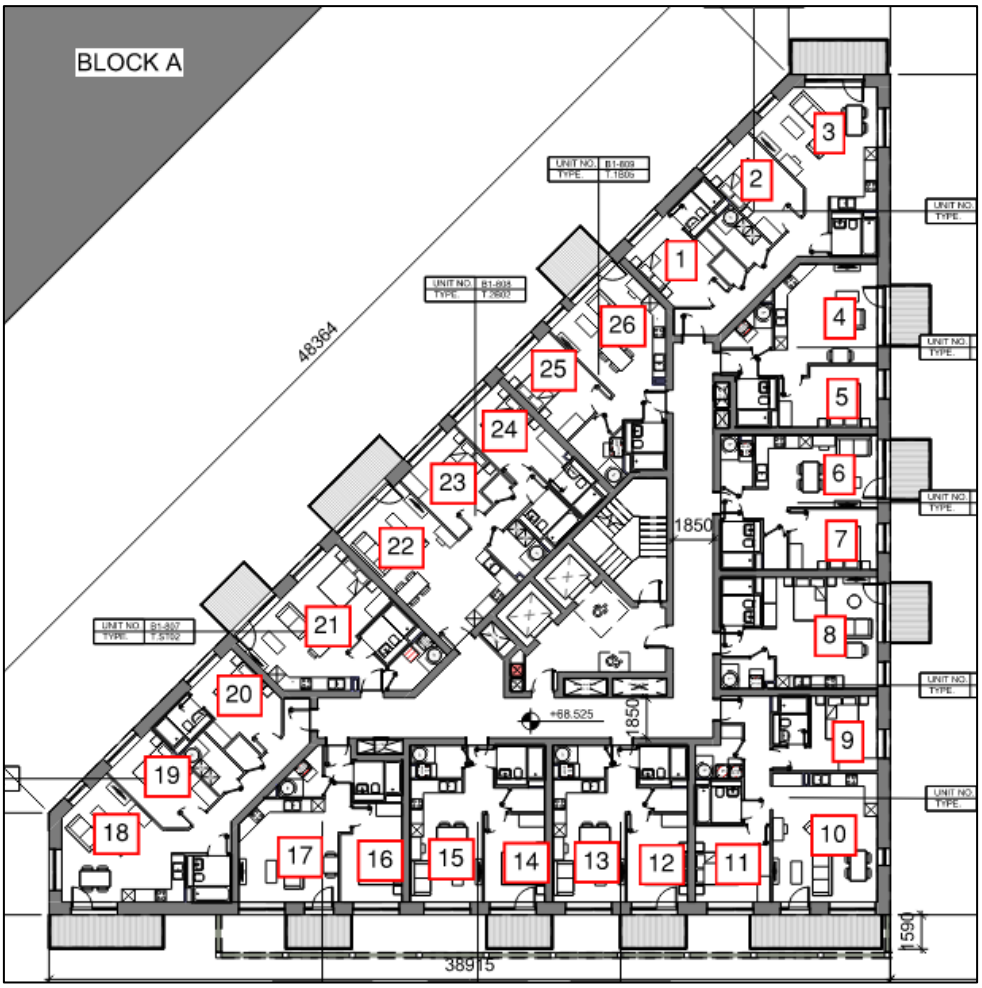


Figure 12: Block B1 8th Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom	100%	Y	63%	Y
2	Bedroom	100%	Y	59%	Y
3	Living/Kitchen	100%	Y	99%	Y
4	Living/Kitchen	100%	Y	100%	Y
5	Bedroom	100%	Y	98%	Y
6	Living/Kitchen	100%	Y	99%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
7	Bedroom	100%	Y	100%	Y
8	Studio	100%	Y	100%	Y
9	Bedroom	100%	Y	91%	Y
10	Living/Kitchen	100%	Y	100%	Y
11	Bedroom	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
13	Living/Kitchen	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y
15	Living/Kitchen	100%	Y	100%	Y
16	Bedroom	100%	Y	100%	Y
17	Living/Kitchen	100%	Y	100%	Y
18	Living/Kitchen	100%	Y	100%	Y
19	Bedroom	99%	Y	88%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
20	Bedroom	100%	Y	60%	Y
21	Studio	100%	Y	72%	Y
22	Living/Kitchen	100%	Y	52%	Y
23	Bedroom	100%	Y	72%	Y
24	Bedroom	100%	Y	68%	Y
25	Bedroom	100%	Y	65%	Y
26	Living/Kitchen	100%	Y	54%	Y

Table 10: BR209 Methodology Results (Block B1 Eighth Floor)

Legends

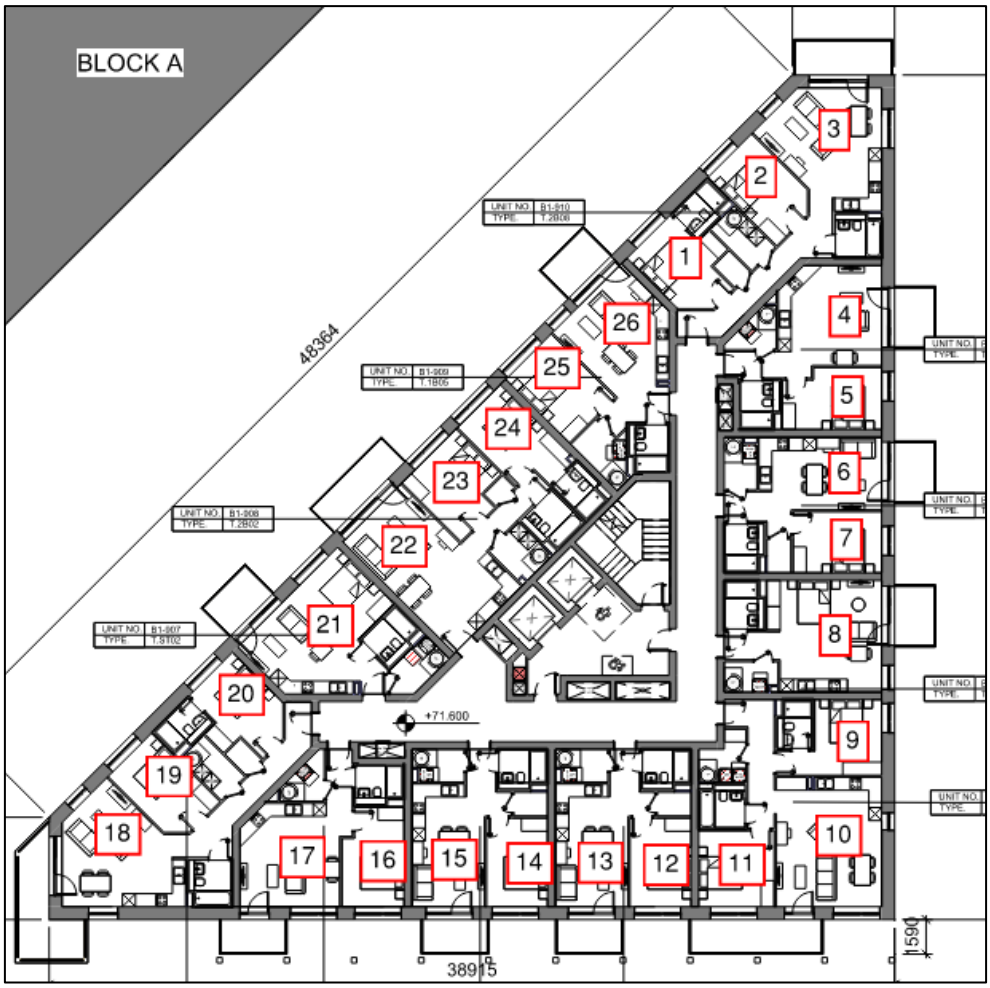


Figure 13: Block B1 9th Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom	100%	Y	71%	Y
2	Bedroom	100%	Y	64%	Y
3	Living/Kitchen	100%	Y	100%	Y
4	Living/Kitchen	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Living/Kitchen	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
8	Studio	100%	Y	100%	Y
9	Bedroom	100%	Y	90%	Y
10	Living/Kitchen	100%	Y	100%	Y
11	Bedroom	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y
13	Living/Kitchen	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
15	Living/Kitchen	100%	Y	100%	Y
16	Bedroom	100%	Y	100%	Y
17	Living/Kitchen	100%	Y	100%	Y
18	Living/Kitchen	100%	Y	100%	Y
19	Bedroom	100%	Y	90%	Y
20	Bedroom	100%	Y	60%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
21	Studio	100%	Y	93%	Y
22	Living/Kitchen	100%	Y	68%	Y
23	Bedroom	100%	Y	75%	Y
24	Bedroom	100%	Y	73%	Y
25	Bedroom	100%	Y	69%	Y
26	Living/Kitchen	100%	Y	67%	Y

Table 11: BR209 Methodology Results (Block B1 Ninth Floor)

Legends

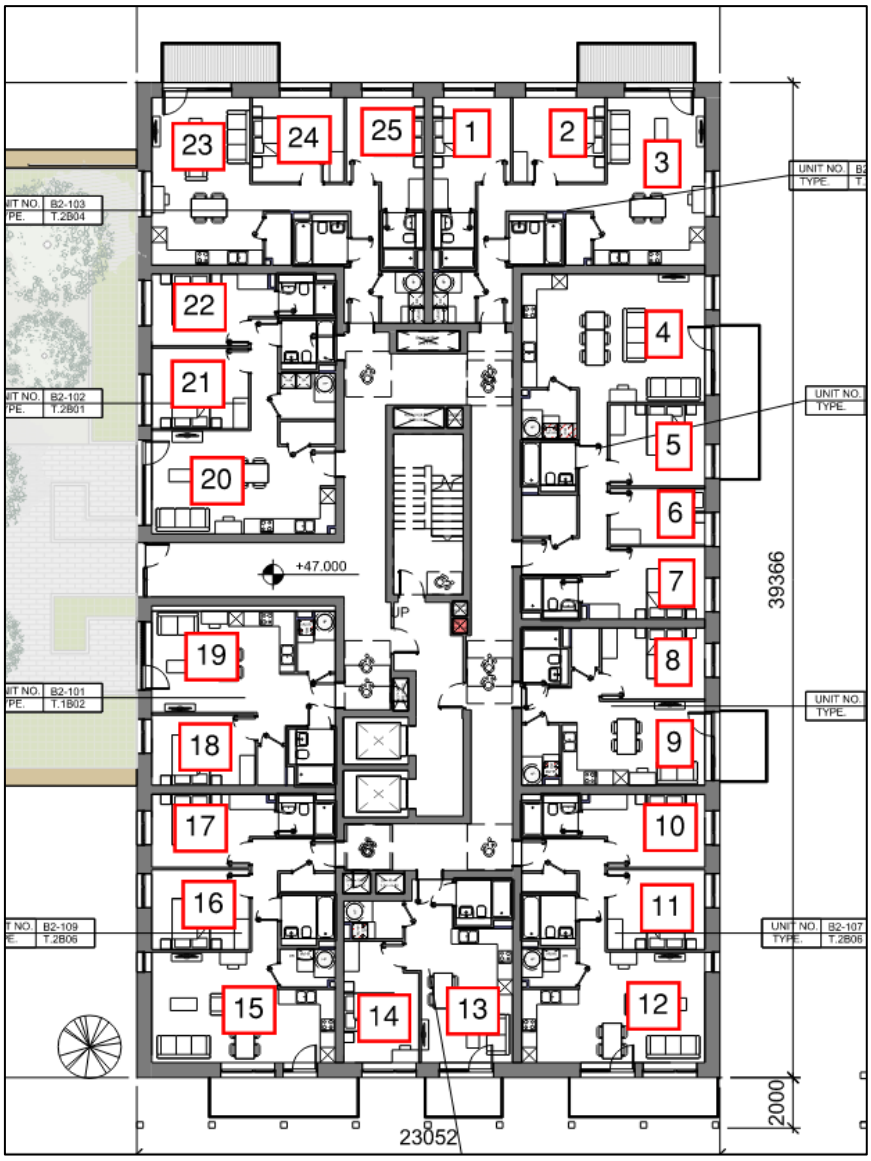


Figure 14: Block B2 1st Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom	100%	Y	89%	Y
2	Bedroom	100%	Y	93%	Y
3	Living/Kitchen	100%	Y	85%	Y
4	Living/Kitchen	100%	Y	35%	N
5	Bedroom	100%	Y	52%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
6	Bedroom	100%	Y	93%	Y
7	Bedroom	100%	Y	51%	Y
8	Bedroom	100%	Y	59%	Y
9	Living/Kitchen	100%	Y	56%	Y
10	Bedroom	100%	Y	81%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
11	Bedroom	100%	Y	60%	Y
12	Living/Kitchen	100%	Y	100%	Y
13	Living/Kitchen	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y
15	Living/Kitchen	100%	Y	100%	Y
16	Bedroom	100%	Y	63%	Y
17	Bedroom	100%	Y	94%	Y
18	Bedroom	100%	Y	67%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
19	Living/Kitchen	100%	Y	50%	Y
20	Living/Kitchen	100%	Y	52%	Y
21	Bedroom	100%	Y	65%	Y
22	Bedroom	100%	Y	64%	Y
23	Living/Kitchen	100%	Y	84%	Y
24	Bedroom	100%	Y	91%	Y
25	Bedroom	100%	Y	91%	Y

Table 12: BR209 Methodology Results (Block B2 First Floor)

Legends

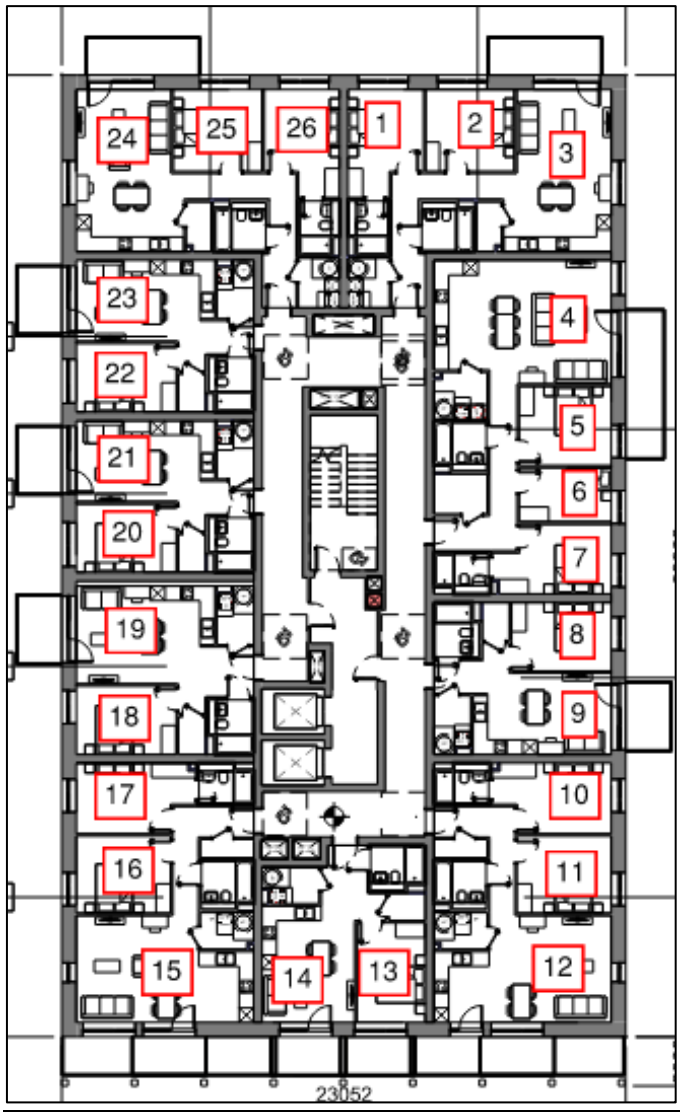


Figure 15: Block B2 2nd Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom	100%	Y	90%	Y
2	Bedroom	100%	Y	93%	Y
3	Living/Kitchen	100%	Y	79%	Y
4	Living/Kitchen	100%	Y	37%	N
5	Bedroom	100%	Y	52%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
6	Bedroom	100%	Y	93%	Y
7	Bedroom	100%	Y	58%	Y
8	Bedroom	100%	Y	63%	Y
9	Living/Kitchen	100%	Y	54%	Y
10	Bedroom	100%	Y	81%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
11	Bedroom	100%	Y	86%	Y
12	Living/Kitchen	100%	Y	100%	Y
13	Bedroom	100%	Y	100%	Y
14	Living/Kitchen	100%	Y	100%	Y
15	Living/Kitchen	100%	Y	100%	Y
16	Bedroom	100%	Y	84%	Y
17	Bedroom	100%	Y	86%	Y
18	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
19	Living/Kitchen	100%	Y	54%	Y
20	Bedroom	100%	Y	73%	Y
21	Living/Kitchen	100%	Y	51%	Y
22	Bedroom	100%	Y	100%	Y
23	Living/Kitchen	100%	Y	54%	Y
24	Living/Kitchen	100%	Y	92%	Y
25	Bedroom	100%	Y	92%	Y
26	Bedroom	100%	Y	94%	Y

Table 13: BR209 Methodology Results (Block B2 Second Floor)

Legends

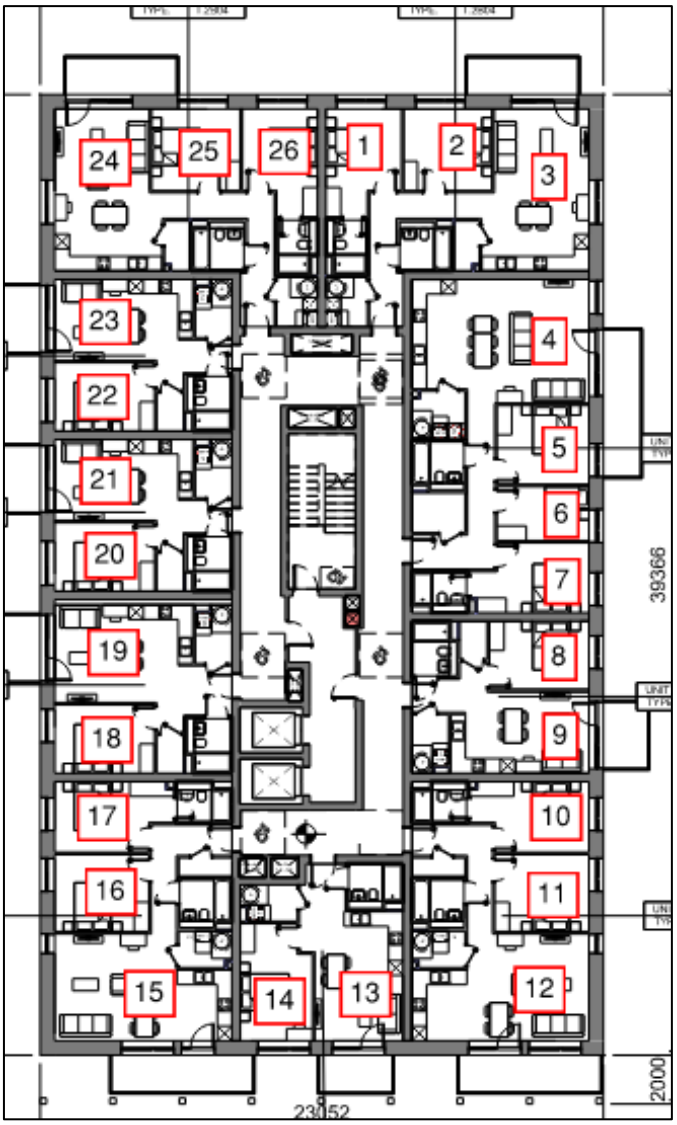


Figure 16: Block B2 3rd Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom	100%	Y	91%	Y
2	Bedroom	100%	Y	94%	Y
3	Living/Kitchen	100%	Y	82%	Y
4	Living/Kitchen	100%	Y	39%	N
5	Bedroom	100%	Y	56%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
6	Bedroom	100%	Y	94%	Y
7	Bedroom	100%	Y	54%	Y
8	Bedroom	100%	Y	61%	Y
9	Living/Kitchen	100%	Y	57%	Y
10	Bedroom	100%	Y	79%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
11	Bedroom	100%	Y	62%	Y
12	Living/Kitchen	100%	Y	100%	Y
13	Living/Kitchen	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y
15	Living/Kitchen	100%	Y	100%	Y
16	Bedroom	100%	Y	60%	Y
17	Bedroom	100%	Y	73%	Y
18	Bedroom	100%	Y	68%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
19	Living/Kitchen	100%	Y	58%	Y
20	Bedroom	100%	Y	82%	Y
21	Living/Kitchen	100%	Y	53%	Y
22	Bedroom	100%	Y	100%	Y
23	Living/Kitchen	100%	Y	52%	Y
24	Living/Kitchen	100%	Y	97%	Y
25	Bedroom	100%	Y	93%	Y
26	Bedroom	100%	Y	94%	Y

Table 14: BR209 Methodology Results (Block B2 Third Floor)

Legends

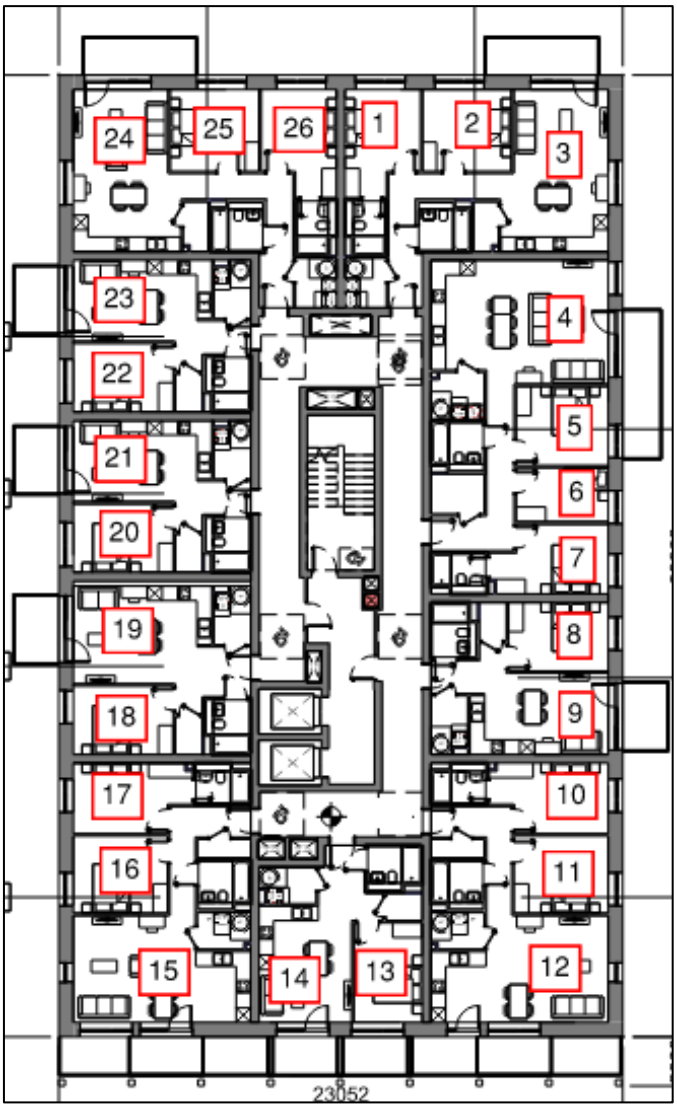


Figure 17: Block B2 4th Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom	100%	Y	94%	Y
2	Bedroom	100%	Y	96%	Y
3	Living/Kitchen	100%	Y	81%	Y
4	Living/Kitchen	100%	Y	40%	N
5	Bedroom	100%	Y	60%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
6	Bedroom	100%	Y	89%	Y
7	Bedroom	100%	Y	54%	Y
8	Bedroom	100%	Y	67%	Y
9	Living/Kitchen	100%	Y	56%	Y
10	Bedroom	100%	Y	86%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
11	Bedroom	100%	Y	87%	Y
12	Living/Kitchen	100%	Y	100%	Y
13	Bedroom	100%	Y	100%	Y
14	Living/Kitchen	100%	Y	100%	Y
15	Living/Kitchen	100%	Y	100%	Y
16	Bedroom	100%	Y	84%	Y
17	Bedroom	100%	Y	73%	Y
18	Bedroom	100%	Y	72%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
19	Living/Kitchen	100%	Y	60%	Y
20	Bedroom	100%	Y	84%	Y
21	Living/Kitchen	100%	Y	51%	Y
22	Bedroom	100%	Y	100%	Y
23	Living/Kitchen	100%	Y	50%	Y
24	Living/Kitchen	100%	Y	91%	Y
25	Bedroom	100%	Y	92%	Y
26	Bedroom	100%	Y	94%	Y

Table 15: BR209 Methodology Results (Block B2 Fourth Floor)

Legends

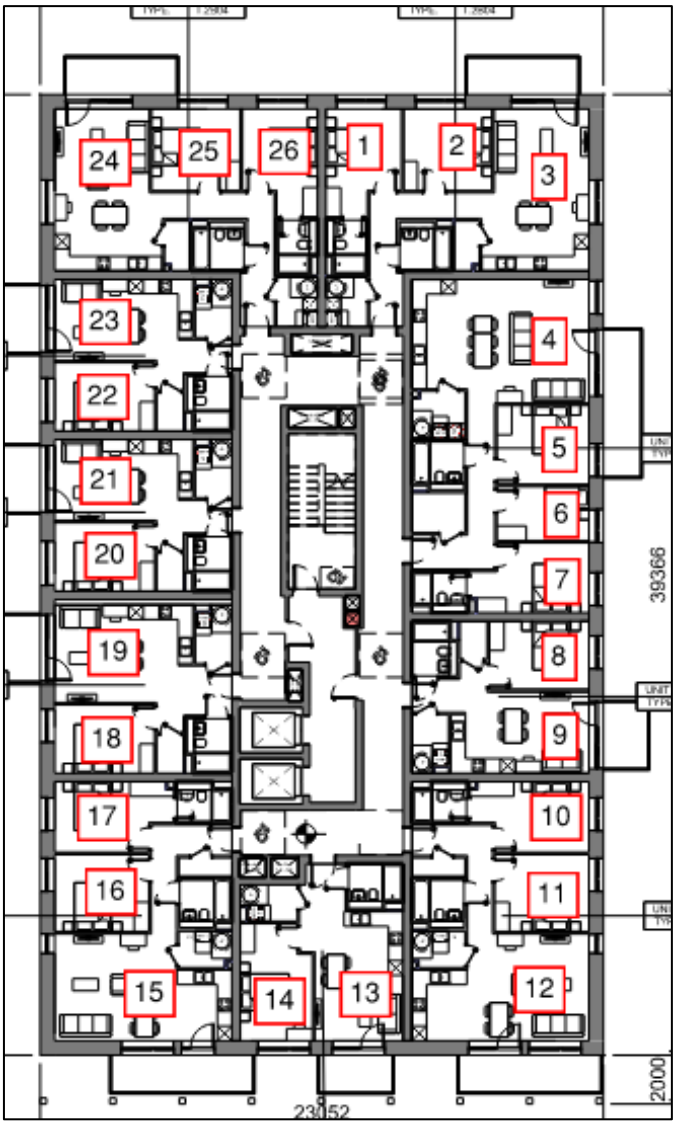


Figure 18: Block B2 5th Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom	100%	Y	98%	Y
2	Bedroom	100%	Y	97%	Y
3	Living/Kitchen	100%	Y	84%	Y
4	Living/Kitchen	100%	Y	42%	N
5	Bedroom	100%	Y	70%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
6	Bedroom	100%	Y	98%	Y
7	Bedroom	100%	Y	63%	Y
8	Bedroom	100%	Y	75%	Y
9	Living/Kitchen	100%	Y	59%	Y
10	Bedroom	100%	Y	88%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
11	Bedroom	100%	Y	68%	Y
12	Living/Kitchen	100%	Y	100%	Y
13	Living/Kitchen	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y
15	Living/Kitchen	100%	Y	100%	Y
16	Bedroom	100%	Y	64%	Y
17	Bedroom	100%	Y	77%	Y
18	Bedroom	100%	Y	81%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
19	Living/Kitchen	100%	Y	62%	Y
20	Bedroom	100%	Y	90%	Y
21	Living/Kitchen	100%	Y	57%	Y
22	Bedroom	100%	Y	100%	Y
23	Living/Kitchen	100%	Y	54%	Y
24	Living/Kitchen	100%	Y	91%	Y
25	Bedroom	100%	Y	93%	Y
26	Bedroom	100%	Y	94%	Y

Table 16: BR209 Methodology Results (Block B2 Fifth Floor)

Legends

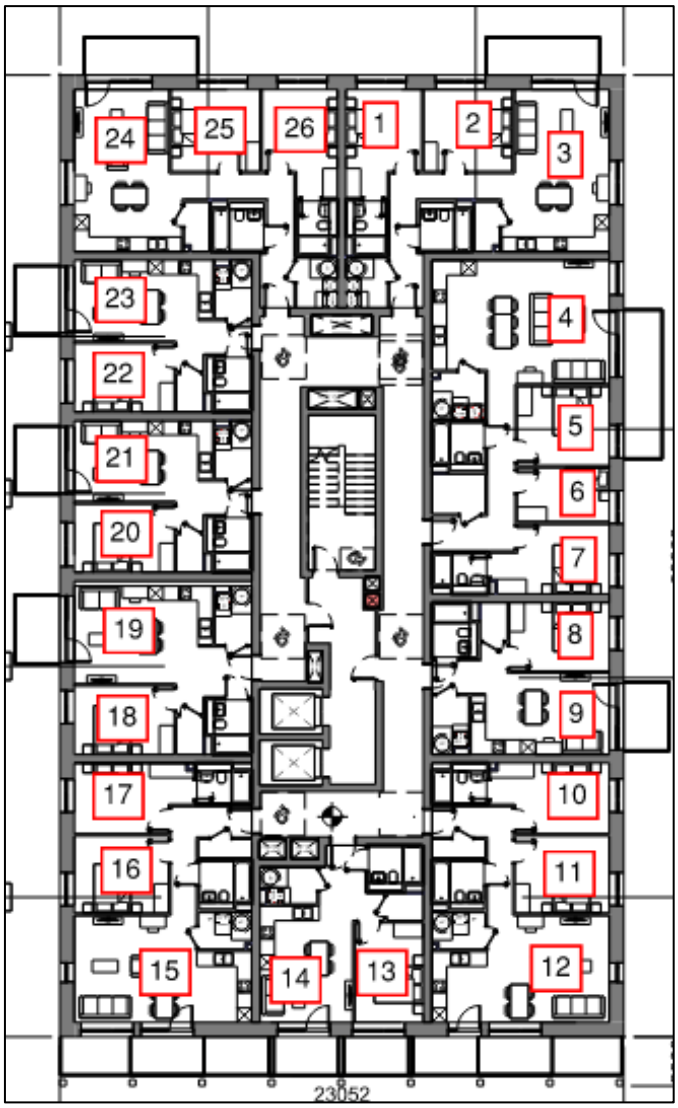


Figure 19: Block B2 6th Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom	100%	Y	99%	Y
2	Bedroom	100%	Y	97%	Y
3	Living/Kitchen	100%	Y	87%	Y
4	Living/Kitchen	100%	Y	47%	N
5	Bedroom	100%	Y	79%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
6	Bedroom	100%	Y	100%	Y
7	Bedroom	100%	Y	73%	Y
8	Bedroom	100%	Y	86%	Y
9	Living/Kitchen	100%	Y	62%	Y
10	Bedroom	100%	Y	95%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
11	Bedroom	100%	Y	93%	Y
12	Living/Kitchen	100%	Y	100%	Y
13	Bedroom	100%	Y	100%	Y
14	Living/Kitchen	100%	Y	100%	Y
15	Living/Kitchen	100%	Y	100%	Y
16	Bedroom	100%	Y	89%	Y
17	Bedroom	100%	Y	82%	Y
18	Bedroom	100%	Y	90%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
19	Living/Kitchen	100%	Y	66%	Y
20	Bedroom	100%	Y	96%	Y
21	Living/Kitchen	100%	Y	58%	Y
22	Bedroom	100%	Y	100%	Y
23	Living/Kitchen	100%	Y	58%	Y
24	Living/Kitchen	100%	Y	96%	Y
25	Bedroom	100%	Y	93%	Y
26	Bedroom	100%	Y	94%	Y

Table 17: BR209 Methodology Results (Block B2 Sixth Floor)

Legends

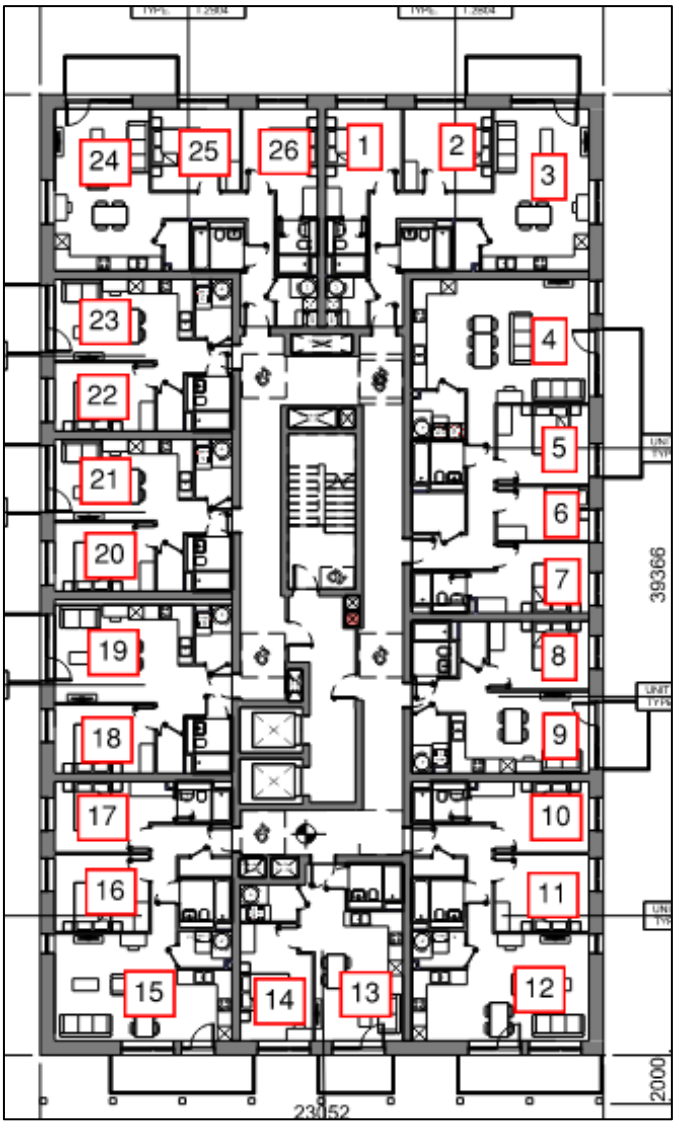


Figure 20: Block B2 7th Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom	100%	Y	100%	Y
2	Bedroom	100%	Y	97%	Y
3	Living/Kitchen	100%	Y	95%	Y
4	Living/Kitchen	100%	Y	54%	Y
5	Bedroom	100%	Y	99%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
6	Bedroom	100%	Y	100%	Y
7	Bedroom	100%	Y	84%	Y
8	Bedroom	100%	Y	95%	Y
9	Living/Kitchen	100%	Y	71%	Y
10	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
11	Bedroom	100%	Y	90%	Y
12	Living/Kitchen	100%	Y	100%	Y
13	Living/Kitchen	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y
15	Living/Kitchen	100%	Y	100%	Y
16	Bedroom	100%	Y	71%	Y
17	Bedroom	100%	Y	84%	Y
18	Bedroom	100%	Y	50%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
19	Living/Kitchen	100%	Y	71%	Y
20	Bedroom	100%	Y	98%	Y
21	Living/Kitchen	100%	Y	66%	Y
22	Bedroom	100%	Y	100%	Y
23	Living/Kitchen	100%	Y	67%	Y
24	Living/Kitchen	100%	Y	98%	Y
25	Bedroom	100%	Y	94%	Y
26	Bedroom	100%	Y	97%	Y

Table 18: BR209 Methodology Results (Block B2 Seventh Floor)

Legends

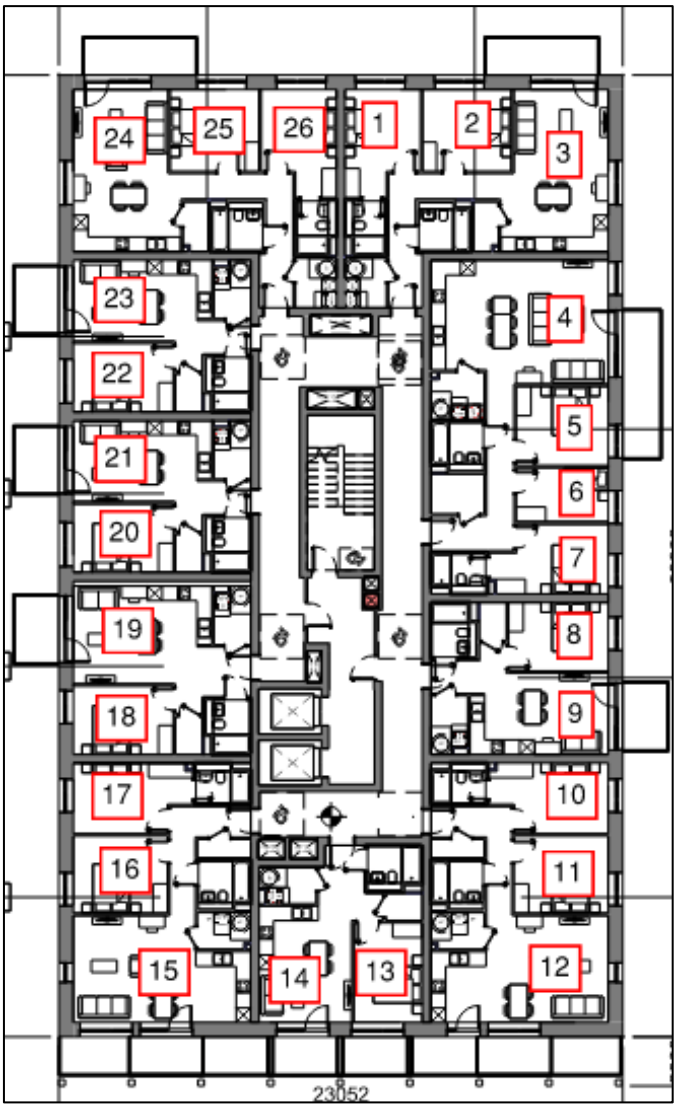


Figure 21: Block B2 8th Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom	100%	Y	100%	Y
2	Bedroom	100%	Y	98%	Y
3	Living/Kitchen	100%	Y	98%	Y
4	Living/Kitchen	100%	Y	69%	Y
5	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
6	Bedroom	100%	Y	100%	Y
7	Bedroom	100%	Y	97%	Y
8	Bedroom	100%	Y	100%	Y
9	Living/Kitchen	100%	Y	78%	Y
10	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
11	Bedroom	100%	Y	99%	Y
12	Living/Kitchen	100%	Y	100%	Y
13	Bedroom	100%	Y	100%	Y
14	Living/Kitchen	100%	Y	100%	Y
15	Living/Kitchen	100%	Y	100%	Y
16	Bedroom	100%	Y	95%	Y
17	Bedroom	100%	Y	89%	Y
18	Bedroom	100%	Y	91%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
19	Living/Kitchen	100%	Y	76%	Y
20	Bedroom	100%	Y	100%	Y
21	Living/Kitchen	100%	Y	72%	Y
22	Bedroom	100%	Y	100%	Y
23	Living/Kitchen	100%	Y	72%	Y
24	Living/Kitchen	100%	Y	99%	Y
25	Bedroom	100%	Y	94%	Y
26	Bedroom	100%	Y	96%	Y

Table 19: BR209 Methodology Results (Block B2 Eighth Floor)

Legends

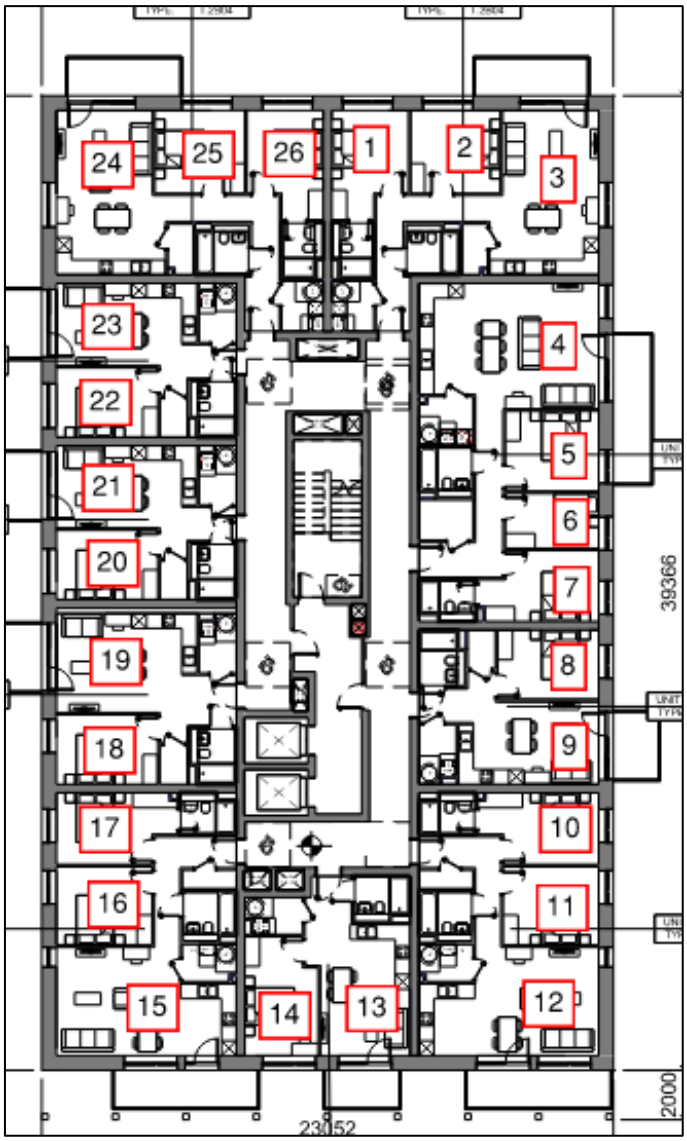


Figure 22: Block B2 9th Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom	100%	Y	100%	Y
2	Bedroom	100%	Y	99%	Y
3	Living/Kitchen	100%	Y	99%	Y
4	Living/Kitchen	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
6	Bedroom	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Bedroom	100%	Y	100%	Y
9	Living/Kitchen	100%	Y	97%	Y
10	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
11	Bedroom	100%	Y	97%	Y
12	Living/Kitchen	100%	Y	100%	Y
13	Living/Kitchen	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y
15	Living/Kitchen	100%	Y	100%	Y
16	Bedroom	100%	Y	77%	Y
17	Bedroom	100%	Y	89%	Y
18	Bedroom	100%	Y	59%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
19	Living/Kitchen	100%	Y	89%	Y
20	Bedroom	100%	Y	100%	Y
21	Living/Kitchen	100%	Y	90%	Y
22	Bedroom	100%	Y	100%	Y
23	Living/Kitchen	100%	Y	86%	Y
24	Living/Kitchen	100%	Y	100%	Y
25	Bedroom	100%	Y	95%	Y
26	Bedroom	100%	Y	98%	Y

Table 20: BR209 Methodology Results (Block B2 Ninth Floor)

Legends

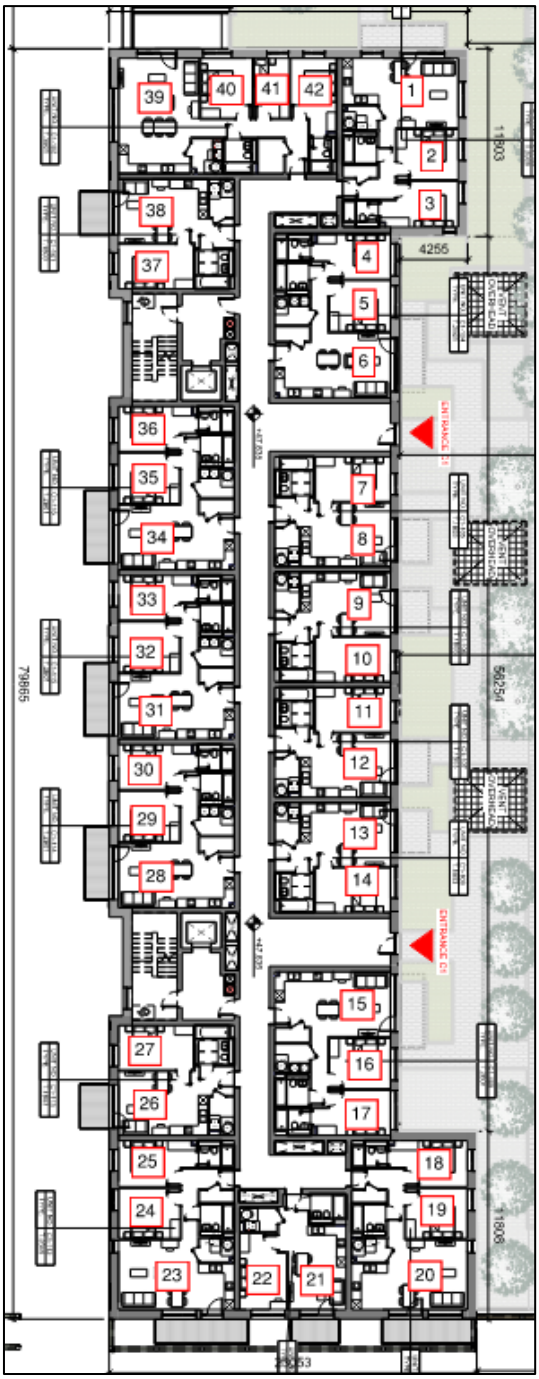


Figure 23: Block B2 First Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Living/Kitchen	100%	Y	99%	Y
2	Bedroom	100%	Y	59%	Y
3	Bedroom	100%	Y	100%	Y
4	Bedroom	100%	Y	90%	Y
5	Bedroom	100%	Y	75%	Y
6	Living/Kitchen	100%	Y	57%	Y
7	Bedroom	100%	Y	51%	Y
8	Living/Kitchen	100%	Y	57%	Y
9	Living/Kitchen	100%	Y	59%	Y
10	Bedroom	100%	Y	86%	Y
11	Bedroom	100%	Y	70%	Y
12	Living/Kitchen	100%	Y	60%	Y
13	Living/Kitchen	100%	Y	54%	Y
14	Bedroom	100%	Y	86%	Y
15	Living/Kitchen	100%	Y	67%	Y
16	Bedroom	100%	Y	70%	Y
17	Bedroom	100%	Y	94%	Y
18	Bedroom	100%	Y	79%	Y
19	Bedroom	100%	Y	76%	Y
20	Living/Kitchen	100%	Y	100%	Y
21	Living/Kitchen	100%	Y	100%	Y
22	Bedroom	100%	Y	100%	Y
23	Living/Kitchen	100%	Y	99%	Y
24	Bedroom	100%	Y	70%	Y
25	Bedroom	100%	Y	84%	Y
26	Living/Kitchen	100%	Y	65%	Y
27	Bedroom	100%	Y	55%	Y
28	Living/Kitchen	100%	Y	54%	Y
29	Bedroom	100%	Y	69%	Y
30	Bedroom	100%	Y	70%	Y
31	Living/Kitchen	100%	Y	59%	Y
32	Bedroom	100%	Y	71%	Y
33	Bedroom	100%	Y	87%	Y
34	Living/Kitchen	100%	Y	69%	Y
35	Bedroom	100%	Y	79%	Y
36	Bedroom	100%	Y	84%	Y
37	Bedroom	100%	Y	71%	Y
38	Living/Kitchen	100%	Y	74%	Y
39	Living/Kitchen	100%	Y	87%	Y
40	Bedroom	98%	Y	57%	Y
41	Bedroom	100%	Y	56%	Y
42	Bedroom	100%	Y	54%	Y

Table 21: BR209 Methodology Results (Block C1 First Floor)

Legends

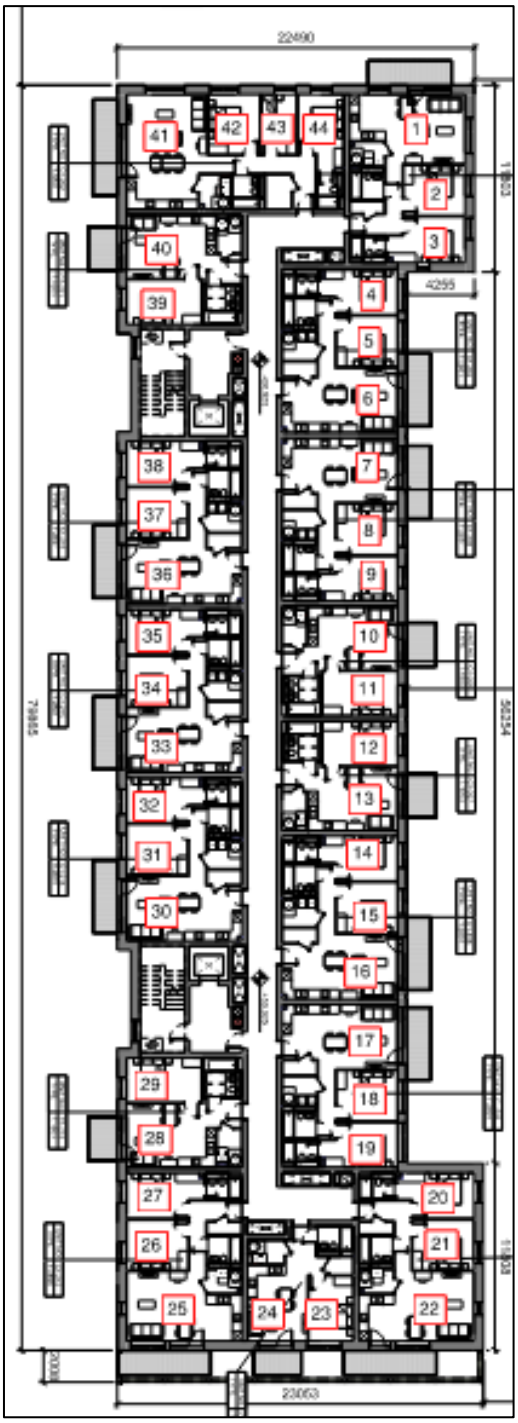


Figure 24: Block C1 2nd Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Living/Kitchen	100%	Y	99%	Y
2	Bedroom	100%	Y	53%	Y
3	Bedroom	100%	Y	96%	Y
4	Bedroom	100%	Y	93%	Y
5	Bedroom	100%	Y	82%	Y
6	Living/Kitchen	100%	Y	57%	Y
7	Living/Kitchen	100%	Y	50%	Y
8	Bedroom	100%	Y	56%	Y
9	Bedroom	100%	Y	52%	Y
10	Living/Kitchen	100%	Y	67%	Y
11	Bedroom	100%	Y	70%	Y
12	Bedroom	100%	Y	64%	Y
13	Living/Kitchen	100%	Y	65%	Y
14	Bedroom	100%	Y	58%	Y
15	Bedroom	100%	Y	63%	Y
16	Living/Kitchen	100%	Y	50%	Y
17	Living/Kitchen	100%	Y	52%	Y
18	Bedroom	100%	Y	76%	Y
19	Bedroom	100%	Y	99%	Y
20	Bedroom	100%	Y	78%	Y
21	Bedroom	100%	Y	94%	Y
22	Living/Kitchen	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
23	Bedroom	100%	Y	100%	Y
24	Living/Kitchen	100%	Y	100%	Y
25	Living/Kitchen	100%	Y	100%	Y
26	Bedroom	100%	Y	86%	Y
27	Bedroom	100%	Y	86%	Y
28	Living/Kitchen	100%	Y	62%	Y
29	Bedroom	100%	Y	58%	Y
30	Living/Kitchen	100%	Y	54%	Y
31	Bedroom	100%	Y	72%	Y
32	Bedroom	100%	Y	78%	Y
33	Living/Kitchen	100%	Y	63%	Y
34	Bedroom	100%	Y	78%	Y
35	Bedroom	100%	Y	90%	Y
36	Living/Kitchen	100%	Y	68%	Y
37	Bedroom	100%	Y	85%	Y
38	Bedroom	100%	Y	89%	Y
39	Bedroom	100%	Y	81%	Y
40	Living/Kitchen	100%	Y	85%	Y
41	Living/Kitchen	100%	Y	87%	Y
42	Bedroom	97%	Y	61%	Y
43	Bedroom	100%	Y	60%	Y
44	Bedroom	100%	Y	54%	Y

Table 22: BR209 Methodology Results (Block C1 Second Floor)

Legends

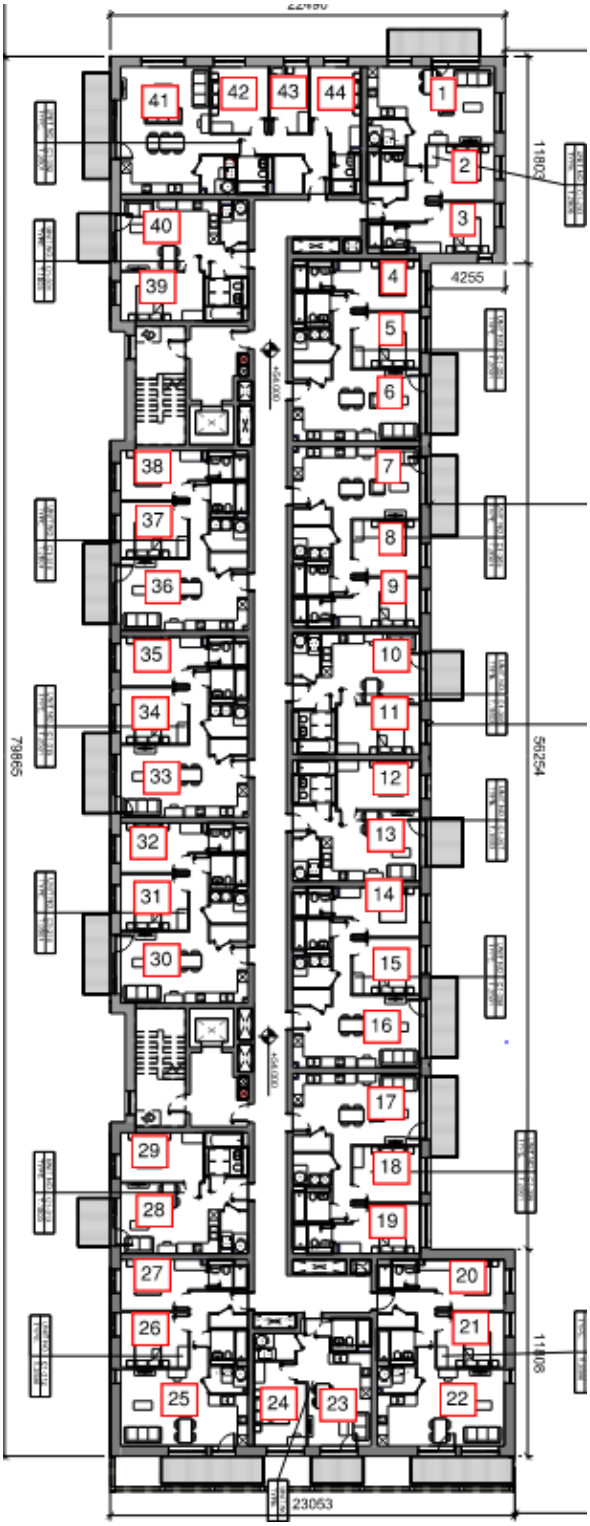


Figure 25: Block C1 3rd Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Living/Kitchen	100%	Y	98%	Y
2	Bedroom	100%	Y	62%	Y
3	Bedroom	100%	Y	97%	Y
4	Bedroom	100%	Y	97%	Y
5	Bedroom	100%	Y	85%	Y
6	Living/Kitchen	100%	Y	61%	Y
7	Living/Kitchen	100%	Y	53%	Y
8	Bedroom	100%	Y	53%	Y
9	Bedroom	100%	Y	54%	Y
10	Living/Kitchen	100%	Y	62%	Y
11	Bedroom	100%	Y	75%	Y
12	Bedroom	100%	Y	72%	Y
13	Living/Kitchen	100%	Y	54%	Y
14	Bedroom	100%	Y	61%	Y
15	Bedroom	100%	Y	67%	Y
16	Living/Kitchen	100%	Y	51%	Y
17	Living/Kitchen	100%	Y	54%	Y
18	Bedroom	100%	Y	83%	Y
19	Bedroom	100%	Y	88%	Y
20	Bedroom	100%	Y	68%	Y
21	Bedroom	100%	Y	70%	Y
22	Living/Kitchen	100%	Y	100%	Y
23	Living/Kitchen	100%	Y	100%	Y
24	Bedroom	100%	Y	100%	Y
25	Living/Kitchen	100%	Y	98%	Y
26	Bedroom	100%	Y	73%	Y
27	Bedroom	100%	Y	88%	Y
28	Living/Kitchen	100%	Y	65%	Y
29	Bedroom	100%	Y	60%	Y
30	Living/Kitchen	100%	Y	58%	Y
31	Bedroom	100%	Y	76%	Y
32	Bedroom	100%	Y	79%	Y
33	Living/Kitchen	100%	Y	53%	Y
34	Bedroom	100%	Y	79%	Y
35	Bedroom	100%	Y	93%	Y
36	Living/Kitchen	100%	Y	70%	Y
37	Bedroom	100%	Y	88%	Y
38	Bedroom	100%	Y	93%	Y
39	Bedroom	100%	Y	84%	Y
40	Living/Kitchen	100%	Y	81%	Y
41	Living/Kitchen	100%	Y	88%	Y
42	Bedroom	98%	Y	72%	Y
43	Bedroom	100%	Y	70%	Y
44	Bedroom	100%	Y	61%	Y

Table 23: BR209 Methodology Results (Block C1 Third Floor)

Legends

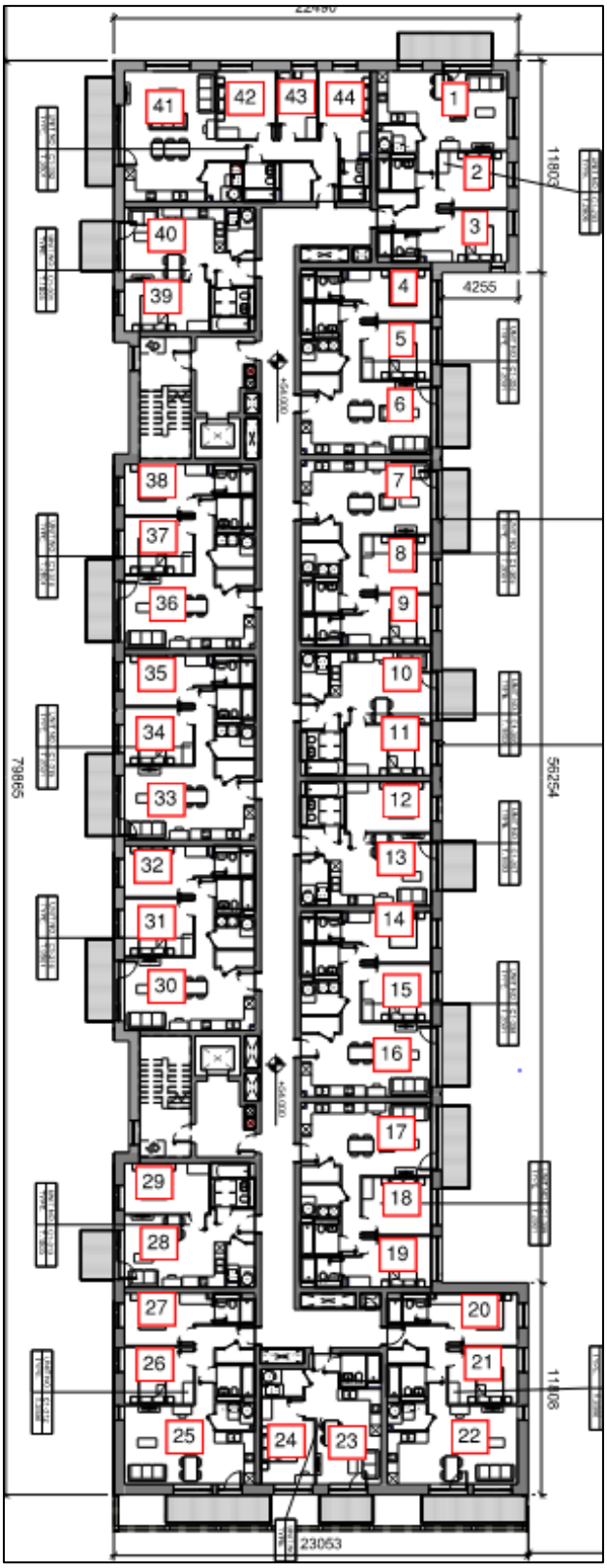


Figure 26: Block C1 4th Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Living/Kitchen	100%	Y	98%	Y
2	Bedroom	100%	Y	59%	Y
3	Bedroom	100%	Y	97%	Y
4	Bedroom	100%	Y	100%	Y
5	Bedroom	100%	Y	94%	Y
6	Living/Kitchen	100%	Y	64%	Y
7	Living/Kitchen	100%	Y	57%	Y
8	Bedroom	100%	Y	57%	Y
9	Bedroom	100%	Y	60%	Y
10	Living/Kitchen	100%	Y	65%	Y
11	Bedroom	100%	Y	77%	Y
12	Bedroom	100%	Y	72%	Y
13	Living/Kitchen	100%	Y	57%	Y
14	Bedroom	100%	Y	63%	Y
15	Bedroom	100%	Y	72%	Y
16	Living/Kitchen	100%	Y	53%	Y
17	Living/Kitchen	100%	Y	55%	Y
18	Bedroom	100%	Y	84%	Y
19	Bedroom	100%	Y	99%	Y
20	Bedroom	100%	Y	63%	Y
21	Bedroom	100%	Y	83%	Y
22	Living/Kitchen	100%	Y	100%	Y
23	Bedroom	100%	Y	100%	Y
24	Living/Kitchen	100%	Y	100%	Y
25	Living/Kitchen	100%	Y	100%	Y
26	Bedroom	100%	Y	89%	Y
27	Bedroom	100%	Y	92%	Y
28	Living/Kitchen	100%	Y	65%	Y
29	Bedroom	100%	Y	64%	Y
30	Living/Kitchen	100%	Y	60%	Y
31	Bedroom	100%	Y	81%	Y
32	Bedroom	100%	Y	85%	Y
33	Living/Kitchen	100%	Y	55%	Y
34	Bedroom	100%	Y	83%	Y
35	Bedroom	100%	Y	95%	Y
36	Living/Kitchen	100%	Y	74%	Y
37	Bedroom	100%	Y	93%	Y
38	Bedroom	100%	Y	97%	Y
39	Bedroom	100%	Y	89%	Y
40	Living/Kitchen	100%	Y	88%	Y
41	Living/Kitchen	100%	Y	94%	Y
42	Bedroom	100%	Y	87%	Y
43	Bedroom	100%	Y	75%	Y
44	Bedroom	100%	Y	70%	Y

Table 24: BR209 Methodology Results (Block C1 Fourth Floor)

Legends

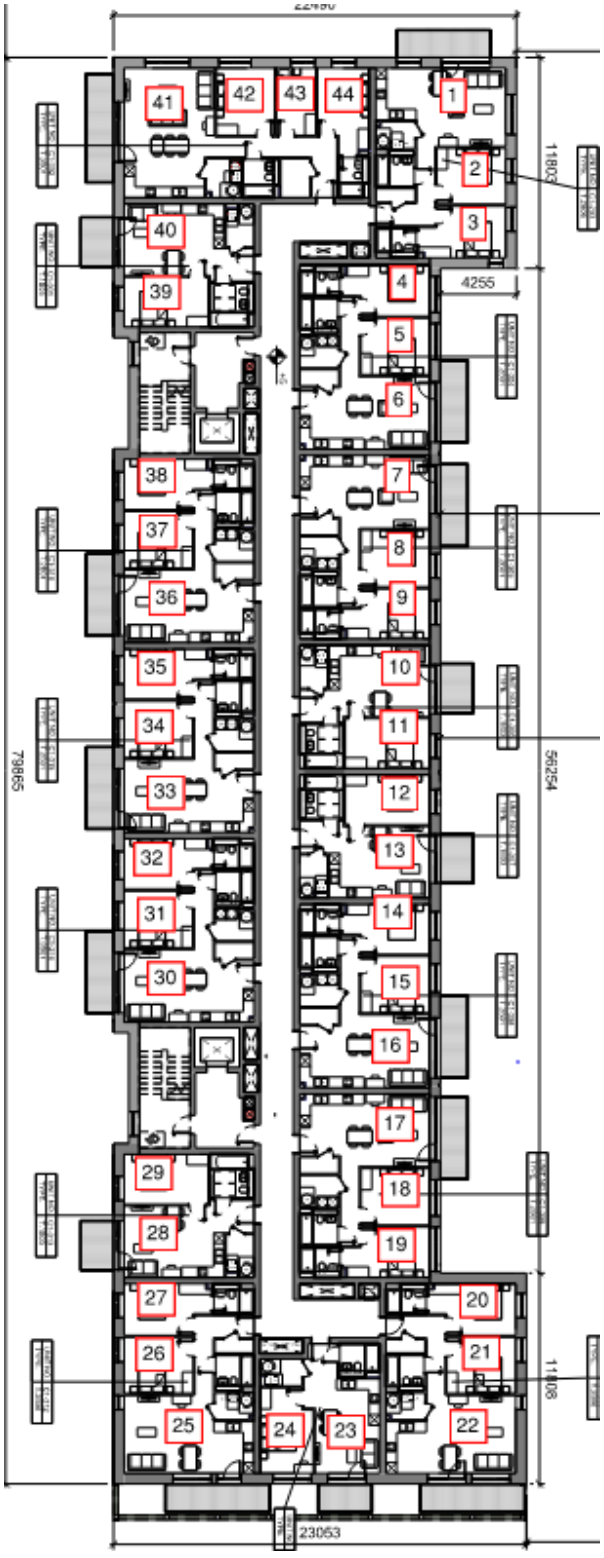


Figure 27: Block C1 5th Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Living/Kitchen	100%	Y	99%	Y
2	Bedroom	100%	Y	69%	Y
3	Bedroom	100%	Y	97%	Y
4	Bedroom	100%	Y	100%	Y
5	Bedroom	100%	Y	97%	Y
6	Living/Kitchen	100%	Y	77%	Y
7	Living/Kitchen	100%	Y	69%	Y
8	Bedroom	100%	Y	64%	Y
9	Bedroom	100%	Y	69%	Y
10	Living/Kitchen	100%	Y	69%	Y
11	Bedroom	100%	Y	83%	Y
12	Bedroom	100%	Y	76%	Y
13	Living/Kitchen	100%	Y	64%	Y
14	Bedroom	100%	Y	75%	Y
15	Bedroom	100%	Y	79%	Y
16	Living/Kitchen	100%	Y	57%	Y
17	Living/Kitchen	100%	Y	57%	Y
18	Bedroom	100%	Y	90%	Y
19	Bedroom	100%	Y	100%	Y
20	Bedroom	100%	Y	72%	Y
21	Bedroom	100%	Y	56%	Y
22	Living/Kitchen	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
23	Living/Kitchen	100%	Y	100%	Y
24	Bedroom	100%	Y	100%	Y
25	Living/Kitchen	100%	Y	100%	Y
26	Bedroom	100%	Y	76%	Y
27	Bedroom	100%	Y	95%	Y
28	Living/Kitchen	100%	Y	67%	Y
29	Bedroom	100%	Y	70%	Y
30	Living/Kitchen	100%	Y	65%	Y
31	Bedroom	100%	Y	91%	Y
32	Bedroom	100%	Y	93%	Y
33	Living/Kitchen	100%	Y	60%	Y
34	Bedroom	100%	Y	89%	Y
35	Bedroom	100%	Y	96%	Y
36	Living/Kitchen	100%	Y	78%	Y
37	Bedroom	100%	Y	94%	Y
38	Bedroom	100%	Y	98%	Y
39	Bedroom	100%	Y	93%	Y
40	Living/Kitchen	100%	Y	90%	Y
41	Living/Kitchen	100%	Y	100%	Y
42	Bedroom	100%	Y	100%	Y
43	Bedroom	100%	Y	92%	Y
44	Bedroom	100%	Y	78%	Y

Table 25: BR209 Methodology Results (Block C1 Fifth Floor)

Legends

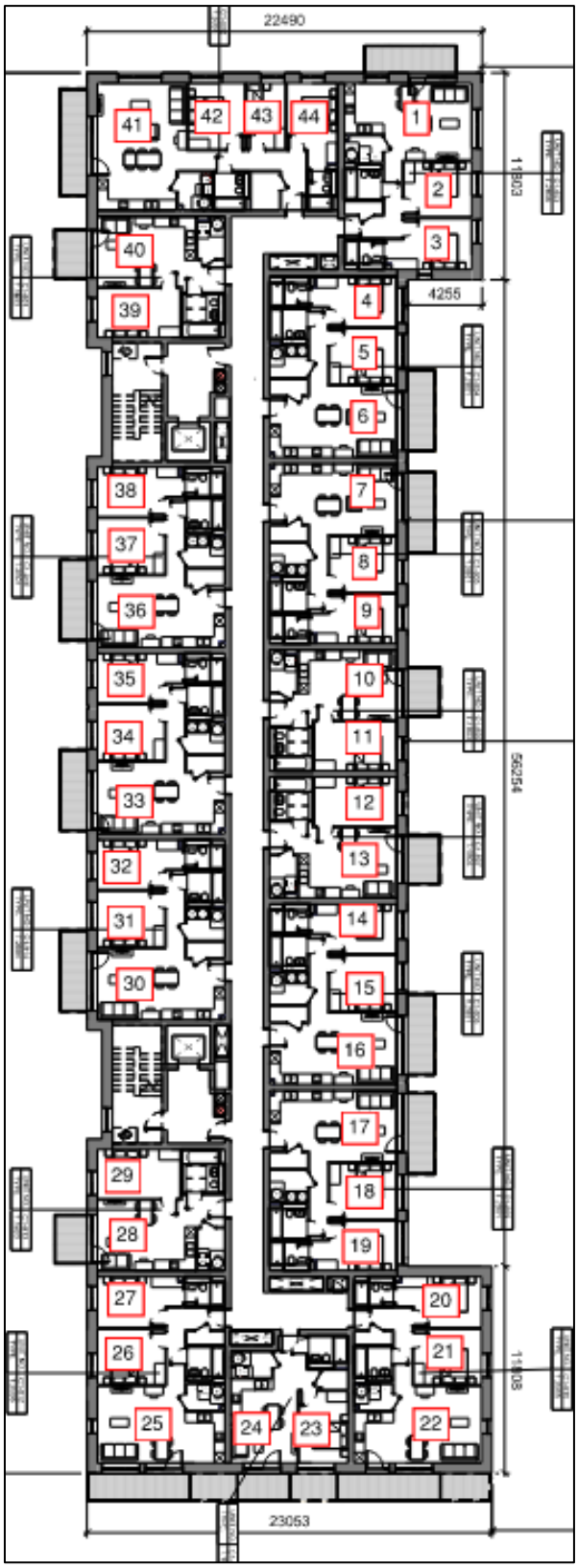


Figure 28: Block C1 6th Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Living/Kitchen	100%	Y	99%	Y
2	Bedroom	100%	Y	81%	Y
3	Bedroom	100%	Y	100%	Y
4	Bedroom	100%	Y	100%	Y
5	Bedroom	100%	Y	97%	Y
6	Living/Kitchen	100%	Y	96%	Y
7	Living/Kitchen	100%	Y	55%	Y
8	Bedroom	100%	Y	76%	Y
9	Bedroom	100%	Y	84%	Y
10	Living/Kitchen	100%	Y	73%	Y
11	Bedroom	100%	Y	88%	Y
12	Bedroom	100%	Y	82%	Y
13	Living/Kitchen	100%	Y	68%	Y
14	Bedroom	100%	Y	89%	Y
15	Bedroom	100%	Y	88%	Y
16	Living/Kitchen	100%	Y	67%	Y
17	Living/Kitchen	100%	Y	65%	Y
18	Bedroom	100%	Y	98%	Y
19	Bedroom	100%	Y	100%	Y
20	Bedroom	100%	Y	77%	Y
21	Bedroom	100%	Y	93%	Y
22	Living/Kitchen	100%	Y	100%	Y
23	Bedroom	100%	Y	100%	Y
24	Living/Kitchen	100%	Y	100%	Y
25	Living/Kitchen	100%	Y	100%	Y
26	Bedroom	100%	Y	96%	Y
27	Bedroom	100%	Y	99%	Y
28	Living/Kitchen	100%	Y	70%	Y
29	Bedroom	100%	Y	78%	Y
30	Living/Kitchen	100%	Y	73%	Y
31	Bedroom	100%	Y	94%	Y
32	Bedroom	100%	Y	100%	Y
33	Living/Kitchen	100%	Y	68%	Y
34	Bedroom	100%	Y	95%	Y
35	Bedroom	100%	Y	98%	Y
36	Living/Kitchen	100%	Y	86%	Y
37	Bedroom	100%	Y	96%	Y
38	Bedroom	100%	Y	99%	Y
39	Bedroom	100%	Y	97%	Y
40	Living/Kitchen	100%	Y	95%	Y
41	Living/Kitchen	100%	Y	97%	Y
42	Bedroom	100%	Y	89%	Y
43	Bedroom	100%	Y	94%	Y
44	Bedroom	100%	Y	94%	Y

Table 26: BR209 Methodology Results (Block C1 Sixth Floor)

Legends

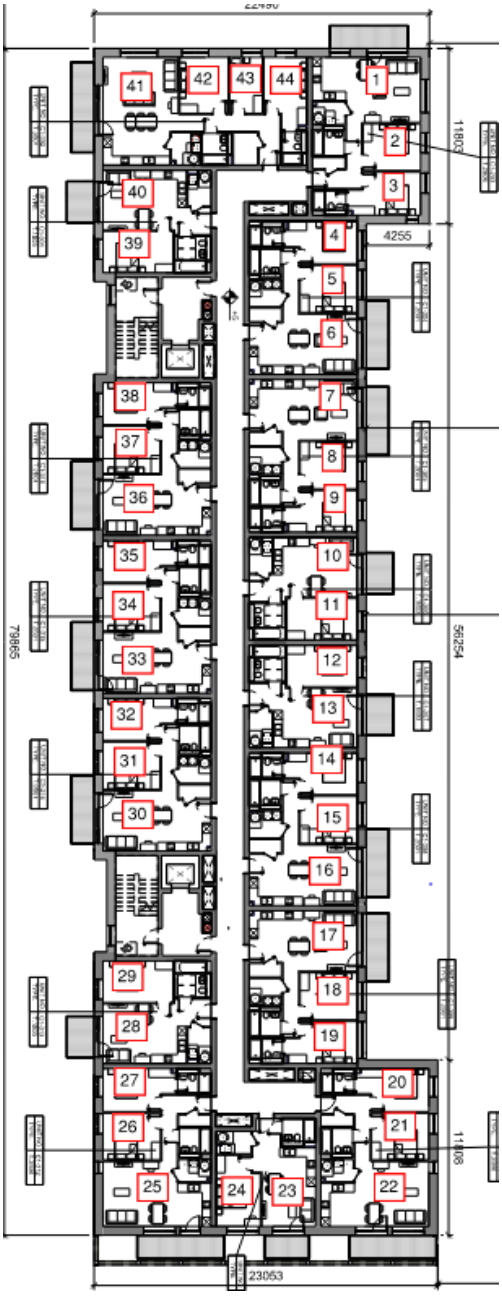


Figure 29: Block C1 7th Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Living/Kitchen	100%	Y	99%	Y
2	Bedroom	100%	Y	97%	Y
3	Bedroom	100%	Y	100%	Y
4	Bedroom	100%	Y	100%	Y
5	Bedroom	100%	Y	97%	Y
6	Living/Kitchen	100%	Y	100%	Y
7	Living/Kitchen	100%	Y	60%	Y
8	Bedroom	100%	Y	85%	Y
9	Bedroom	100%	Y	93%	Y
10	Living/Kitchen	100%	Y	81%	Y
11	Bedroom	100%	Y	92%	Y
12	Bedroom	100%	Y	91%	Y
13	Living/Kitchen	100%	Y	80%	Y
14	Bedroom	100%	Y	100%	Y
15	Bedroom	100%	Y	100%	Y
16	Living/Kitchen	100%	Y	71%	Y
17	Living/Kitchen	100%	Y	77%	Y
18	Bedroom	100%	Y	98%	Y
19	Bedroom	100%	Y	100%	Y
20	Bedroom	100%	Y	90%	Y
21	Bedroom	100%	Y	75%	Y
22	Living/Kitchen	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
23	Living/Kitchen	100%	Y	100%	Y
24	Bedroom	100%	Y	100%	Y
25	Living/Kitchen	100%	Y	100%	Y
26	Bedroom	100%	Y	91%	Y
27	Bedroom	100%	Y	100%	Y
28	Living/Kitchen	100%	Y	78%	Y
29	Bedroom	100%	Y	86%	Y
30	Living/Kitchen	100%	Y	83%	Y
31	Bedroom	100%	Y	96%	Y
32	Bedroom	100%	Y	100%	Y
33	Living/Kitchen	100%	Y	76%	Y
34	Bedroom	100%	Y	95%	Y
35	Bedroom	100%	Y	100%	Y
36	Living/Kitchen	100%	Y	96%	Y
37	Bedroom	100%	Y	96%	Y
38	Bedroom	100%	Y	100%	Y
39	Bedroom	100%	Y	97%	Y
40	Living/Kitchen	100%	Y	99%	Y
41	Living/Kitchen	100%	Y	100%	Y
42	Bedroom	100%	Y	100%	Y
43	Bedroom	100%	Y	94%	Y
44	Bedroom	100%	Y	97%	Y

Table 27: BR209 Methodology Results (Seventh Floor)

Legends

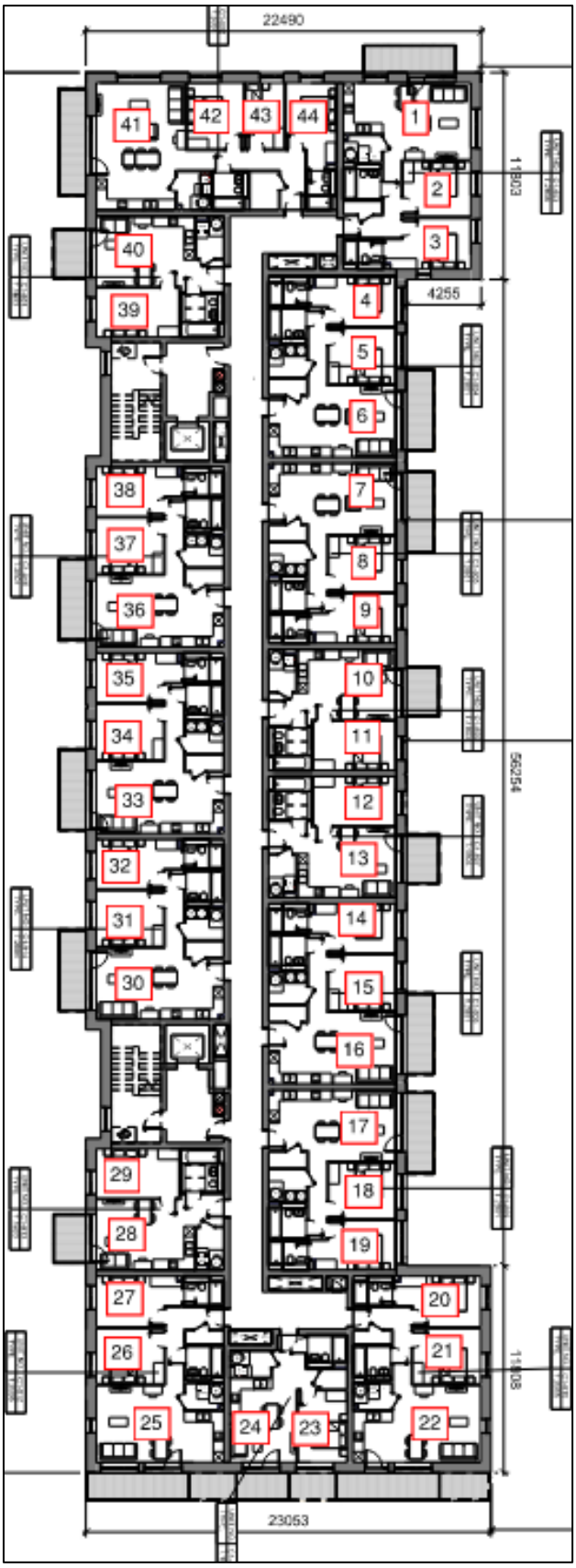


Figure 30: Block C1 8th Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Living/Kitchen	100%	Y	100%	Y
2	Bedroom	100%	Y	100%	Y
3	Bedroom	100%	Y	100%	Y
4	Bedroom	100%	Y	100%	Y
5	Bedroom	100%	Y	99%	Y
6	Living/Kitchen	100%	Y	100%	Y
7	Living/Kitchen	100%	Y	60%	Y
8	Bedroom	100%	Y	97%	Y
9	Bedroom	100%	Y	99%	Y
10	Living/Kitchen	100%	Y	87%	Y
11	Bedroom	100%	Y	98%	Y
12	Bedroom	100%	Y	97%	Y
13	Living/Kitchen	100%	Y	87%	Y
14	Bedroom	100%	Y	100%	Y
15	Bedroom	100%	Y	100%	Y
16	Living/Kitchen	100%	Y	82%	Y
17	Living/Kitchen	100%	Y	88%	Y
18	Bedroom	100%	Y	98%	Y
19	Bedroom	100%	Y	100%	Y
20	Bedroom	100%	Y	99%	Y
21	Bedroom	100%	Y	100%	Y
22	Living/Kitchen	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
23	Bedroom	100%	Y	100%	Y
24	Living/Kitchen	100%	Y	100%	Y
25	Living/Kitchen	100%	Y	100%	Y
26	Bedroom	100%	Y	98%	Y
27	Bedroom	100%	Y	100%	Y
28	Living/Kitchen	100%	Y	90%	Y
29	Bedroom	100%	Y	92%	Y
30	Living/Kitchen	100%	Y	94%	Y
31	Bedroom	100%	Y	96%	Y
32	Bedroom	100%	Y	100%	Y
33	Living/Kitchen	100%	Y	86%	Y
34	Bedroom	100%	Y	96%	Y
35	Bedroom	100%	Y	100%	Y
36	Living/Kitchen	100%	Y	99%	Y
37	Bedroom	100%	Y	96%	Y
38	Bedroom	100%	Y	100%	Y
39	Bedroom	100%	Y	99%	Y
40	Living/Kitchen	100%	Y	100%	Y
41	Living/Kitchen	100%	Y	100%	Y
42	Bedroom	100%	Y	100%	Y
43	Bedroom	100%	Y	97%	Y
44	Bedroom	100%	Y	97%	Y

Table 28: BR209 Methodology Results (Eighth Floor)

Legends

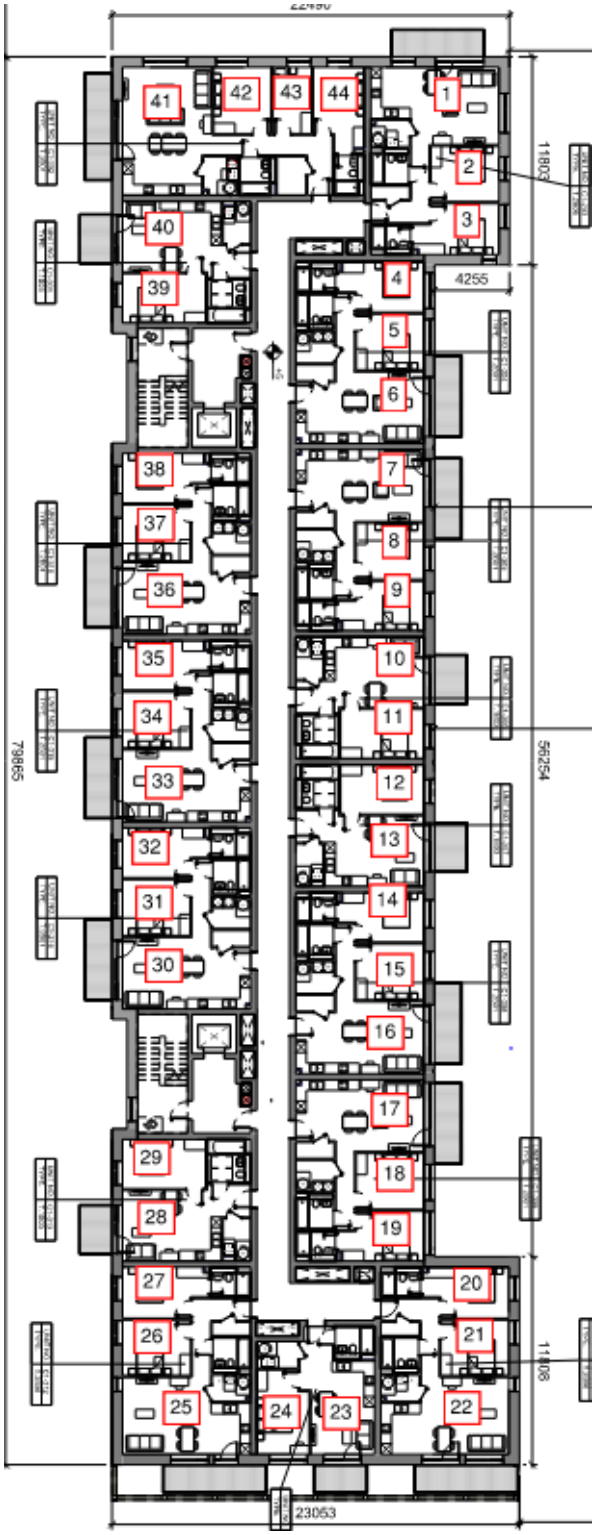


Figure 31: Block C1 9th Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Living/Kitchen	100%	Y	100%	Y
2	Bedroom	100%	Y	100%	Y
3	Bedroom	100%	Y	100%	Y
4	Bedroom	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Living/Kitchen	100%	Y	100%	Y
7	Living/Kitchen	100%	Y	75%	Y
8	Bedroom	100%	Y	100%	Y
9	Bedroom	100%	Y	100%	Y
10	Living/Kitchen	100%	Y	98%	Y
11	Bedroom	100%	Y	100%	Y
12	Bedroom	100%	Y	99%	Y
13	Living/Kitchen	100%	Y	98%	Y
14	Bedroom	100%	Y	100%	Y
15	Bedroom	100%	Y	100%	Y
16	Living/Kitchen	100%	Y	100%	Y
17	Living/Kitchen	100%	Y	100%	Y
18	Bedroom	100%	Y	100%	Y
19	Bedroom	100%	Y	100%	Y
20	Bedroom	100%	Y	100%	Y
21	Bedroom	100%	Y	100%	Y
22	Living/Kitchen	100%	Y	100%	Y
23	Living/Kitchen	100%	Y	100%	Y
24	Bedroom	100%	Y	100%	Y
25	Living/Kitchen	100%	Y	100%	Y
26	Bedroom	100%	Y	96%	Y
27	Bedroom	100%	Y	100%	Y
28	Living/Kitchen	100%	Y	99%	Y
29	Bedroom	100%	Y	95%	Y
30	Living/Kitchen	100%	Y	100%	Y
31	Bedroom	100%	Y	99%	Y
32	Bedroom	100%	Y	100%	Y
33	Living/Kitchen	100%	Y	100%	Y
34	Bedroom	100%	Y	98%	Y
35	Bedroom	100%	Y	100%	Y
36	Living/Kitchen	100%	Y	100%	Y
37	Bedroom	100%	Y	99%	Y
38	Bedroom	100%	Y	100%	Y
39	Bedroom	100%	Y	99%	Y
40	Living/Kitchen	100%	Y	100%	Y
41	Living/Kitchen	100%	Y	100%	Y
42	Bedroom	100%	Y	100%	Y
43	Bedroom	100%	Y	96%	Y
44	Bedroom	100%	Y	97%	Y

Table 29: BR209 Methodology Results (Ninth Floor)

Legends

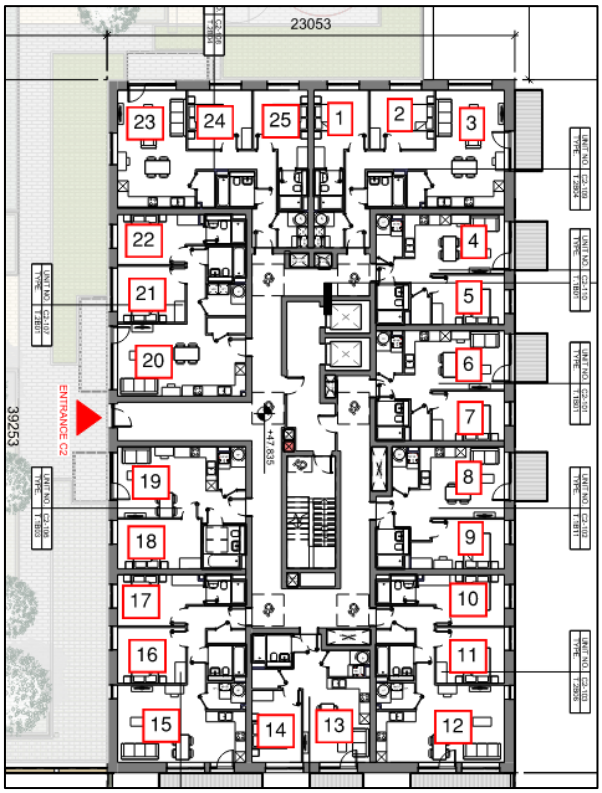


Figure 32: Block C2 1st Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom 1	100%	Y	91%	Y
2	Bedroom 2	100%	Y	100%	Y
3	Liv/Din	100%	Y	100%	Y
4	Liv/Din	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Liv/Din	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	100%	Y
9	Bedroom	100%	Y	100%	Y
10	Bedroom 1	100%	Y	100%	Y
11	Bedroom 2	100%	Y	100%	Y
12	Liv/Din	100%	Y	100%	Y
13	Liv/Din	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
14	Bedroom	100%	Y	100%	Y
15	Liv/Din	100%	Y	100%	Y
16	Bedroom 1	100%	Y	73%	Y
17	Bedroom 2	100%	Y	81%	Y
18	Bedroom	100%	Y	85%	Y
19	Liv/Din	100%	Y	83%	Y
20	Liv/Din	100%	Y	47%	N
21	Bedroom 1	100%	Y	51%	Y
22	Bedroom 2	100%	Y	47%	N
23	Liv/Din	100%	Y	96%	Y
24	Bedroom 1	100%	Y	79%	Y
25	Bedroom 2	100%	Y	80%	Y

Table 30: BR209 Methodology Results (Block C2-First Floor)

Legends

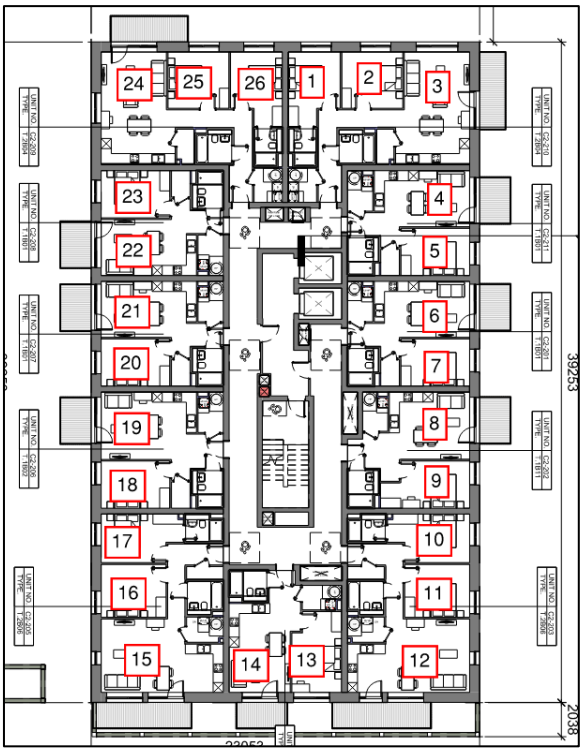


Figure 33: Block C2 2nd Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom 1	100%	Y	91%	Y
2	Bedroom 2	100%	Y	86%	Y
3	Liv/Din	100%	Y	100%	Y
4	Liv/Din	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Liv/Din	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	99%	Y
9	Bedroom	100%	Y	100%	Y
10	Bedroom 1	100%	Y	100%	Y
11	Bedroom 2	100%	Y	100%	Y
12	Liv/Din	100%	Y	100%	Y
13	Liv/Din	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
14	Bedroom	100%	Y	100%	Y
15	Liv/Din	100%	Y	100%	Y
16	Bedroom 1	100%	Y	88%	Y
17	Bedroom 2	100%	Y	77%	Y
18	Bedroom	100%	Y	75%	Y
19	Liv/Din	100%	Y	66%	Y
20	Bedroom	100%	Y	81%	Y
21	Liv/Din	100%	Y	57%	Y
22	Liv/Din	100%	Y	47%	N
23	Bedroom	100%	Y	62%	Y
24	Liv/Din	100%	Y	92%	Y
25	Bedroom 1	100%	Y	79%	Y
26	Bedroom 2	100%	Y	79%	Y

Table 31: BR209 Methodology Results (Block C2-Second Floor)

Legends

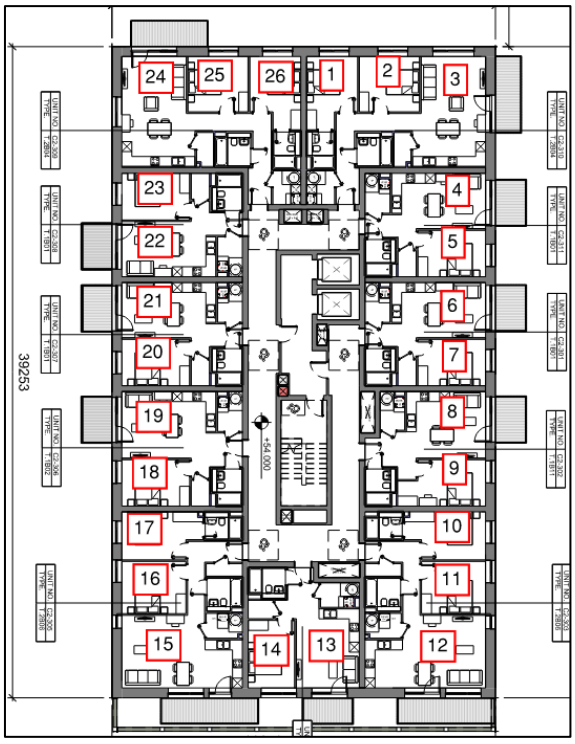


Figure 34: Block C2 3rd Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom 1	100%	Y	84%	Y
2	Bedroom 2	100%	Y	84%	Y
3	Liv/Din	100%	Y	100%	Y
4	Liv/Din	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Liv/Din	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	100%	Y
9	Bedroom	100%	Y	100%	Y
10	Bedroom 1	100%	Y	100%	Y
11	Bedroom 2	100%	Y	99%	Y
12	Liv/Din	100%	Y	100%	Y
13	Liv/Din	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
14	Bedroom	100%	Y	100%	Y
15	Liv/Din	100%	Y	100%	Y
16	Bedroom 1	100%	Y	90%	Y
17	Bedroom 2	100%	Y	75%	Y
18	Bedroom	100%	Y	61%	Y
19	Liv/Din	100%	Y	62%	Y
20	Bedroom	100%	Y	63%	Y
21	Liv/Din	100%	Y	56%	Y
22	Liv/Din	100%	Y	50%	Y
23	Bedroom	100%	Y	59%	Y
24	Liv/Din	100%	Y	81%	Y
25	Bedroom 1	100%	Y	79%	Y
26	Bedroom 2	100%	Y	84%	Y

Table 32: BR209 Methodology Results (Block C2-Third Floor)

Legends

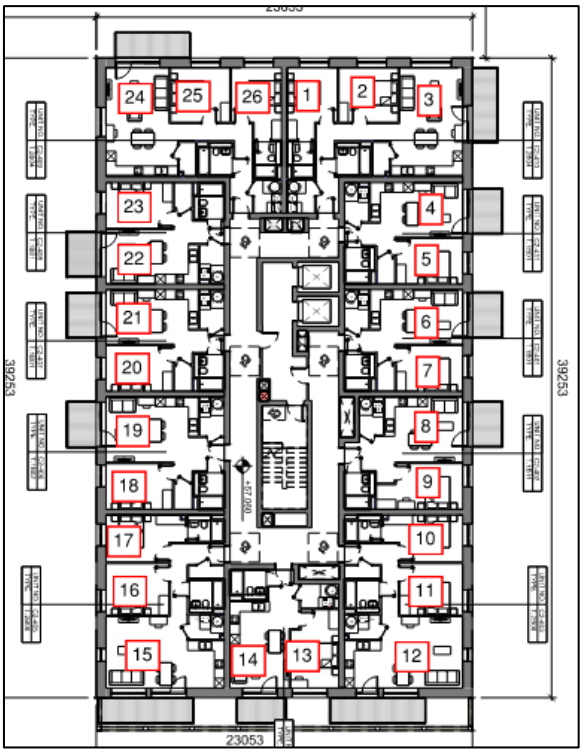


Figure 35: Block C2 4th Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom 1	100%	Y	87%	Y
2	Bedroom 2	100%	Y	83%	Y
3	Liv/Din	100%	Y	100%	Y
4	Liv/Din	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Liv/Din	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	100%	Y
9	Bedroom	100%	Y	99%	Y
10	Bedroom 1	100%	Y	100%	Y
11	Bedroom 2	100%	Y	98%	Y
12	Liv/Din	100%	Y	100%	Y
13	Liv/Din	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
14	Bedroom	100%	Y	100%	Y
15	Liv/Din	100%	Y	100%	Y
16	Bedroom 1	100%	Y	89%	Y
17	Bedroom 2	100%	Y	78%	Y
18	Bedroom	100%	Y	67%	Y
19	Liv/Din	100%	Y	62%	Y
20	Bedroom	100%	Y	72%	Y
21	Liv/Din	100%	Y	56%	Y
22	Liv/Din	100%	Y	51%	Y
23	Bedroom	100%	Y	63%	Y
24	Liv/Din	100%	Y	78%	Y
25	Bedroom 1	100%	Y	84%	Y
26	Bedroom 2	100%	Y	88%	Y

Table 33: BR209 Methodology Results (Block C2-Fourth Floor)

Legends

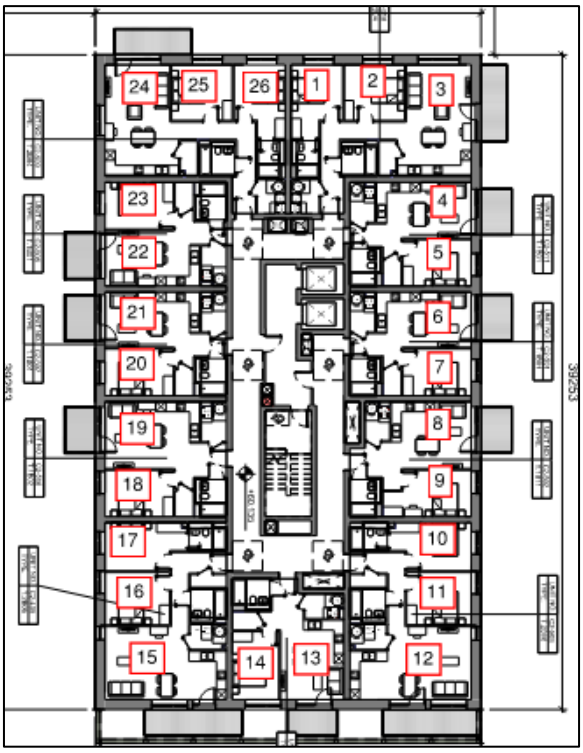


Figure 36: Block C2 5th Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom 1	100%	Y	91%	Y
2	Bedroom 2	100%	Y	87%	Y
3	Liv/Din	100%	Y	100%	Y
4	Liv/Din	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Liv/Din	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	100%	Y
9	Bedroom	100%	Y	99%	Y
10	Bedroom 1	100%	Y	100%	Y
11	Bedroom 2	100%	Y	98%	Y
12	Liv/Din	100%	Y	100%	Y
13	Liv/Din	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
14	Bedroom	100%	Y	100%	Y
15	Liv/Din	100%	Y	100%	Y
16	Bedroom 1	100%	Y	90%	Y
17	Bedroom 2	100%	Y	81%	Y
18	Bedroom	100%	Y	73%	Y
19	Liv/Din	100%	Y	66%	Y
20	Bedroom	100%	Y	81%	Y
21	Liv/Din	100%	Y	63%	Y
22	Liv/Din	100%	Y	57%	Y
23	Bedroom	100%	Y	74%	Y
24	Liv/Din	100%	Y	84%	Y
25	Bedroom 1	100%	Y	88%	Y
26	Bedroom 2	100%	Y	94%	Y

Table 34: BR209 Methodology Results (Block C2-Fifth Floor)

Legends

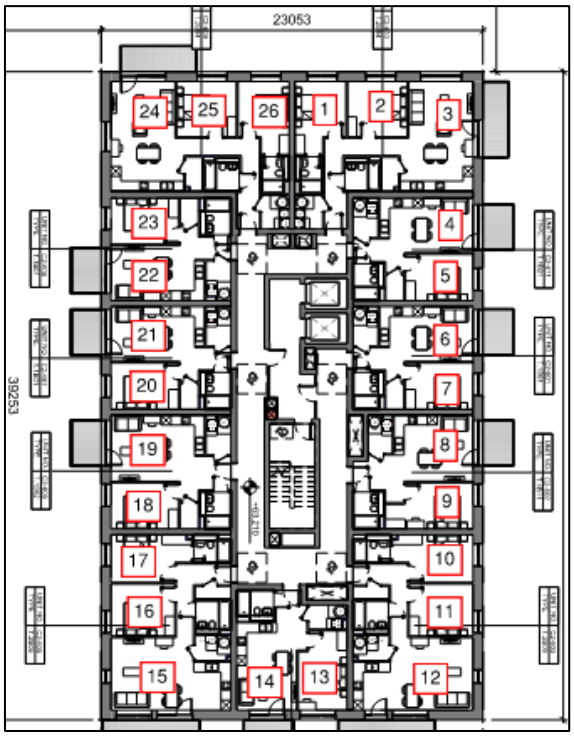


Figure 37: Block C2 6th Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom 1	100%	Y	98%	Y
2	Bedroom 2	100%	Y	94%	Y
3	Liv/Din	100%	Y	100%	Y
4	Liv/Din	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Liv/Din	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	100%	Y
9	Bedroom	100%	Y	98%	Y
10	Bedroom 1	100%	Y	100%	Y
11	Bedroom 2	100%	Y	98%	Y
12	Liv/Din	100%	Y	100%	Y
13	Liv/Din	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
14	Bedroom	100%	Y	100%	Y
15	Liv/Din	100%	Y	100%	Y
16	Bedroom 1	100%	Y	93%	Y
17	Bedroom 2	100%	Y	89%	Y
18	Bedroom	100%	Y	86%	Y
19	Liv/Din	100%	Y	72%	Y
20	Bedroom	100%	Y	91%	Y
21	Liv/Din	100%	Y	73%	Y
22	Liv/Din	100%	Y	68%	Y
23	Bedroom	100%	Y	87%	Y
24	Liv/Din	100%	Y	92%	Y
25	Bedroom 1	100%	Y	95%	Y
26	Bedroom 2	100%	Y	94%	Y

Table 35: BR209 Methodology Results (Block C2-Sixth Floor)

Legends

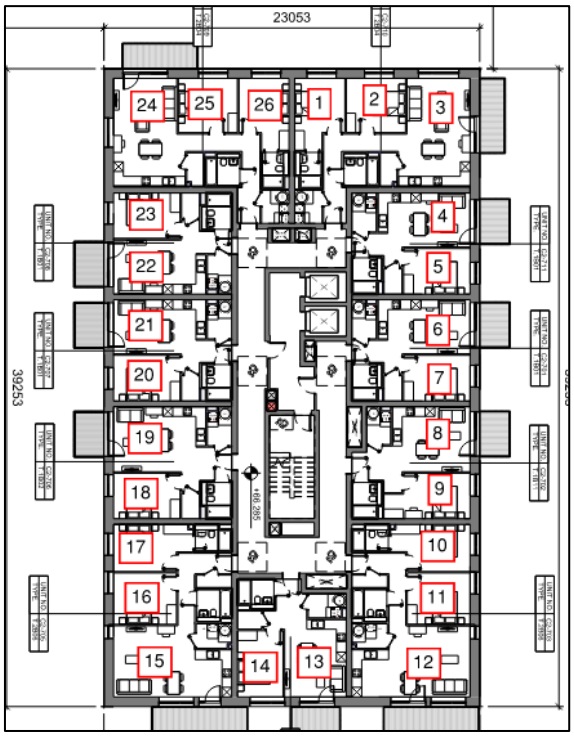


Figure 38: Block C2 7th Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom 1	100%	Y	98%	Y
2	Bedroom 2	100%	Y	98%	Y
3	Liv/Din	100%	Y	100%	Y
4	Liv/Din	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Liv/Din	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	100%	Y
9	Bedroom	100%	Y	99%	Y
10	Bedroom 1	100%	Y	100%	Y
11	Bedroom 2	100%	Y	98%	Y
12	Liv/Din	100%	Y	100%	Y
13	Liv/Din	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y
15	Liv/Din	100%	Y	100%	Y
16	Bedroom 1	100%	Y	98%	Y
17	Bedroom 2	100%	Y	95%	Y
18	Bedroom	100%	Y	92%	Y
19	Liv/Din	100%	Y	87%	Y
20	Bedroom	100%	Y	95%	Y
21	Liv/Din	100%	Y	85%	Y
22	Liv/Din	100%	Y	83%	Y
23	Bedroom	100%	Y	94%	Y
24	Liv/Din	100%	Y	97%	Y
25	Bedroom 1	100%	Y	95%	Y
26	Bedroom 2	100%	Y	94%	Y

Table 36: BR209 Methodology Results (Block C2-Seventh Floor)

Legends

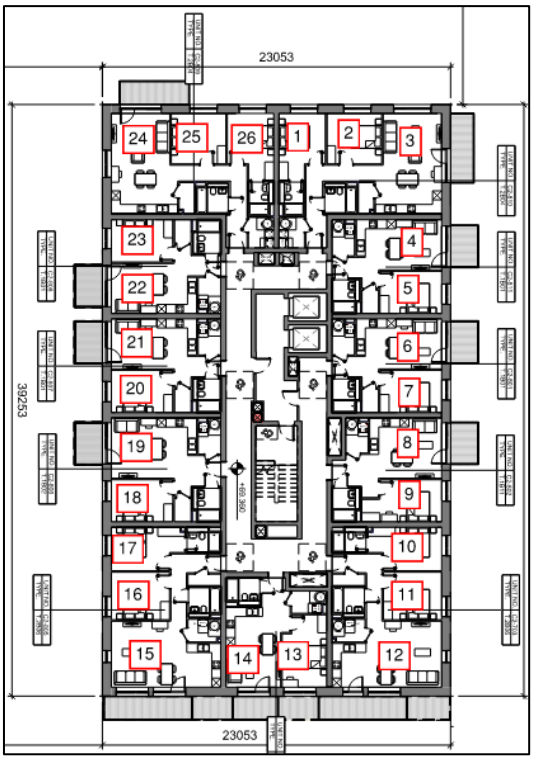


Figure 39: Block C2 8th Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom 1	100%	Y	98%	Y
2	Bedroom 2	100%	Y	98%	Y
3	Liv/Din	100%	Y	100%	Y
4	Liv/Din	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Liv/Din	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	100%	Y
9	Bedroom	100%	Y	99%	Y
10	Bedroom 1	100%	Y	100%	Y
11	Bedroom 2	100%	Y	98%	Y
12	Liv/Din	100%	Y	100%	Y
13	Liv/Din	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
14	Bedroom	100%	Y	100%	Y
15	Liv/Din	100%	Y	100%	Y
16	Bedroom 1	100%	Y	99%	Y
17	Bedroom 2	100%	Y	97%	Y
18	Bedroom	100%	Y	92%	Y
19	Liv/Din	100%	Y	98%	Y
20	Bedroom	100%	Y	97%	Y
21	Liv/Din	100%	Y	99%	Y
22	Liv/Din	100%	Y	99%	Y
23	Bedroom	100%	Y	94%	Y
24	Liv/Din	100%	Y	99%	Y
25	Bedroom 1	100%	Y	95%	Y
26	Bedroom 2	100%	Y	96%	Y

Table 37: BR209 Methodology Results (Block C2-Eighth Floor)

Legends

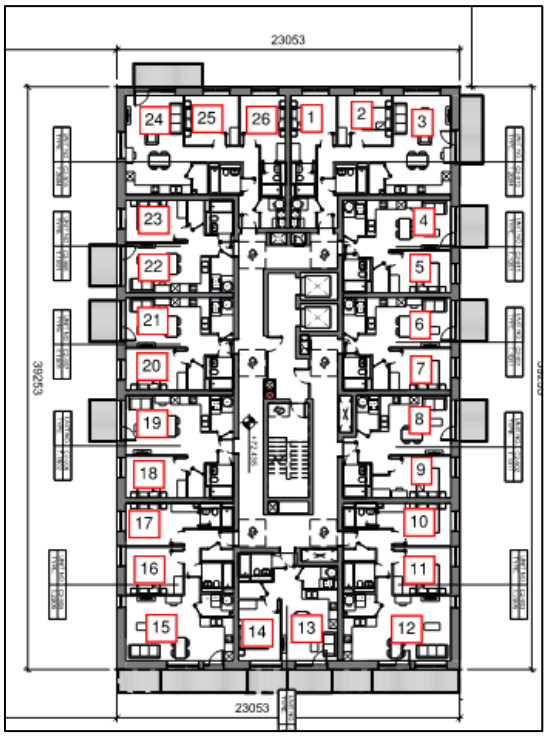


Figure 40: Block C2 9th Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom 1	100%	Y	98%	Y
2	Bedroom 2	100%	Y	100%	Y
3	Liv/Din	100%	Y	100%	Y
4	Liv/Din	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Liv/Din	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	100%	Y
9	Bedroom	100%	Y	99%	Y
10	Bedroom 1	100%	Y	100%	Y
11	Bedroom 2	100%	Y	98%	Y
12	Liv/Din	100%	Y	100%	Y
13	Liv/Din	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
14	Bedroom	100%	Y	100%	Y
15	Liv/Din	100%	Y	100%	Y
16	Bedroom 1	100%	Y	99%	Y
17	Bedroom 2	100%	Y	97%	Y
18	Bedroom	100%	Y	94%	Y
19	Liv/Din	100%	Y	99%	Y
20	Bedroom	100%	Y	100%	Y
21	Liv/Din	100%	Y	100%	Y
22	Liv/Din	100%	Y	100%	Y
23	Bedroom	100%	Y	97%	Y
24	Liv/Din	100%	Y	100%	Y
25	Bedroom 1	100%	Y	96%	Y
26	Bedroom 2	100%	Y	98%	Y

Table 38: BR209 Methodology Results (Block C2-Ninth Floor)

Legends

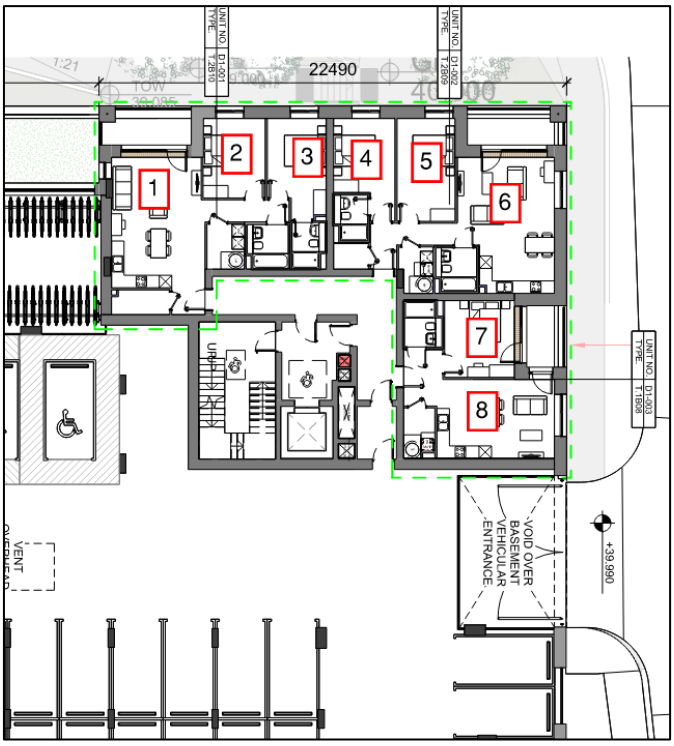


Figure 41: Block D1 Ground Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	97%	Y
2	Bedroom 1	100%	Y	96%	Y
3	Bedroom 2	100%	Y	97%	Y
4	Bedroom 1	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
5	Bedroom 2	100%	Y	100%	Y
6	Liv/Din	98%	Y	98%	Y
7	Bedroom	100%	Y	96%	Y
8	Liv/Din	100%	Y	93%	Y

Table 39: BR209 Methodology Results (Block D1-Ground Floor)

Legends

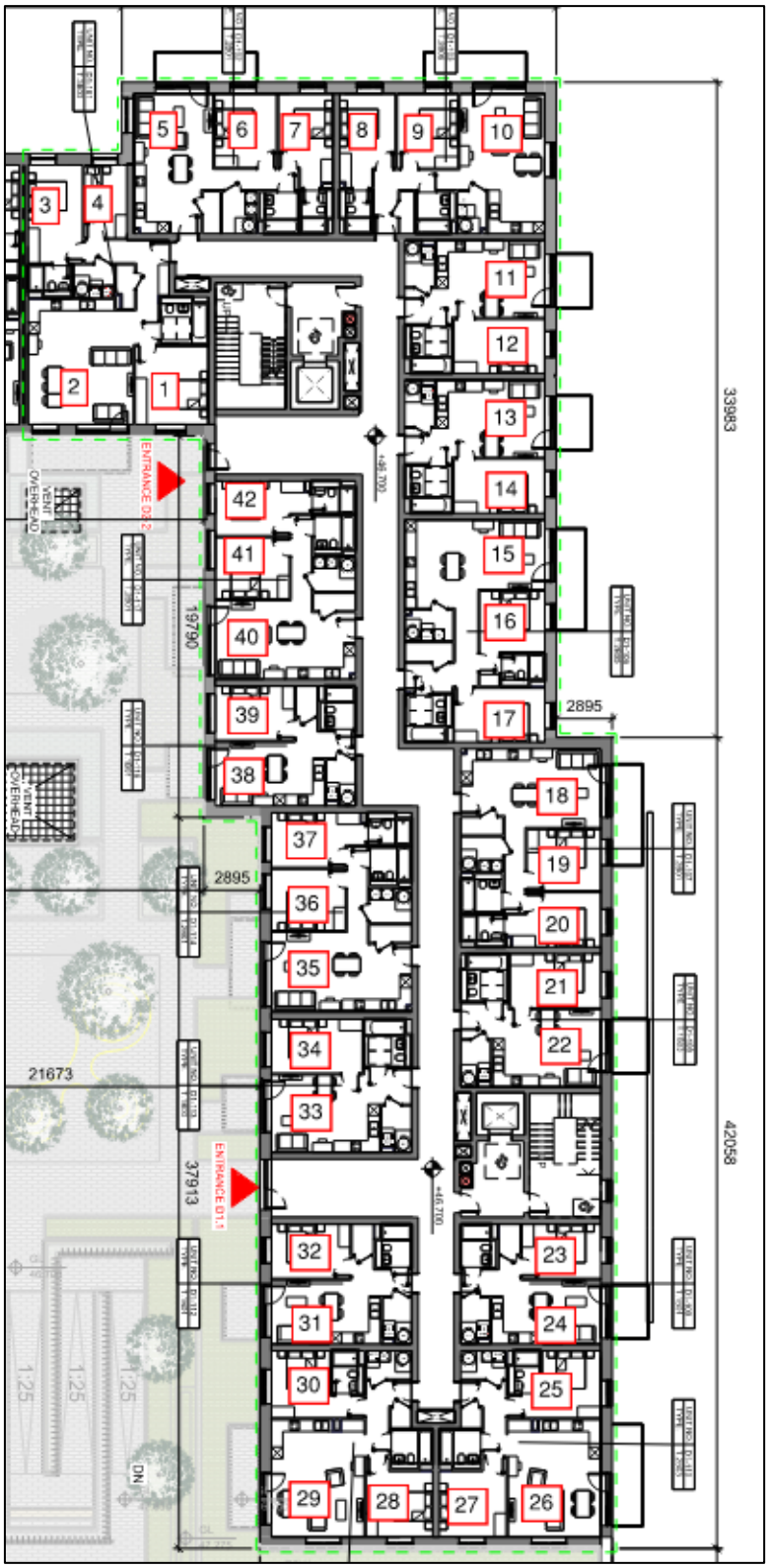


Figure 42: Block D1 First Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom 1	92%	N	57%	Y
2	Liv/Din	100%	Y	50%	Y
3	Bedroom 2	100%	Y	99%	Y
4	Bedroom 3	100%	Y	100%	Y
5	Liv/Din	100%	Y	89%	Y
6	Bedroom 1	100%	Y	92%	Y
7	Bedroom 2	100%	Y	93%	Y
8	Bedroom 1	100%	Y	93%	Y
9	Bedroom 2	100%	Y	90%	Y
10	Liv/Din	100%	Y	95%	Y
11	Liv/Din	100%	Y	99%	Y
12	Bedroom	100%	Y	100%	Y
13	Liv/Din	100%	Y	99%	Y
14	Bedroom	100%	Y	95%	Y
15	Liv/Din	100%	Y	64%	Y
16	Bedroom 1	100%	Y	100%	Y
17	Bedroom 2	100%	Y	98%	Y
18	Liv/Din	100%	Y	70%	Y
19	Bedroom 1	100%	Y	93%	Y
20	Bedroom 2	100%	Y	100%	Y
21	Bedroom	100%	Y	100%	Y
22	Liv/Din	100%	Y	99%	Y
23	Bedroom	100%	Y	100%	Y
24	Liv/Din	100%	Y	99%	Y
25	Bedroom 1	100%	Y	100%	Y
26	Liv/Din	100%	Y	98%	Y
27	Bedroom 2	100%	Y	63%	Y
28	Bedroom 1	100%	Y	81%	Y
29	Liv/Din	100%	Y	90%	Y
30	Bedroom 2	100%	Y	50%	Y
31	Liv/Din	100%	Y	50%	Y
32	Bedroom	100%	Y	51%	Y
33	Liv/Din	100%	Y	51%	Y
34	Bedroom 1	100%	Y	75%	Y
35	Liv/Din	100%	Y	44%	N
36	Bedroom 1	100%	Y	58%	Y
37	Bedroom 2	100%	Y	60%	Y
38	Liv/Din	100%	Y	50%	Y
39	Bedroom	100%	Y	75%	Y
40	Liv/Din	100%	Y	29%	N
41	Bedroom 1	100%	Y	47%	N
42	Bedroom 2	100%	Y	52%	Y

Table 40: BR209 Methodology Results (Block D1-First Floor)

Legends

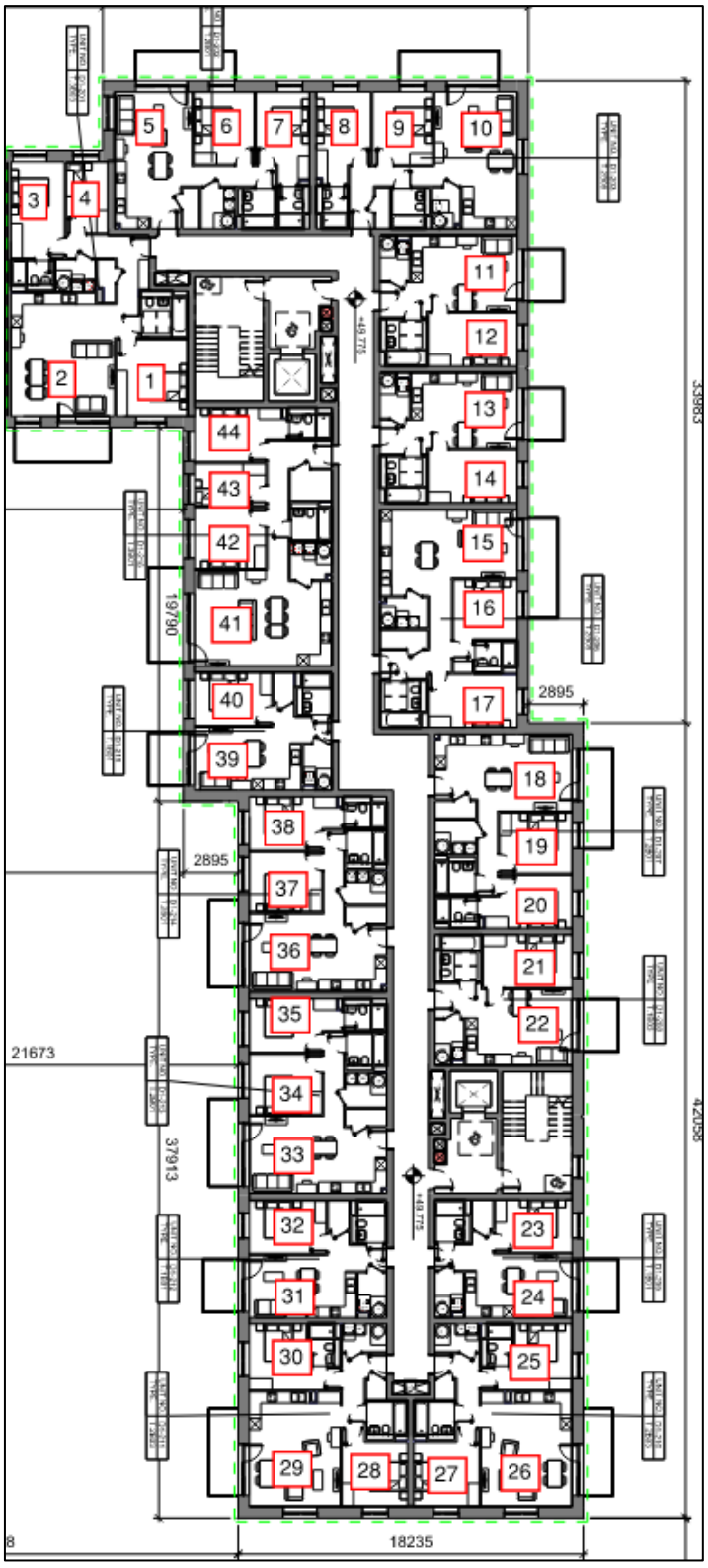


Figure 43: Block D1 Second Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom 1	96%	Y	61%	Y
2	Liv/Din	100%	Y	62%	Y
3	Bedroom 2	100%	Y	100%	Y
4	Bedroom 3	100%	Y	100%	Y
5	Liv/Din	100%	Y	90%	Y
6	Bedroom 1	100%	Y	93%	Y
7	Bedroom 2	100%	Y	93%	Y
8	Bedroom 1	100%	Y	92%	Y
9	Bedroom 2	100%	Y	90%	Y
10	Liv/Din	100%	Y	95%	Y
11	Liv/Din	100%	Y	99%	Y
12	Bedroom	100%	Y	100%	Y
13	Liv/Din	100%	Y	99%	Y
14	Bedroom	100%	Y	95%	Y
15	Liv/Din	100%	Y	64%	Y
16	Bedroom 1	100%	Y	100%	Y
17	Bedroom 2	100%	Y	99%	Y
18	Liv/Din	100%	Y	71%	Y
19	Bedroom 1	100%	Y	94%	Y
20	Bedroom 2	100%	Y	100%	Y
21	Bedroom	100%	Y	100%	Y
22	Liv/Din	100%	Y	99%	Y
23	Bedroom	100%	Y	100%	Y
24	Liv/Din	100%	Y	99%	Y
25	Bedroom 1	100%	Y	99%	Y
26	Liv/Din	100%	Y	98%	Y
27	Bedroom 2	100%	Y	65%	Y
28	Bedroom 1	100%	Y	81%	Y
29	Liv/Din	100%	Y	96%	Y
30	Bedroom 2	100%	Y	59%	Y
31	Liv/Din	100%	Y	51%	Y
32	Bedroom	100%	Y	69%	Y
33	Liv/Din	77%	N	27%	N
34	Bedroom 1	100%	Y	54%	Y
35	Bedroom 2	100%	Y	79%	Y
36	Liv/Din	100%	Y	51%	Y
37	Bedroom 1	100%	Y	69%	Y
38	Bedroom 2	100%	Y	79%	Y
39	Liv/Din	100%	Y	50%	Y
40	Bedroom	100%	Y	80%	Y
41	Liv/Din	99%	Y	28%	N
42	Bedroom 1	100%	Y	68%	Y
43	Bedroom 2	100%	Y	62%	Y
44	Bedroom 3	91%	N	44%	N

Table 41: BR209 Methodology Results (Block D1-Second Floor)

Legends

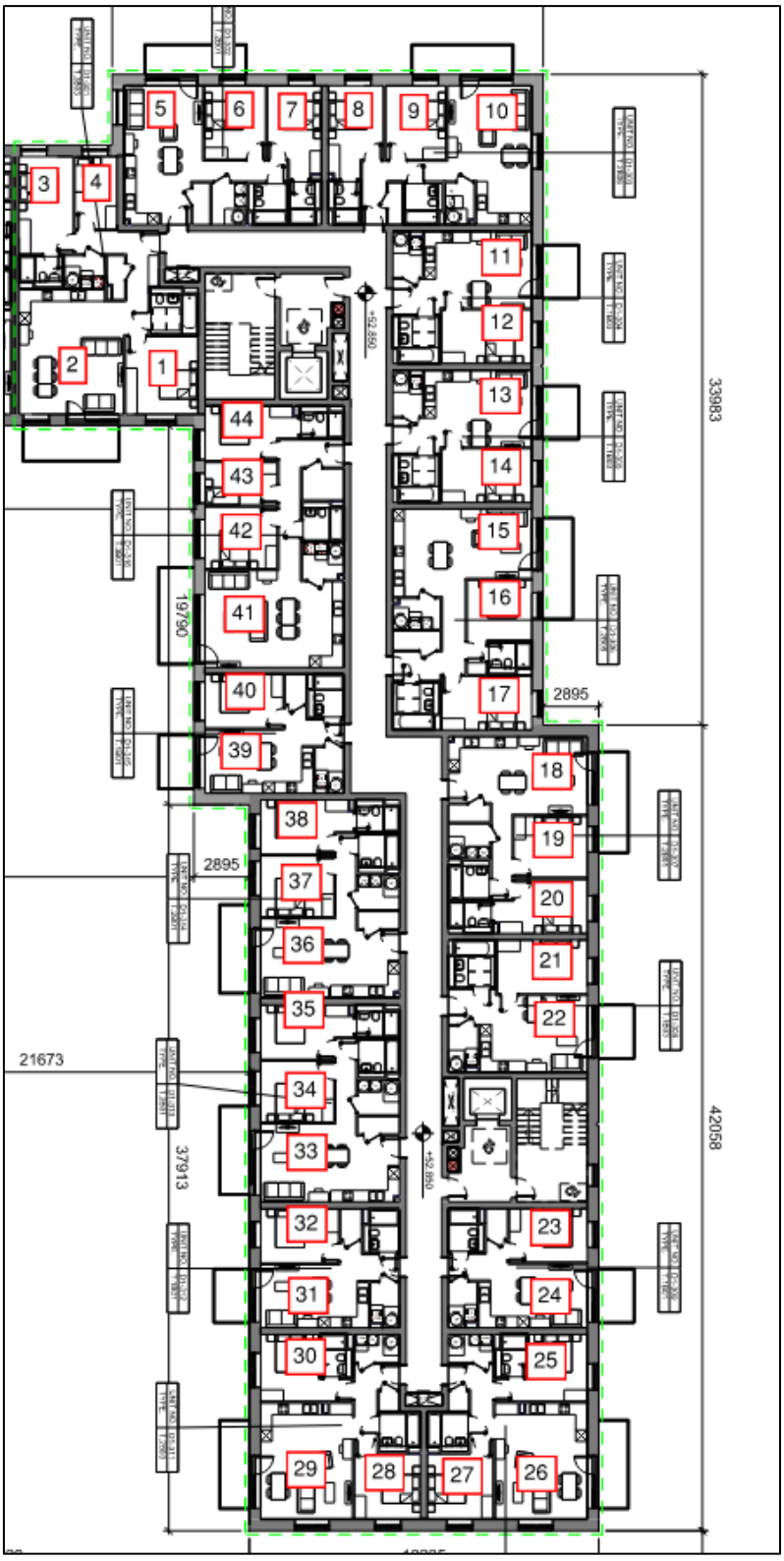


Figure 44: Block D1 Third Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom 1	95%	Y	63%	Y
2	Liv/Din	100%	Y	71%	Y
3	Bedroom 2	100%	Y	97%	Y
4	Bedroom 3	100%	Y	100%	Y
5	Liv/Din	100%	Y	90%	Y
6	Bedroom 1	100%	Y	93%	Y
7	Bedroom 2	100%	Y	93%	Y
8	Bedroom 1	100%	Y	92%	Y
9	Bedroom 2	100%	Y	90%	Y
10	Liv/Din	95%	Y	95%	Y
11	Liv/Din	100%	Y	99%	Y
12	Bedroom	100%	Y	100%	Y
13	Liv/Din	100%	Y	99%	Y
14	Bedroom	100%	Y	95%	Y
15	Liv/Din	100%	Y	64%	Y
16	Bedroom 1	100%	Y	100%	Y
17	Bedroom 2	100%	Y	100%	Y
18	Liv/Din	100%	Y	71%	Y
19	Bedroom 1	100%	Y	94%	Y
20	Bedroom 2	100%	Y	100%	Y
21	Bedroom	100%	Y	100%	Y
22	Liv/Din	100%	Y	99%	Y
23	Bedroom	100%	Y	100%	Y
24	Liv/Din	100%	Y	100%	Y
25	Bedroom 1	100%	Y	99%	Y
26	Liv/Din	100%	Y	97%	Y
27	Bedroom 2	100%	Y	63%	Y
28	Bedroom 1	100%	Y	74%	Y
29	Liv/Din	100%	Y	88%	Y
30	Bedroom 2	100%	Y	63%	Y
31	Liv/Din	100%	Y	58%	Y
32	Bedroom	100%	Y	65%	Y
33	Liv/Din	80%	N	32%	N
34	Bedroom 1	100%	Y	52%	Y
35	Bedroom 2	100%	Y	80%	Y
36	Liv/Din	100%	Y	52%	Y
37	Bedroom 1	100%	Y	77%	Y
38	Bedroom 2	100%	Y	80%	Y
39	Liv/Din	100%	Y	65%	Y
40	Bedroom	100%	Y	88%	Y
41	Liv/Din	99%	Y	30%	N
42	Bedroom 1	100%	Y	79%	Y
43	Bedroom 2	100%	Y	71%	Y
44	Bedroom 3	95%	Y	51%	Y

Table 42: BR209 Methodology Results (Block D1-Third Floor)

Legends

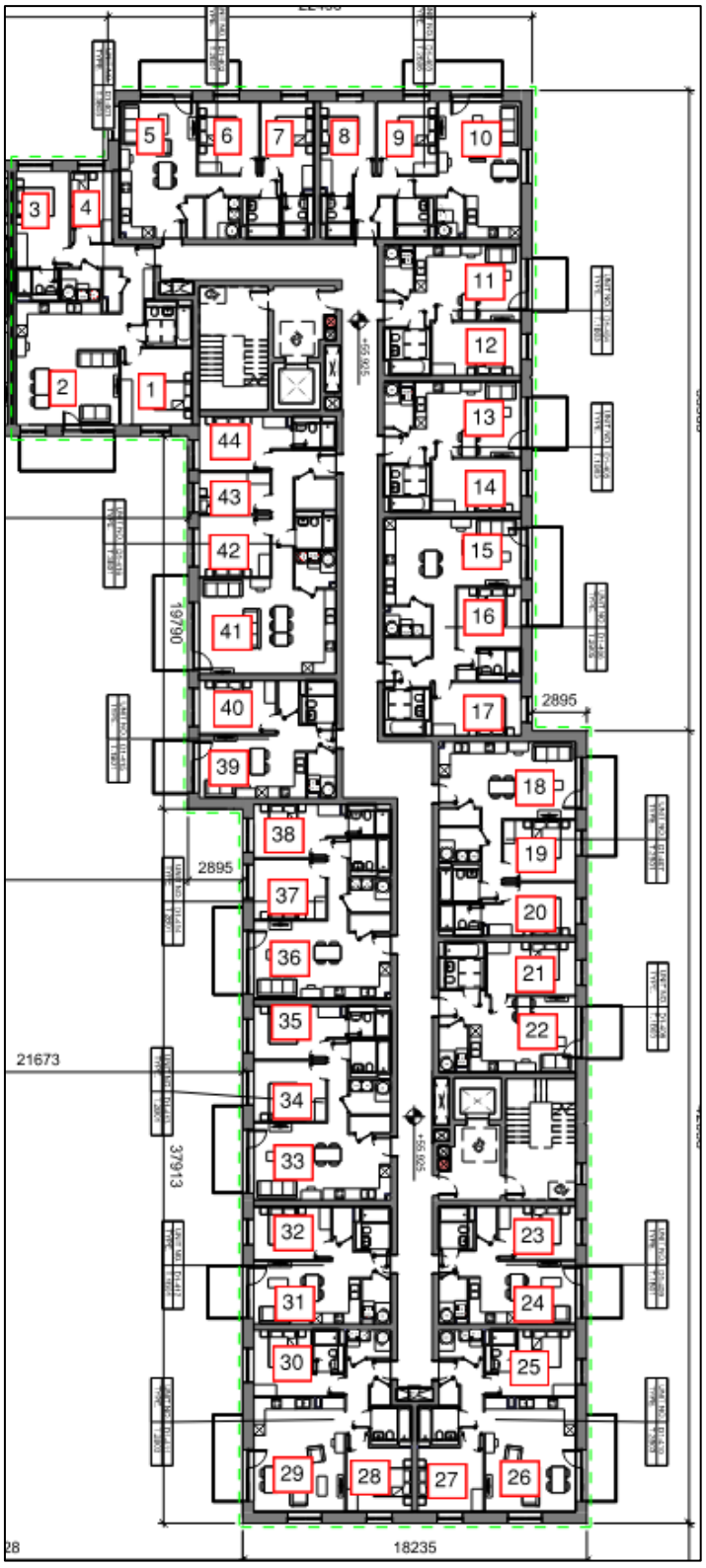


Figure 45: Block D1 Fourth Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom 1	100%	Y	71%	Y
2	Liv/Din	100%	Y	85%	Y
3	Bedroom 2	100%	Y	100%	Y
4	Bedroom 3	100%	Y	100%	Y
5	Liv/Din	100%	Y	92%	Y
6	Bedroom 1	100%	Y	94%	Y
7	Bedroom 2	100%	Y	95%	Y
8	Bedroom 1	100%	Y	95%	Y
9	Bedroom 2	100%	Y	91%	Y
10	Liv/Din	96%	Y	95%	Y
11	Liv/Din	100%	Y	99%	Y
12	Bedroom	100%	Y	100%	Y
13	Liv/Din	100%	Y	99%	Y
14	Bedroom	100%	Y	95%	Y
15	Liv/Din	100%	Y	66%	Y
16	Bedroom 1	100%	Y	100%	Y
17	Bedroom 2	100%	Y	98%	Y
18	Liv/Din	100%	Y	72%	Y
19	Bedroom 1	100%	Y	94%	Y
20	Bedroom 2	100%	Y	100%	Y
21	Bedroom	100%	Y	100%	Y
22	Liv/Din	100%	Y	99%	Y
23	Bedroom	100%	Y	100%	Y
24	Liv/Din	100%	Y	100%	Y
25	Bedroom 1	100%	Y	99%	Y
26	Liv/Din	100%	Y	97%	Y
27	Bedroom 2	100%	Y	63%	Y
28	Bedroom 1	100%	Y	77%	Y
29	Liv/Din	100%	Y	85%	Y
30	Bedroom 2	100%	Y	73%	Y
31	Liv/Din	100%	Y	57%	Y
32	Bedroom	100%	Y	70%	Y
33	Liv/Din	76%	N	35%	N
34	Bedroom 1	100%	Y	54%	Y
35	Bedroom 2	100%	Y	81%	Y
36	Liv/Din	100%	Y	52%	Y
37	Bedroom 1	100%	Y	97%	Y
38	Bedroom 2	100%	Y	85%	Y
39	Liv/Din	100%	Y	71%	Y
40	Bedroom	100%	Y	93%	Y
41	Liv/Din	99%	Y	34%	N
42	Bedroom 1	100%	Y	96%	Y
43	Bedroom 2	100%	Y	85%	Y
44	Bedroom 3	97%	Y	67%	Y

Table 43: BR209 Methodology Results (Block D1-Fourth Floor)

Legends

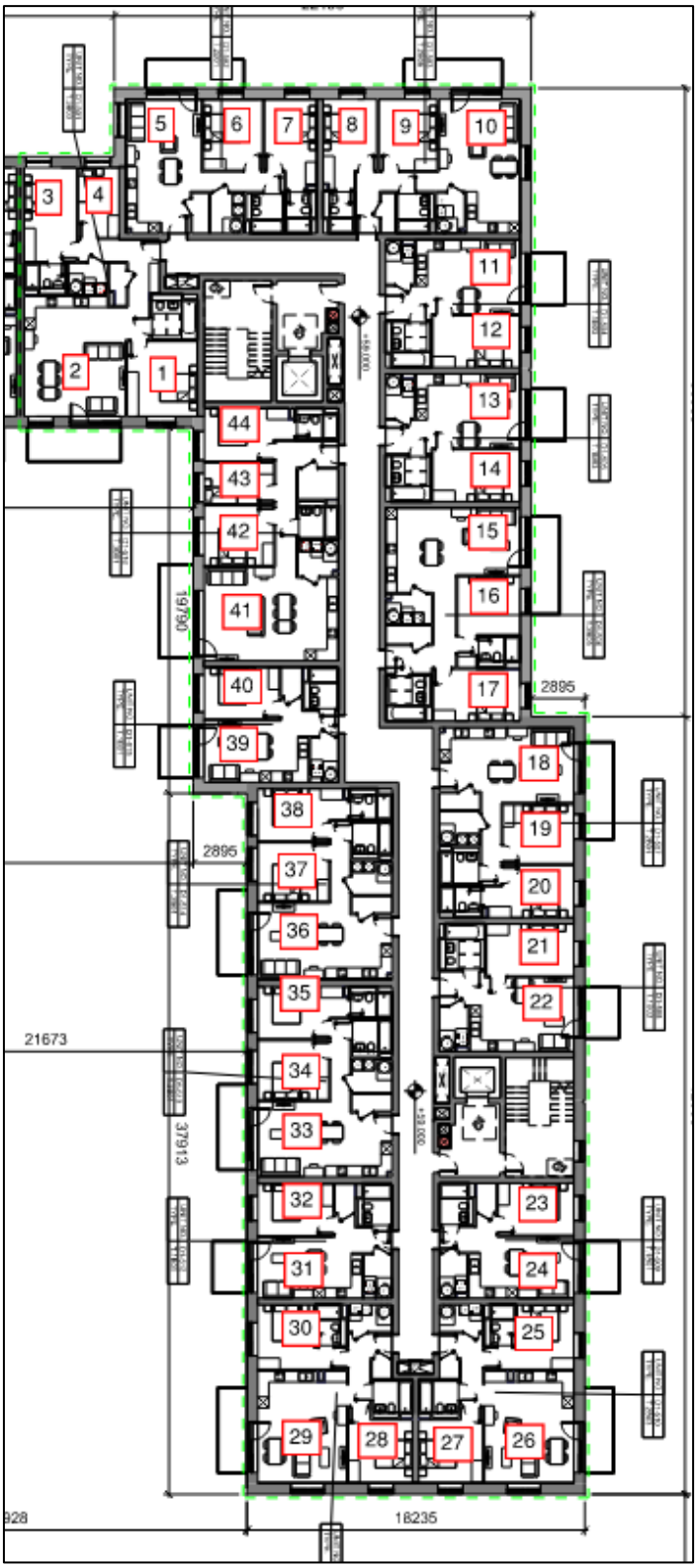


Figure 46: Block D1 Fifth Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom 1	100%	Y	86%	Y
2	Liv/Din	100%	Y	99%	Y
3	Bedroom 2	100%	Y	100%	Y
4	Bedroom 3	100%	Y	100%	Y
5	Liv/Din	100%	Y	93%	Y
6	Bedroom 1	100%	Y	95%	Y
7	Bedroom 2	100%	Y	95%	Y
8	Bedroom 1	100%	Y	93%	Y
9	Bedroom 2	100%	Y	91%	Y
10	Liv/Din	96%	Y	95%	Y
11	Liv/Din	100%	Y	99%	Y
12	Bedroom	100%	Y	100%	Y
13	Liv/Din	100%	Y	99%	Y
14	Bedroom	100%	Y	95%	Y
15	Liv/Din	100%	Y	71%	Y
16	Bedroom 1	100%	Y	100%	Y
17	Bedroom 2	100%	Y	100%	Y
18	Liv/Din	100%	Y	72%	Y
19	Bedroom 1	100%	Y	94%	Y
20	Bedroom 2	100%	Y	100%	Y
21	Bedroom	100%	Y	100%	Y
22	Liv/Din	100%	Y	99%	Y
23	Bedroom	100%	Y	100%	Y
24	Liv/Din	100%	Y	100%	Y
25	Bedroom 1	100%	Y	97%	Y
26	Liv/Din	100%	Y	97%	Y
27	Bedroom 2	100%	Y	63%	Y
28	Bedroom 1	100%	Y	79%	Y
29	Liv/Din	100%	Y	87%	Y
30	Bedroom 2	100%	Y	81%	Y
31	Liv/Din	100%	Y	65%	Y
32	Bedroom	100%	Y	79%	Y
33	Liv/Din	82%	N	42%	N
34	Bedroom 1	100%	Y	64%	Y
35	Bedroom 2	100%	Y	87%	Y
36	Liv/Din	100%	Y	66%	Y
37	Bedroom 1	100%	Y	100%	Y
38	Bedroom 2	100%	Y	90%	Y
39	Liv/Din	100%	Y	81%	Y
40	Bedroom	100%	Y	98%	Y
41	Liv/Din	100%	Y	53%	Y
42	Bedroom 1	100%	Y	96%	Y
43	Bedroom 2	100%	Y	95%	Y
44	Bedroom 3	100%	Y	78%	Y

Table 44: BR209 Methodology Results (Block D1-Fifth Floor)

Legends

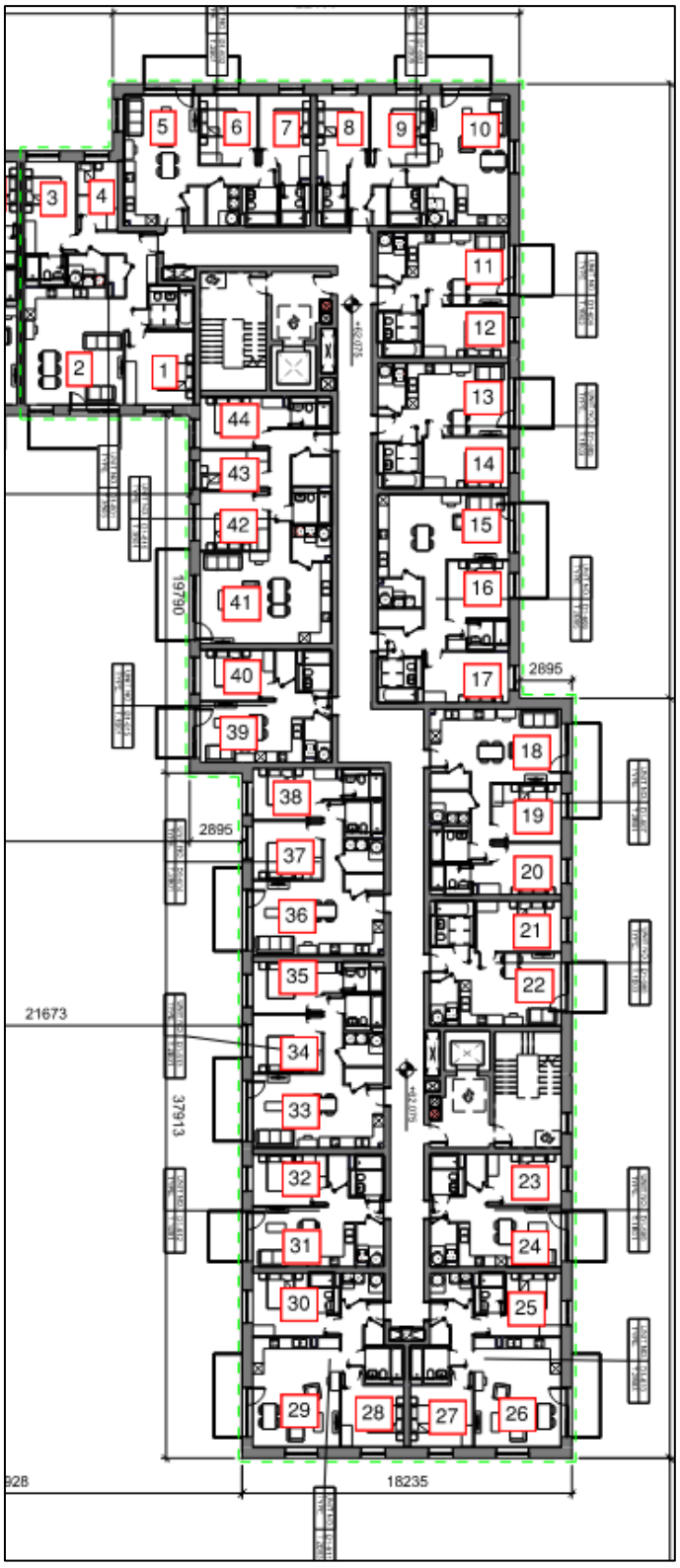


Figure 47: Block D1 Sixth Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom 1	100%	Y	96%	Y
2	Liv/Din	100%	Y	100%	Y
3	Bedroom 2	100%	Y	100%	Y
4	Bedroom 3	100%	Y	100%	Y
5	Liv/Din	100%	Y	90%	Y
6	Bedroom 1	100%	Y	93%	Y
7	Bedroom 2	100%	Y	95%	Y
8	Bedroom 1	100%	Y	95%	Y
9	Bedroom 2	100%	Y	90%	Y
10	Liv/Din	96%	Y	95%	Y
11	Liv/Din	100%	Y	99%	Y
12	Bedroom	100%	Y	100%	Y
13	Liv/Din	100%	Y	100%	Y
14	Bedroom	100%	Y	96%	Y
15	Liv/Din	100%	Y	69%	Y
16	Bedroom 1	100%	Y	100%	Y
17	Bedroom 2	100%	Y	100%	Y
18	Liv/Din	100%	Y	72%	Y
19	Bedroom 1	100%	Y	94%	Y
20	Bedroom 2	100%	Y	100%	Y
21	Bedroom	100%	Y	100%	Y
22	Liv/Din	100%	Y	99%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
23	Bedroom	100%	Y	100%	Y
24	Liv/Din	100%	Y	100%	Y
25	Bedroom 1	100%	Y	98%	Y
26	Liv/Din	100%	Y	97%	Y
27	Bedroom 2	100%	Y	72%	Y
28	Bedroom 1	100%	Y	83%	Y
29	Liv/Din	100%	Y	94%	Y
30	Bedroom 2	100%	Y	95%	Y
31	Liv/Din	100%	Y	74%	Y
32	Bedroom	100%	Y	90%	Y
33	Liv/Din	91%	N	50%	Y
34	Bedroom 1	100%	Y	70%	Y
35	Bedroom 2	100%	Y	92%	Y
36	Liv/Din	100%	Y	80%	Y
37	Bedroom 1	100%	Y	100%	Y
38	Bedroom 2	100%	Y	92%	Y
39	Liv/Din	100%	Y	96%	Y
40	Bedroom	100%	Y	98%	Y
41	Liv/Din	100%	Y	72%	Y
42	Bedroom 1	100%	Y	100%	Y
43	Bedroom 2	100%	Y	98%	Y
44	Bedroom 3	100%	Y	93%	Y

Table 45: BR209 Methodology Results (Block D1-Sixth Floor)

Legends

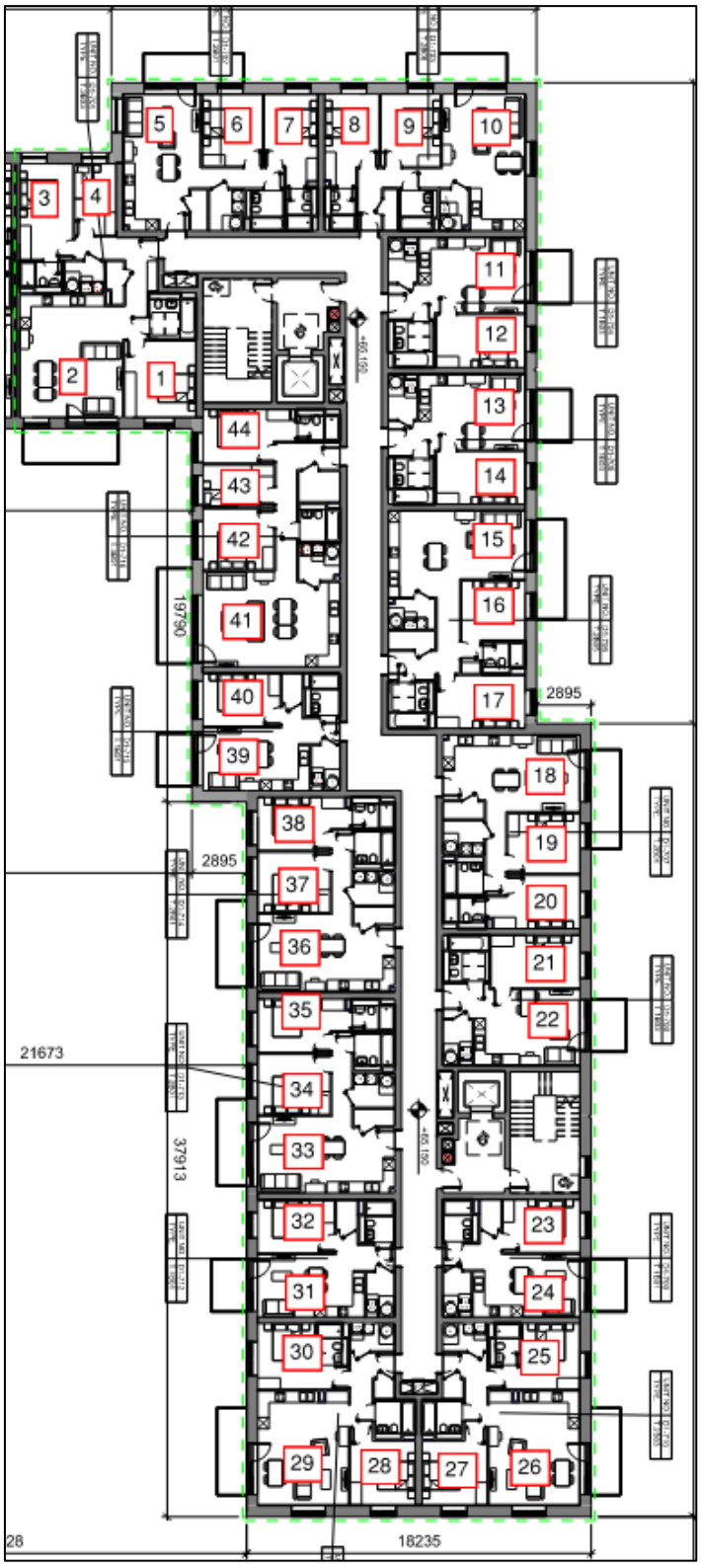


Figure 48: Block D1 Seventh Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom 1	100%	Y	100%	Y
2	Liv/Din	100%	Y	100%	Y
3	Bedroom 2	100%	Y	100%	Y
4	Bedroom 3	100%	Y	100%	Y
5	Liv/Din	100%	Y	98%	Y
6	Bedroom 1	100%	Y	95%	Y
7	Bedroom 2	100%	Y	95%	Y
8	Bedroom 1	100%	Y	93%	Y
9	Bedroom 2	100%	Y	93%	Y
10	Liv/Din	95%	Y	95%	Y
11	Liv/Din	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y
13	Liv/Din	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y
15	Liv/Din	100%	Y	93%	Y
16	Bedroom 1	100%	Y	100%	Y
17	Bedroom 2	100%	Y	100%	Y
18	Liv/Din	100%	Y	73%	Y
19	Bedroom 1	100%	Y	93%	Y
20	Bedroom 2	100%	Y	100%	Y
21	Bedroom	100%	Y	100%	Y
22	Liv/Din	100%	Y	99%	Y
23	Bedroom	100%	Y	100%	Y
24	Liv/Din	100%	Y	100%	Y
25	Bedroom 1	100%	Y	100%	Y
26	Liv/Din	100%	Y	98%	Y
27	Bedroom 2	100%	Y	89%	Y
28	Bedroom 1	100%	Y	93%	Y
29	Liv/Din	100%	Y	97%	Y
30	Bedroom 2	100%	Y	99%	Y
31	Liv/Din	100%	Y	98%	Y
32	Bedroom	100%	Y	95%	Y
33	Liv/Din	95%	Y	54%	Y
34	Bedroom 1	100%	Y	89%	Y
35	Bedroom 2	100%	Y	97%	Y
36	Liv/Din	100%	Y	88%	Y
37	Bedroom 1	100%	Y	100%	Y
38	Bedroom 2	100%	Y	97%	Y
39	Liv/Din	100%	Y	100%	Y
40	Bedroom	100%	Y	100%	Y
41	Liv/Din	100%	Y	100%	Y
42	Bedroom 1	100%	Y	100%	Y
43	Bedroom 2	100%	Y	100%	Y
44	Bedroom 3	100%	Y	95%	Y

Table 46: BR209 Methodology Results (Block D1-Seventh Floor)

Legends

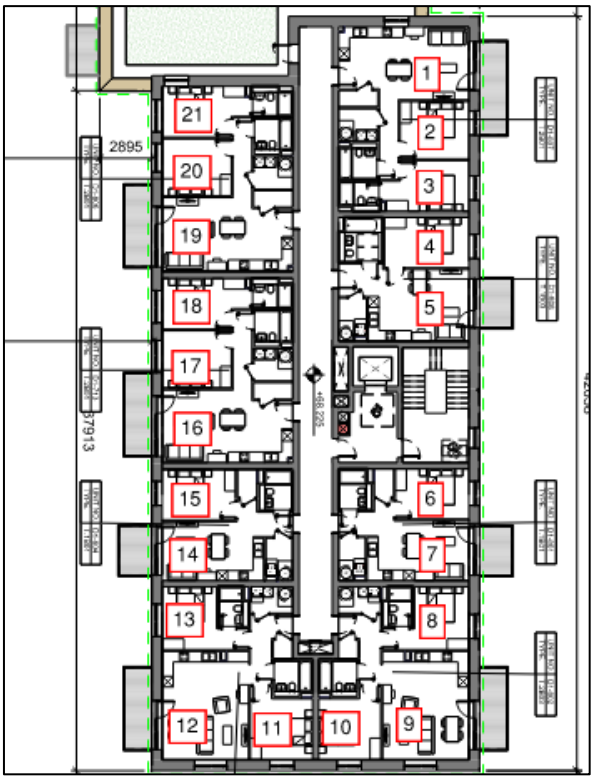


Figure 49: Block D1 Eighth Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom 1	100%	Y	77%	Y
2	Liv/Din	100%	Y	98%	Y
3	Bedroom 2	100%	Y	100%	Y
4	Bedroom 3	100%	Y	100%	Y
5	Liv/Din	100%	Y	100%	Y
6	Bedroom 1	100%	Y	100%	Y
7	Bedroom 2	100%	Y	100%	Y
8	Bedroom 1	100%	Y	100%	Y
9	Bedroom 2	100%	Y	99%	Y
10	Liv/Din	100%	Y	99%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
11	Liv/Din	100%	Y	100%	Y
12	Bedroom	100%	Y	99%	Y
13	Liv/Din	100%	Y	98%	Y
14	Bedroom	100%	Y	100%	Y
15	Liv/Din	100%	Y	97%	Y
16	Bedroom 1	100%	Y	66%	Y
17	Bedroom 2	100%	Y	97%	Y
18	Liv/Din	100%	Y	97%	Y
19	Bedroom 1	100%	Y	100%	Y
20	Bedroom 2	100%	Y	97%	Y
21	Bedroom	100%	Y	100%	Y

Table 47: BR209 Methodology Results (Block D1-Eighth Floor)

Legends

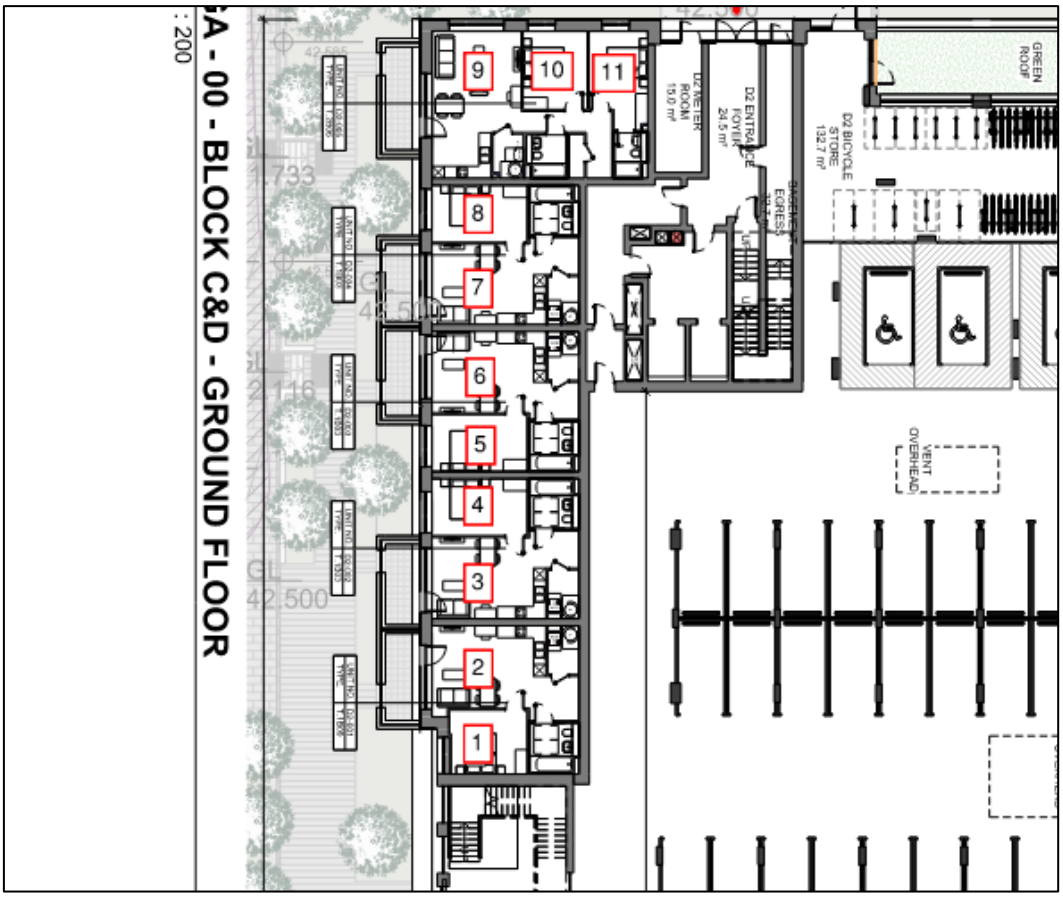


Figure 50: Block D2 Ground Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom	100%	Y	97%	Y
2	Liv/Din	100%	Y	41%	N
3	Liv/Din	100%	Y	41%	N
4	Bedroom	100%	Y	41%	N
5	Bedroom	100%	Y	41%	N
6	Liv/Din	100%	Y	38%	N

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
7	Liv/Din	100%	Y	42%	N
8	Bedroom	100%	Y	41%	N
9	Liv/Din	100%	Y	100%	Y
10	Bedroom 1	100%	Y	89%	Y
11	Bedroom 2	100%	Y	84%	Y

Table 48: BR209 Methodology Results (Block D2-Ground Floor)

Legends

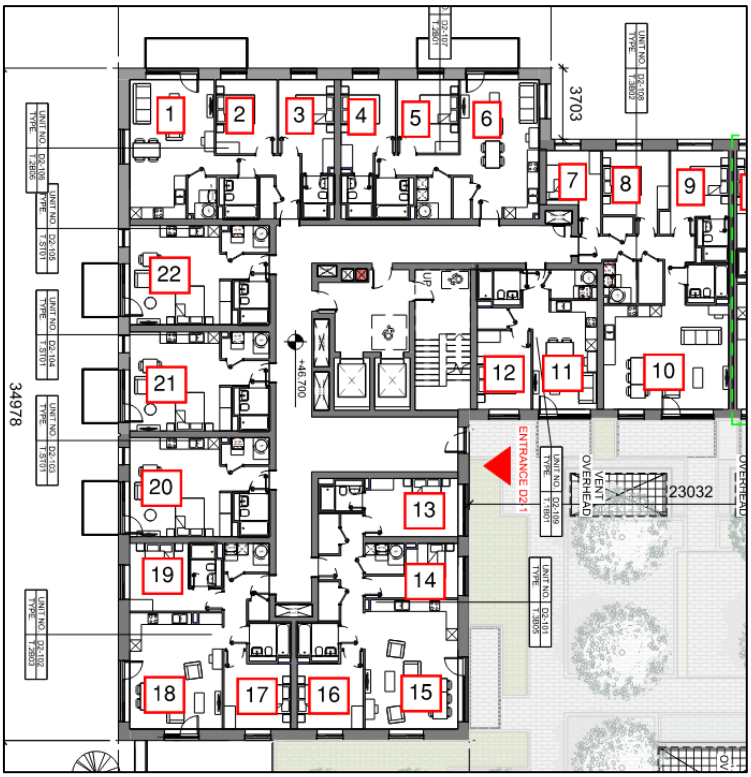


Figure 51: Block D2 First Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	97%	Y
2	Bedroom 1	100%	Y	81%	Y
3	Bedroom 2	100%	Y	93%	Y
4	Bedroom 1	100%	Y	94%	Y
5	Bedroom 2	100%	Y	88%	Y
6	Liv/Din	100%	Y	98%	Y
7	Bedroom 1	100%	Y	96%	Y
8	Bedroom 2	100%	Y	93%	Y
9	Bedroom 3	100%	Y	95%	Y
10	Liv/Din	99%	Y	46%	N
11	Liv/Din	100%	Y	58%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
12	Bedroom	98%	Y	65%	Y
13	Bedroom 1	100%	Y	29%	N
14	Bedroom 2	100%	Y	79%	Y
15	Liv/Din	100%	Y	77%	Y
16	Bedroom 3	100%	Y	56%	Y
17	Bedroom 1	100%	Y	61%	Y
18	Liv/Din	100%	Y	98%	Y
19	Bedroom 2	100%	Y	54%	Y
20	Studio	100%	Y	53%	Y
21	Studio	99%	Y	47%	N
22	Studio	100%	Y	52%	Y

Table 49: BR209 Methodology Results (Block D2-First Floor)

Legends

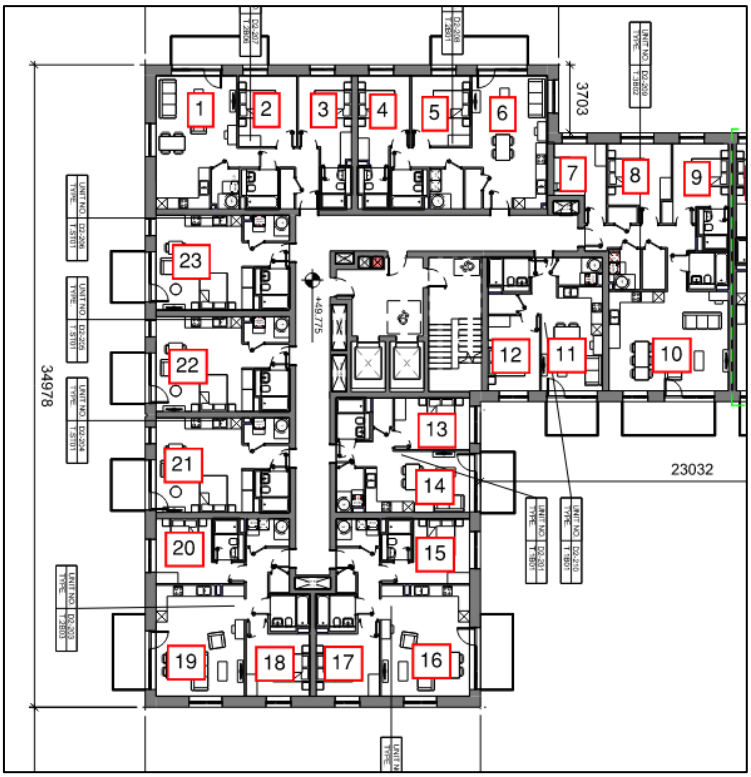


Figure 52: Block D2 Second Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	98%	Y
2	Bedroom 1	100%	Y	86%	Y
3	Bedroom 2	100%	Y	93%	Y
4	Bedroom 1	100%	Y	94%	Y
5	Bedroom 2	100%	Y	88%	Y
6	Liv/Din	100%	Y	98%	Y
7	Bedroom 1	100%	Y	96%	Y
8	Bedroom 2	100%	Y	99%	Y
9	Bedroom 3	100%	Y	91%	Y
10	Liv/Din	99%	Y	55%	Y
11	Liv/Din	100%	Y	70%	Y
12	Bedroom	100%	Y	68%	Y
13	Bedroom	100%	Y	42%	N
14	Liv/Din	72%	N	24%	N
15	Bedroom 1	100%	Y	52%	Y
16	Liv/Din	100%	Y	61%	Y
17	Bedroom 2	100%	Y	56%	Y
18	Bedroom 1	100%	Y	69%	Y
19	Liv/Din	100%	Y	88%	Y
20	Bedroom 2	100%	Y	53%	Y
21	Studio	100%	Y	55%	Y
22	Studio	100%	Y	52%	Y
23	Studio	99%	Y	53%	Y

Table 50: BR209 Methodology Results (Block D2-Second Floor)

Legends

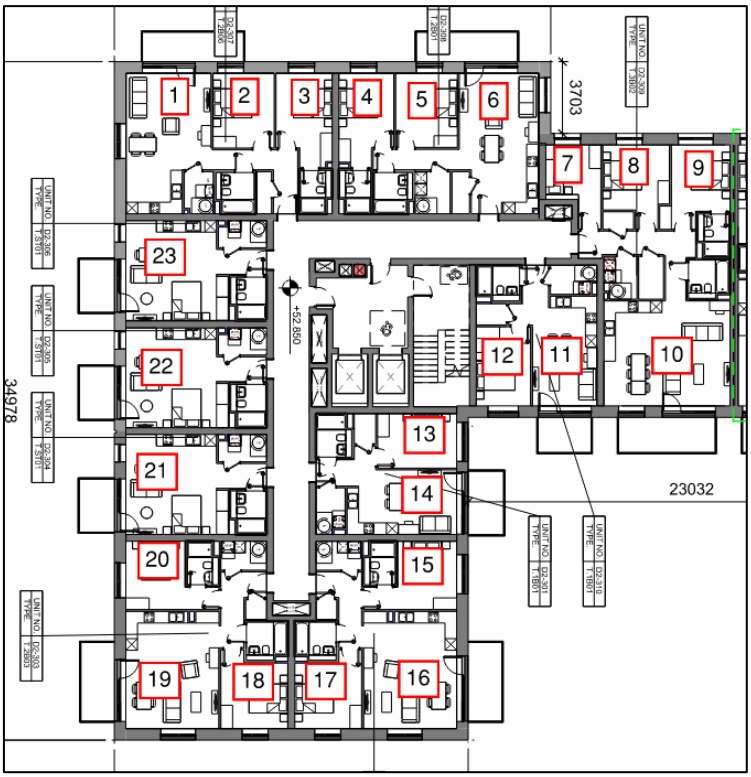


Figure 53: Block D2 Third Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	98%	Y
2	Bedroom 1	100%	Y	82%	Y
3	Bedroom 2	100%	Y	93%	Y
4	Bedroom 1	100%	Y	94%	Y
5	Bedroom 2	100%	Y	89%	Y
6	Liv/Din	100%	Y	98%	Y
7	Bedroom 1	100%	Y	97%	Y
8	Bedroom 2	100%	Y	95%	Y
9	Bedroom 3	100%	Y	96%	Y
10	Liv/Din	100%	Y	65%	Y
11	Liv/Din	100%	Y	79%	Y
12	Bedroom	100%	Y	75%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
13	Bedroom	100%	Y	53%	Y
14	Liv/Din	74%	N	28%	N
15	Bedroom 1	100%	Y	57%	Y
16	Liv/Din	100%	Y	53%	Y
17	Bedroom 2	100%	Y	59%	Y
18	Bedroom 1	100%	Y	59%	Y
19	Liv/Din	100%	Y	82%	Y
20	Bedroom 2	100%	Y	59%	Y
21	Studio	100%	Y	57%	Y
22	Studio	99%	Y	56%	Y
23	Studio	99%	Y	59%	Y

Table 51: BR209 Methodology Results (Block D2-Third Floor)

Legends

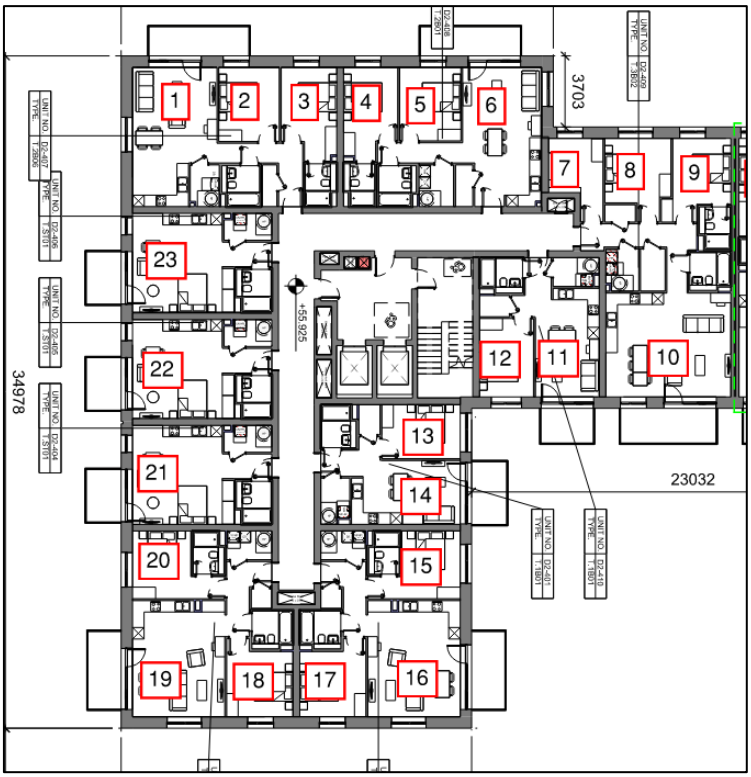


Figure 54: Block D2 Fourth Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	98%	Y
2	Bedroom 1	100%	Y	86%	Y
3	Bedroom 2	100%	Y	93%	Y
4	Bedroom 1	100%	Y	95%	Y
5	Bedroom 2	100%	Y	89%	Y
6	Liv/Din	100%	Y	98%	Y
7	Bedroom 1	100%	Y	96%	Y
8	Bedroom 2	100%	Y	98%	Y
9	Bedroom 3	100%	Y	91%	Y
10	Liv/Din	100%	Y	72%	Y
11	Liv/Din	100%	Y	84%	Y
12	Bedroom	100%	Y	80%	Y
13	Bedroom	100%	Y	65%	Y
14	Liv/Din	84%	N	38%	N
15	Bedroom 1	100%	Y	72%	Y
16	Liv/Din	100%	Y	61%	Y
17	Bedroom 2	100%	Y	59%	Y
18	Bedroom 1	100%	Y	66%	Y
19	Liv/Din	100%	Y	81%	Y
20	Bedroom 2	100%	Y	72%	Y
21	Studio	100%	Y	70%	Y
22	Studio	100%	Y	71%	Y
23	Studio	99%	Y	71%	Y

Table 52: BR209 Methodology Results (Block D2-Fourth Floor)

Legends

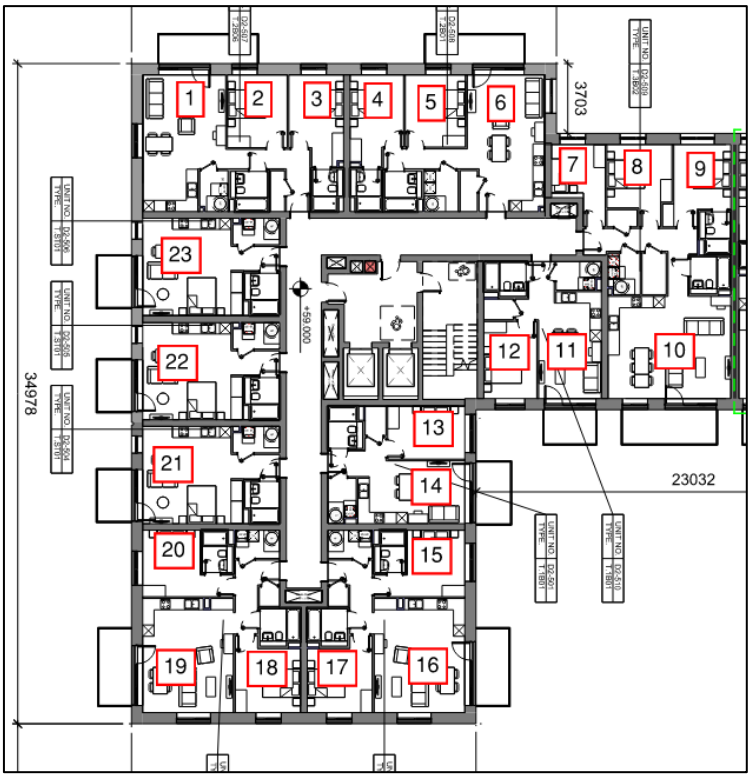


Figure 55: Block D2 Fifth Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom 1	100%	Y	86%	Y
3	Bedroom 2	100%	Y	93%	Y
4	Bedroom 1	100%	Y	95%	Y
5	Bedroom 2	100%	Y	89%	Y
6	Liv/Din	100%	Y	97%	Y
7	Bedroom 1	100%	Y	97%	Y
8	Bedroom 2	100%	Y	95%	Y
9	Bedroom 3	100%	Y	97%	Y
10	Liv/Din	100%	Y	86%	Y
11	Liv/Din	100%	Y	91%	Y
12	Bedroom	100%	Y	86%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
13	Bedroom	100%	Y	80%	Y
14	Liv/Din	100%	Y	53%	Y
15	Bedroom 1	100%	Y	86%	Y
16	Liv/Din	100%	Y	69%	Y
17	Bedroom 2	100%	Y	62%	Y
18	Bedroom 1	100%	Y	71%	Y
19	Liv/Din	100%	Y	90%	Y
20	Bedroom 2	100%	Y	90%	Y
21	Studio	100%	Y	80%	Y
22	Studio	100%	Y	81%	Y
23	Studio	100%	Y	82%	Y

Table 53: BR209 Methodology Results (Block D2-Fifth Floor)

Legends

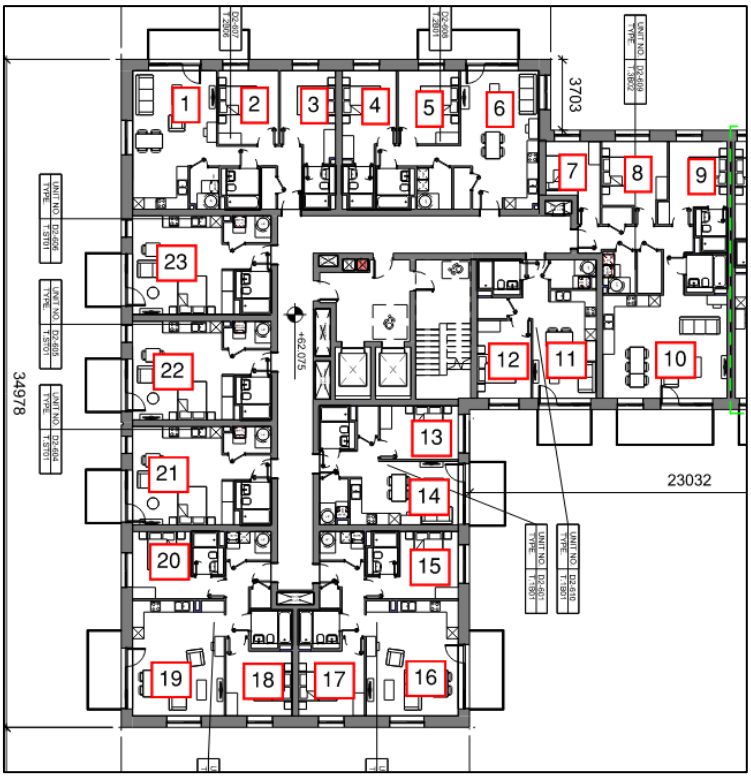


Figure 56: Block D2 Sixth Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom 1	100%	Y	90%	Y
3	Bedroom 2	100%	Y	93%	Y
4	Bedroom 1	100%	Y	95%	Y
5	Bedroom 2	100%	Y	89%	Y
6	Liv/Din	100%	Y	98%	Y
7	Bedroom 1	100%	Y	97%	Y
8	Bedroom 2	100%	Y	100%	Y
9	Bedroom 3	100%	Y	93%	Y
10	Liv/Din	100%	Y	95%	Y
11	Liv/Din	100%	Y	100%	Y
12	Bedroom	100%	Y	89%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
13	Bedroom	100%	Y	96%	Y
14	Liv/Din	100%	Y	70%	Y
15	Bedroom 1	100%	Y	100%	Y
16	Liv/Din	100%	Y	76%	Y
17	Bedroom 2	100%	Y	68%	Y
18	Bedroom 1	100%	Y	74%	Y
19	Liv/Din	100%	Y	94%	Y
20	Bedroom 2	100%	Y	97%	Y
21	Studio	100%	Y	89%	Y
22	Studio	100%	Y	89%	Y
23	Studio	100%	Y	93%	Y

Table 54: BR209 Methodology Results (Block D2-Sixth Floor)

Legends

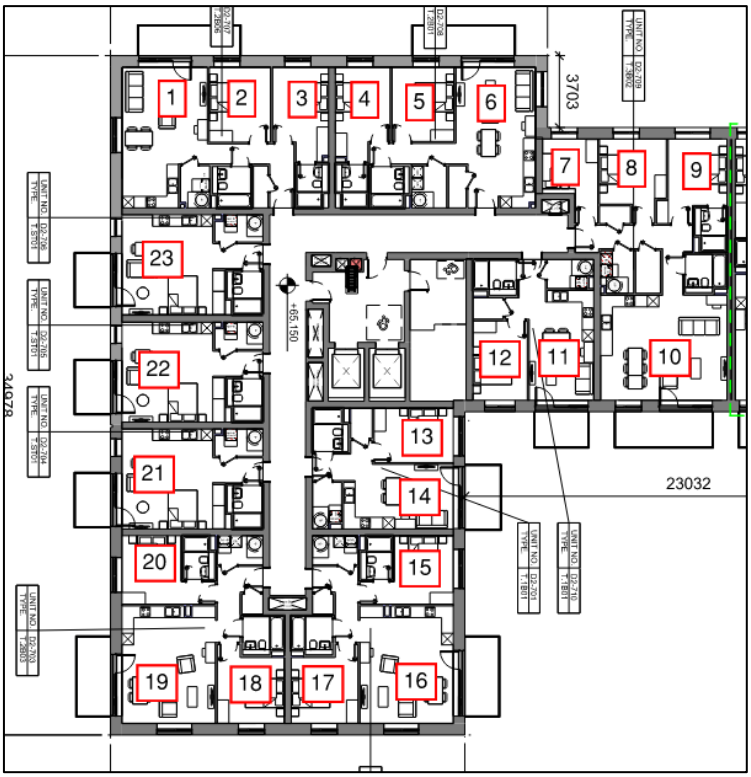


Figure 57: Block D2 Seventh Floor Legend

Results

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom 1	100%	Y	95%	Y
3	Bedroom 2	100%	Y	93%	Y
4	Bedroom 1	100%	Y	94%	Y
5	Bedroom 2	100%	Y	92%	Y
6	Liv/Din	100%	Y	100%	Y
7	Bedroom 1	100%	Y	98%	Y
8	Bedroom 2	100%	Y	97%	Y
9	Bedroom 3	100%	Y	99%	Y
10	Liv/Din	100%	Y	100%	Y
11	Liv/Din	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
13	Bedroom	100%	Y	96%	Y
14	Liv/Din	100%	Y	100%	Y
15	Bedroom 1	100%	Y	100%	Y
16	Liv/Din	100%	Y	96%	Y
17	Bedroom 2	100%	Y	84%	Y
18	Bedroom 1	100%	Y	86%	Y
19	Liv/Din	100%	Y	99%	Y
20	Bedroom 2	100%	Y	100%	Y
21	Studio	100%	Y	100%	Y
22	Studio	100%	Y	100%	Y
23	Studio	100%	Y	100%	Y

Table 55: BR209 Methodology Results (Block D2-Seventh Floor)

6 SUNLIGHT & OVERSHADOWING ASSESSMENT TO AMENITY SPACES WITHIN THE DEVELOPMENT

The BRE Guidance recommend that for external amenity spaces to appear adequately sunlit throughout the year, at least half of the garden or amenity space should receive at least two hours of sunlight on March 21st.

In order to show the sunlight levels within the proposed development design, a sunlight study has been carried out for the amenity space surrounding the development.

SUNLIGHT COMMUNAL AMENITY SPACES

The BRE Guide section 3.3.16 outlines the following for gardens and open spaces:

"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."

In order to show that sunlight levels to the amenity spaces within the development achieve compliance with current the BRE Guidance recommendations a sunlight study has been carried out for the proposed development.

The red squares in Figure 58 below illustrate the areas that receive a minimum of 2 hours of sunlight on the 21st of March for the proposed development.



Figure 58 Amenity Spaces - Hours of Sunlight on March 21st

As seen in the table below, the overall amenity space areas comply with the BRE Guidance, regarding sunlight recommendations, as at least half the space receive at least 2 hours of sunlight on March 21st.

Unit Ref.	Portion of Amenity Space receiving ≥ 2 hrs (%)
A	99.4%
B	98.2%
C	99.8%
D	97.4%
E	82.5%
F	60.2%
Overall	78.1%

Table 56: Amenity Space Sunlight Results

7 SUNLIGHT ASSESSMENT WITHIN THE PROPOSED DEVELOPMENT (APSH)

In order to assess the amount of sunlight that is received by windows within the new proposed amendments to the originally permitted development, the Annual Probable Sunlight Hours (APSH) calculation methods as outlined in the BRE Guidance have been used.

BRE Guidelines outline that 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. BRE Guidelines also state that sunlight is less important in bedrooms and kitchens, however, all windows to occupied rooms within the development have been included within the analysis.

The sunlight values experienced across the development have been assessed against the BRE Guidance. The 2022 methodology states that windows shall receive a minimum of 1.5 hours of direct sunlight on the test day, March 21st. The Methodology also sets out a standard for medium (3 hours), and high (4 hours) levels of direct sunlight.

It must be noted that the results within this report should be treated with certain degree of flexibility, based on the following statement in the BRE Guidelines:

"the guide is intended for building designers and their clients, consultants and planning officials. The advice given here is not mandatory and the guide should not be seen as an instrument of planning policy; its aim is to help rather constrain the designer. Although it gives numerical guidelines, these should be interpreted flexibly since natural lighting is only one of many factors in site layout design".

In addition, BRE Guidelines states that "the degree of satisfaction is related to the expectation of sunlight. If a room is necessarily north facing or if the building is in a densely built urban area, the absence of sunlight is more acceptable than when its exclusion seems arbitrary".

SUNLIGHT ASSESSMENT

The sunlight values experienced across the development as measured against the BRE Guidance are illustrated in the following images. Windows coloured red in Figure 59 to 62 achieves the minimum standard for sunlight on the test day of March 21st.

Element	Sunlight Assessment BRE 3rd Edition Minimum Level
Total Windows Passing	1659
Total No. of Windows Analysed	2129
Percentage of Compliance	77.9%

Table 57: Sunlight Analysis 3rd Edition Results (Window Specific Summary)

As shown in the table above, approx. 78% of rooms meet the minimum recommendations set out in the BRE guidelines. Additionally, the figures below demonstrate that the majority of windows exceed the minimum values outlined in the BRE guidance document.

Windows that fall short of the BRE criteria are primarily associated with north facing orientations, which naturally receive reduced sunlight due to the path of the sun, resulting in greater solar exposure for other orientations.

As the existing massing has already been granted planning permission, and the proposed amendments result in a reduction in the overall building massing, the revised development represents an improvement over the originally permitted development. Hence the new proposed amended development will perform equal to or better than the previously approved development.

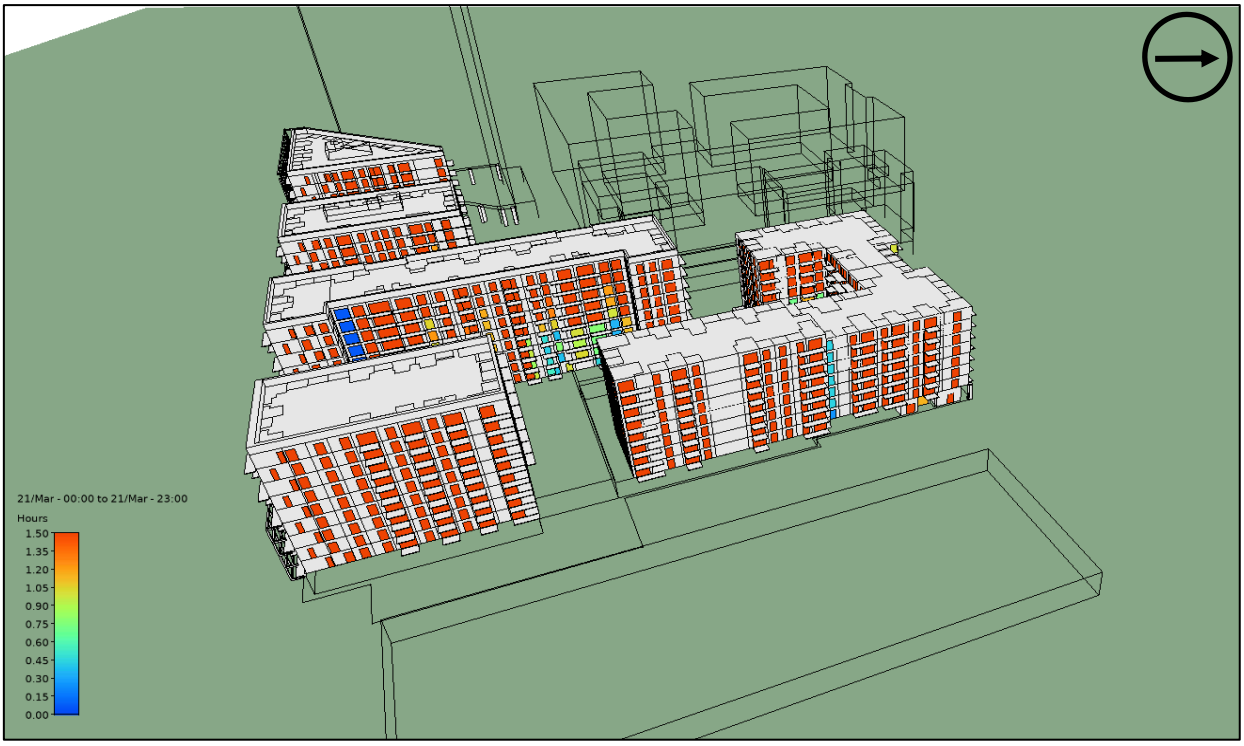


Figure 59: Sunlight Exposure March 21st (2022 Methodology Min Level) – East Elevation

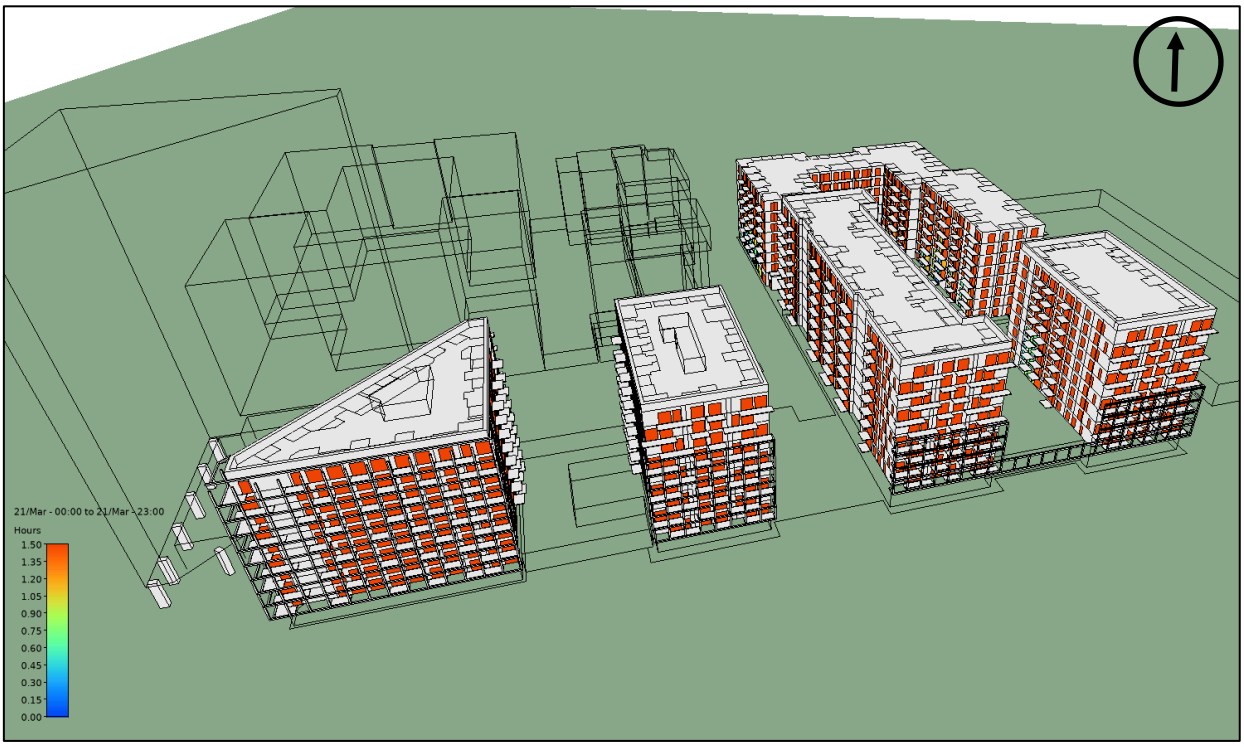


Figure 60: Sunlight Exposure March 21st (2022 Methodology Min Level) – South Elevation

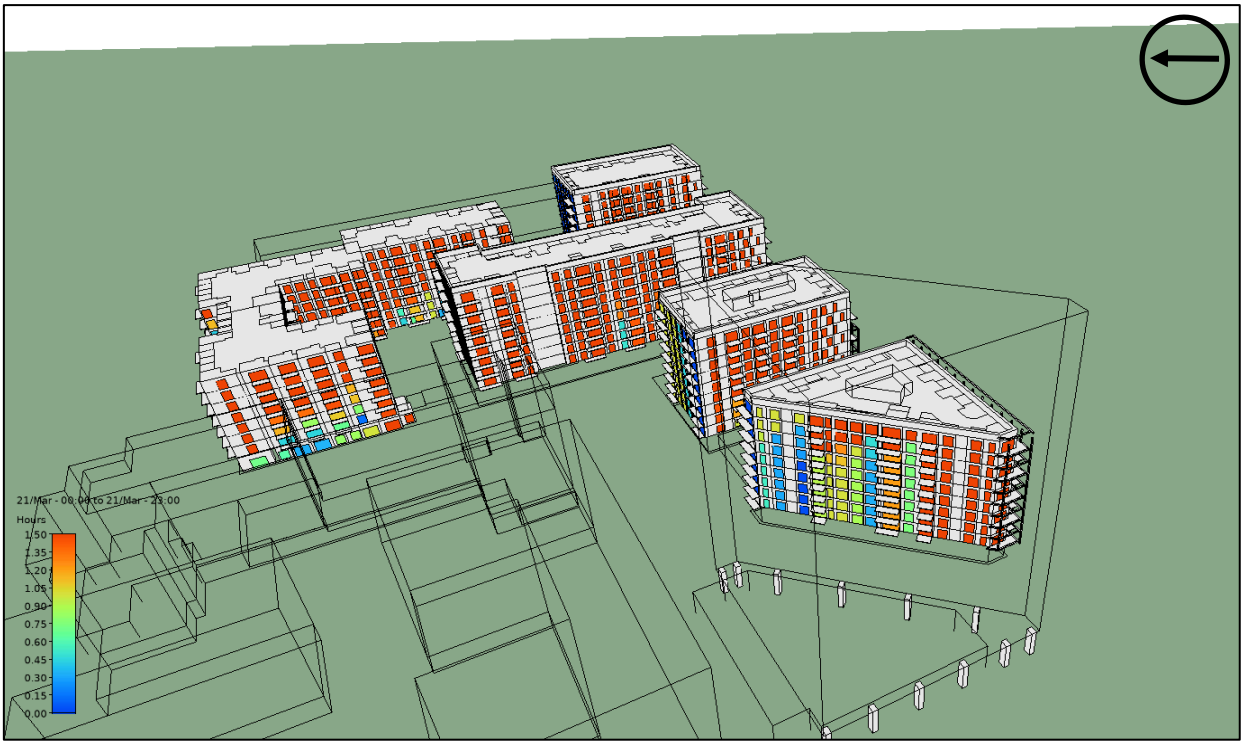


Figure 61: Sunlight Exposure March 21st (2022 Methodology Min Level) – West Elevation

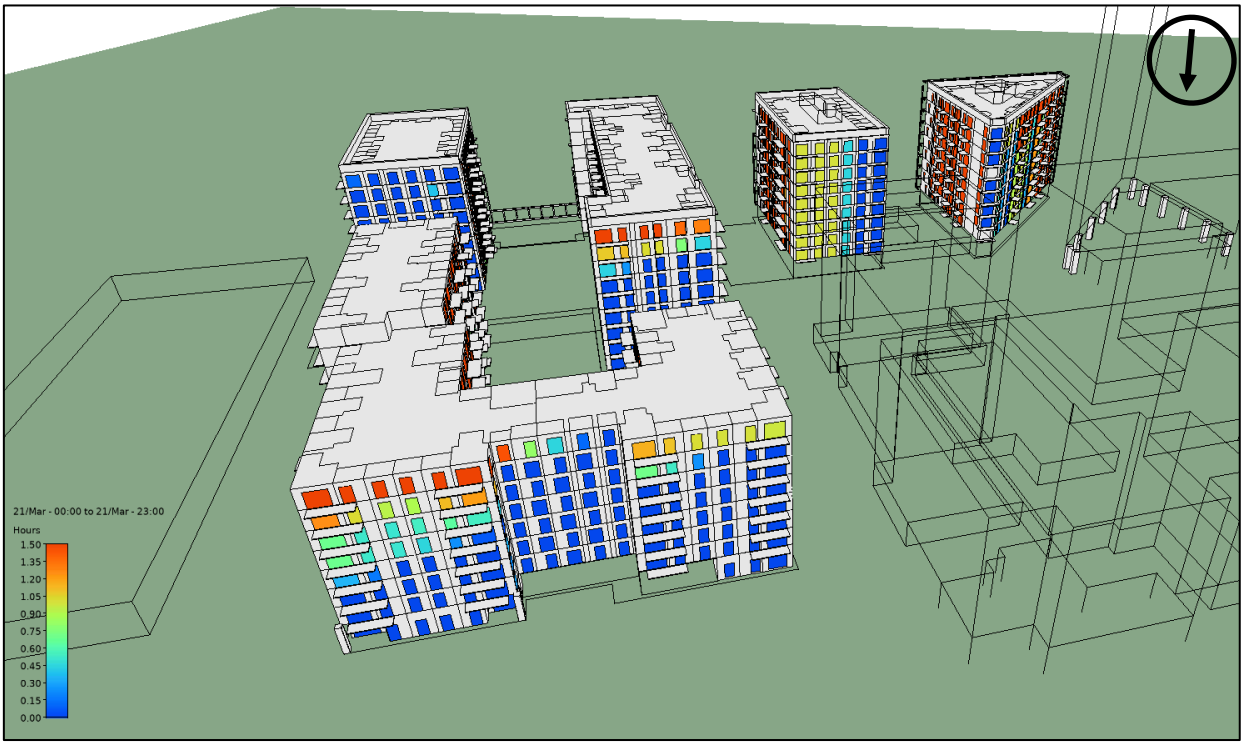


Figure 62: Sunlight Exposure March 21st (2022 Methodology Min Level) – North Elevation

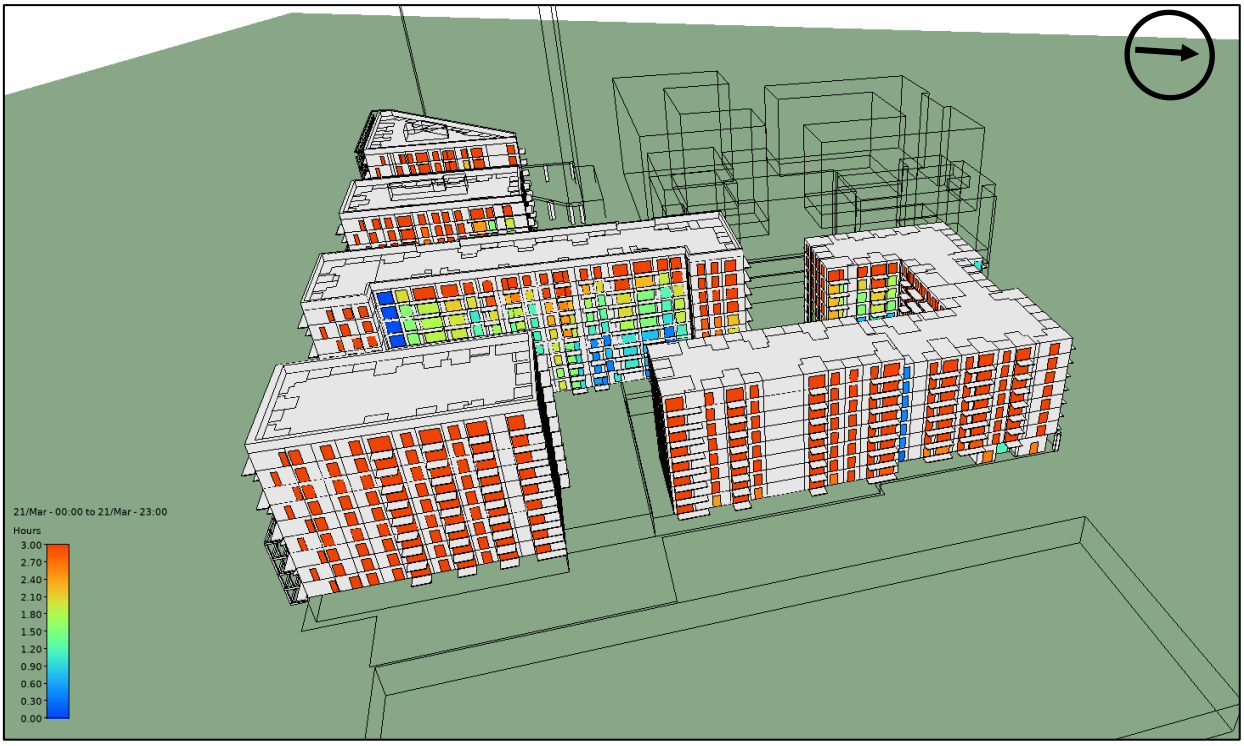


Figure 63: Sunlight Exposure March 21st (2022 Methodology Medium Level) – East Elevation

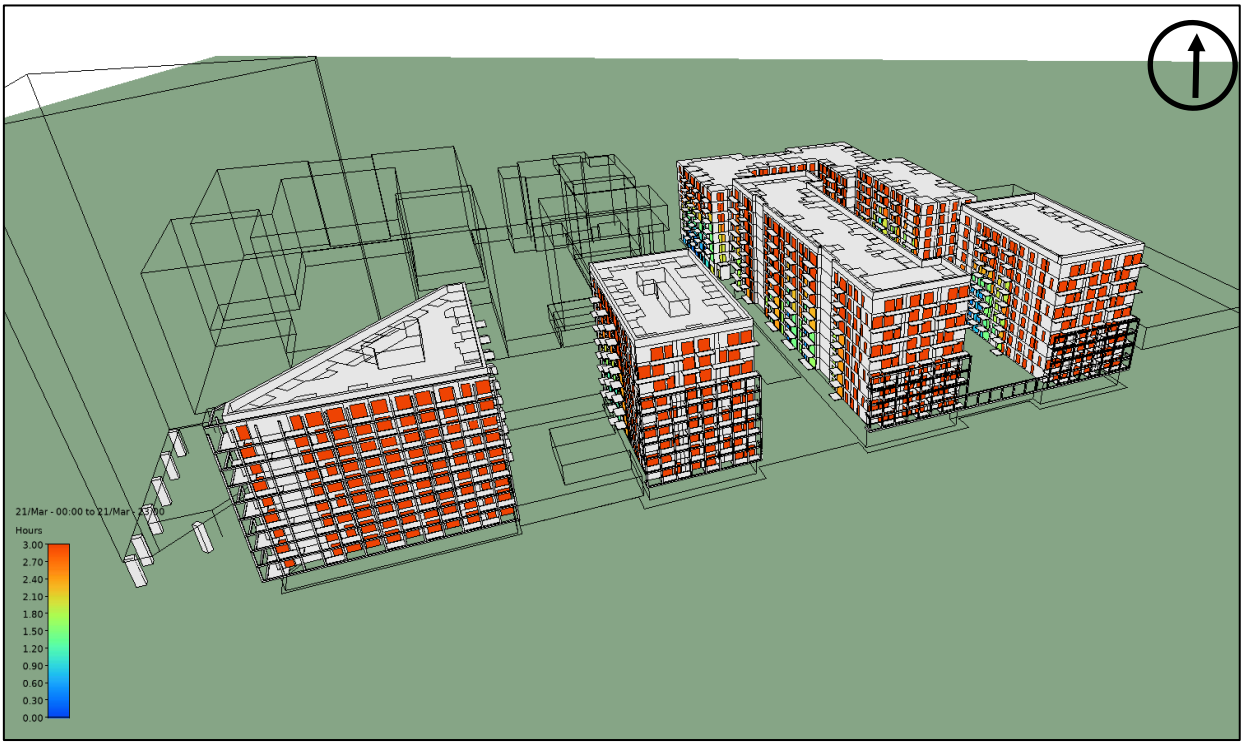


Figure 64: Sunlight Exposure March 21st (2022 Methodology Medium Level) – South Elevation

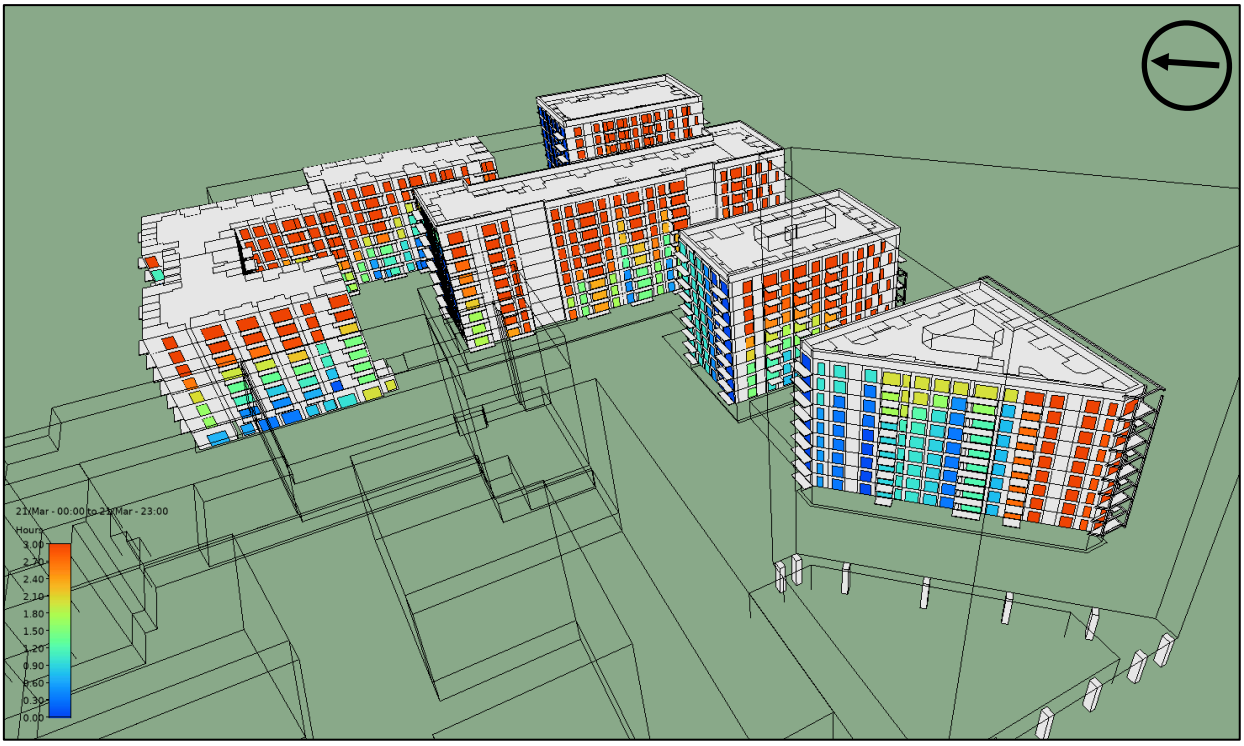


Figure 65: Sunlight Exposure March 21st (2022 Methodology Medium Level) –West Elevation

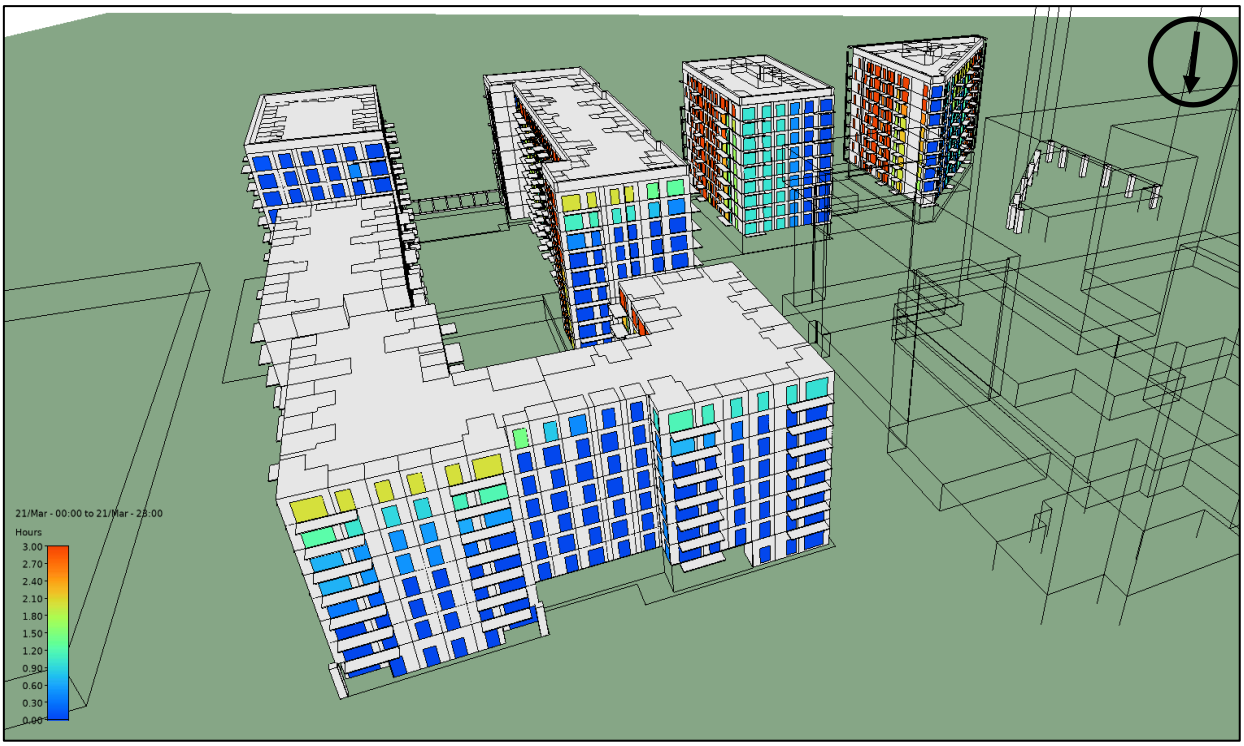


Figure 66: Sunlight Exposure March 21st (2022 Methodology Medium Level) – North Elevation

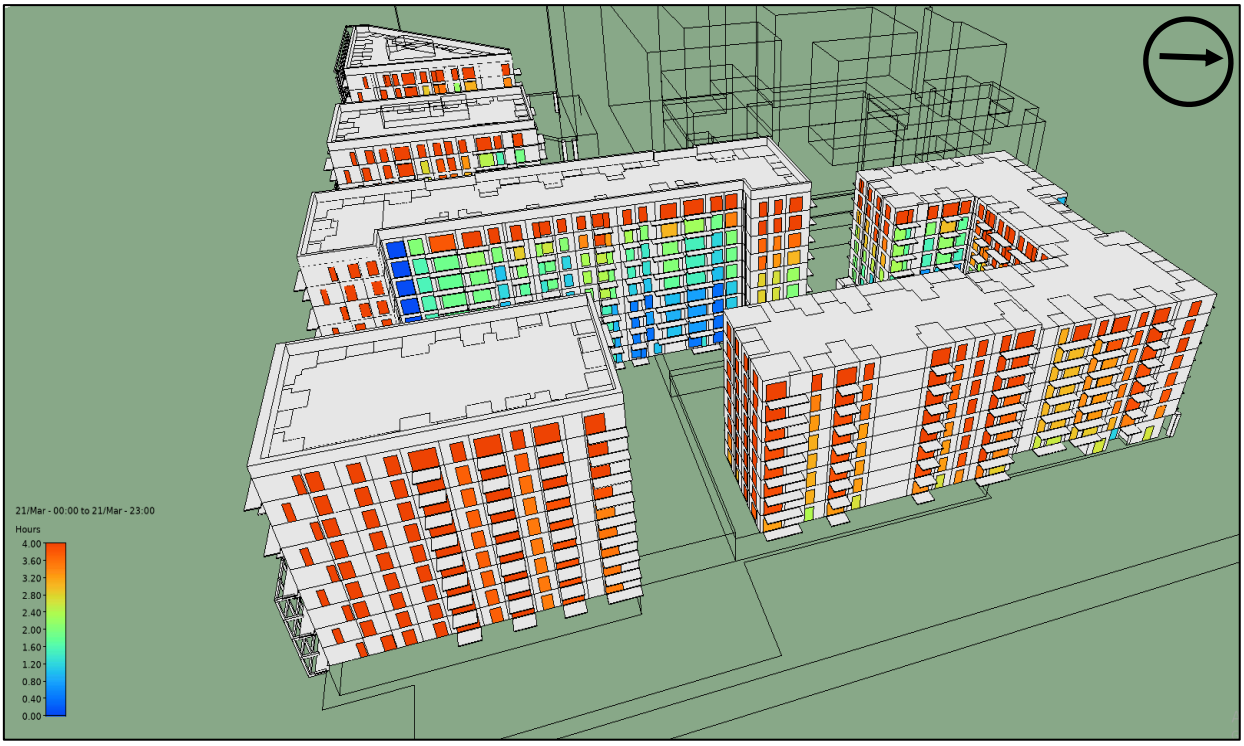


Figure 67: Sunlight Exposure March 21st (2022 Methodology High Level) – East Elevation

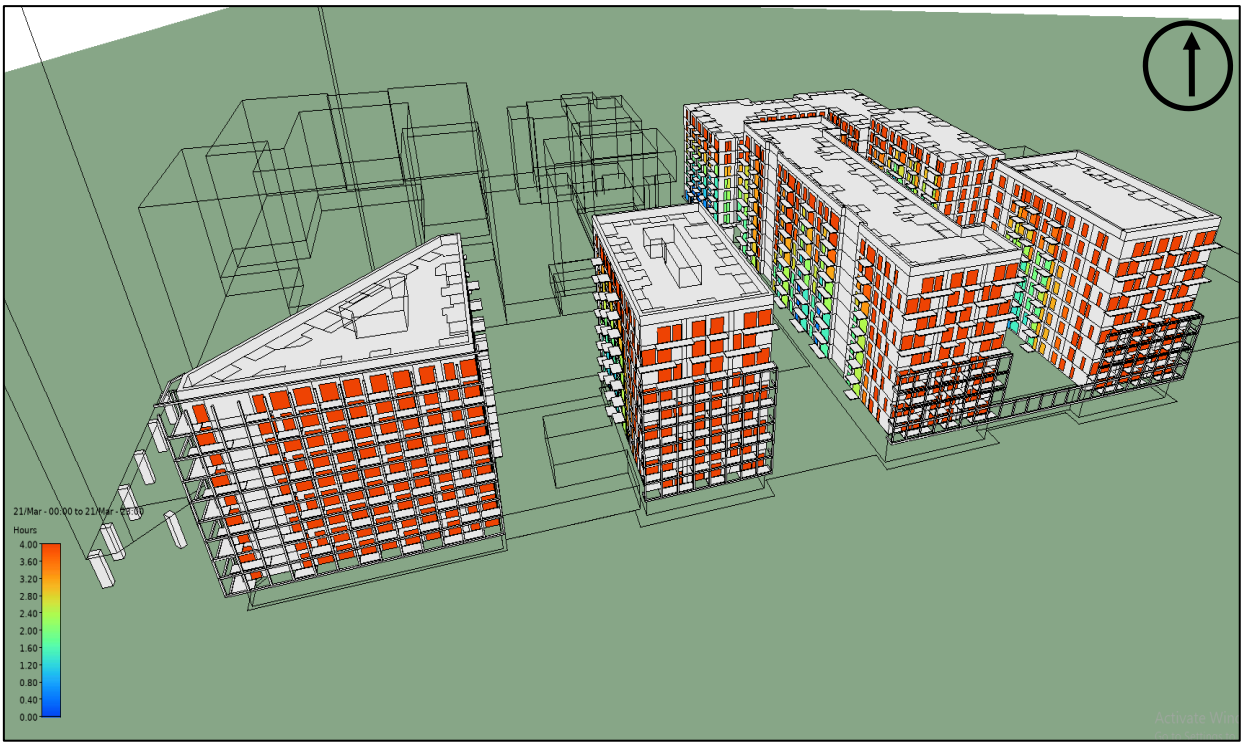


Figure 68: Sunlight Exposure March 21st (2022 Methodology High Level) – South Elevation

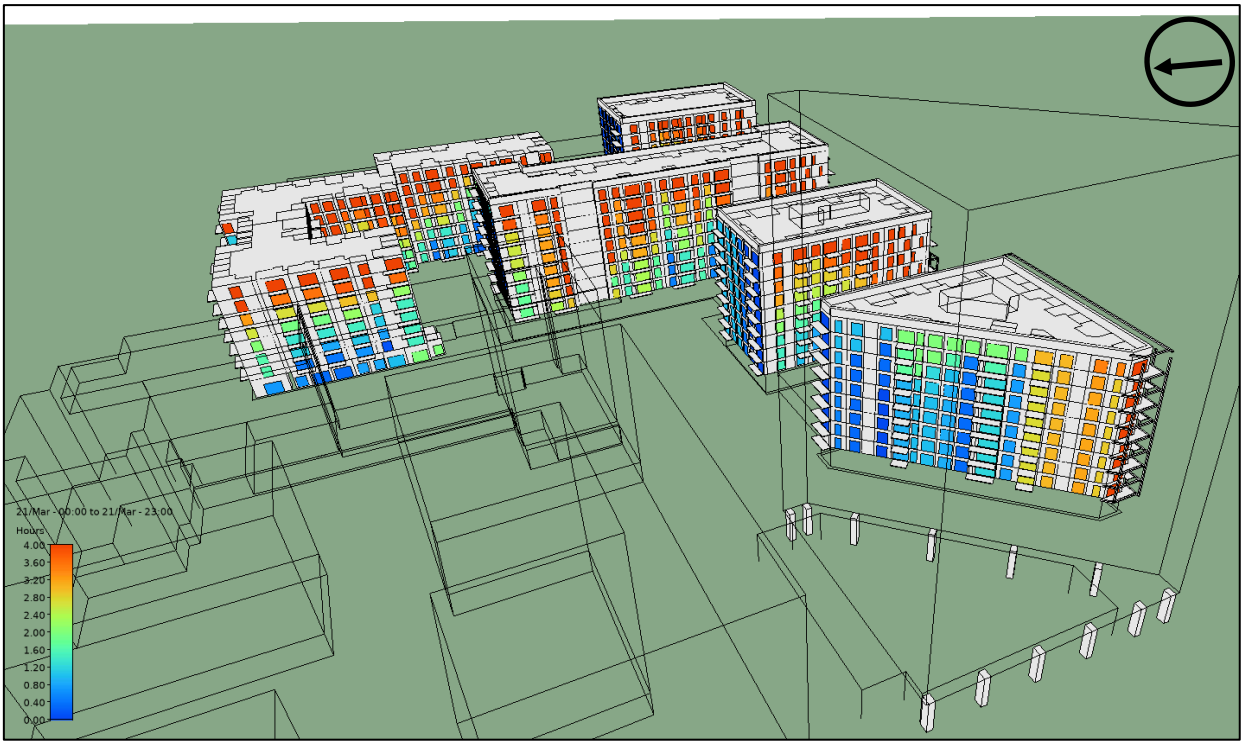


Figure 69: Sunlight Exposure March 21st (2022 Methodology High Level) – West Elevation

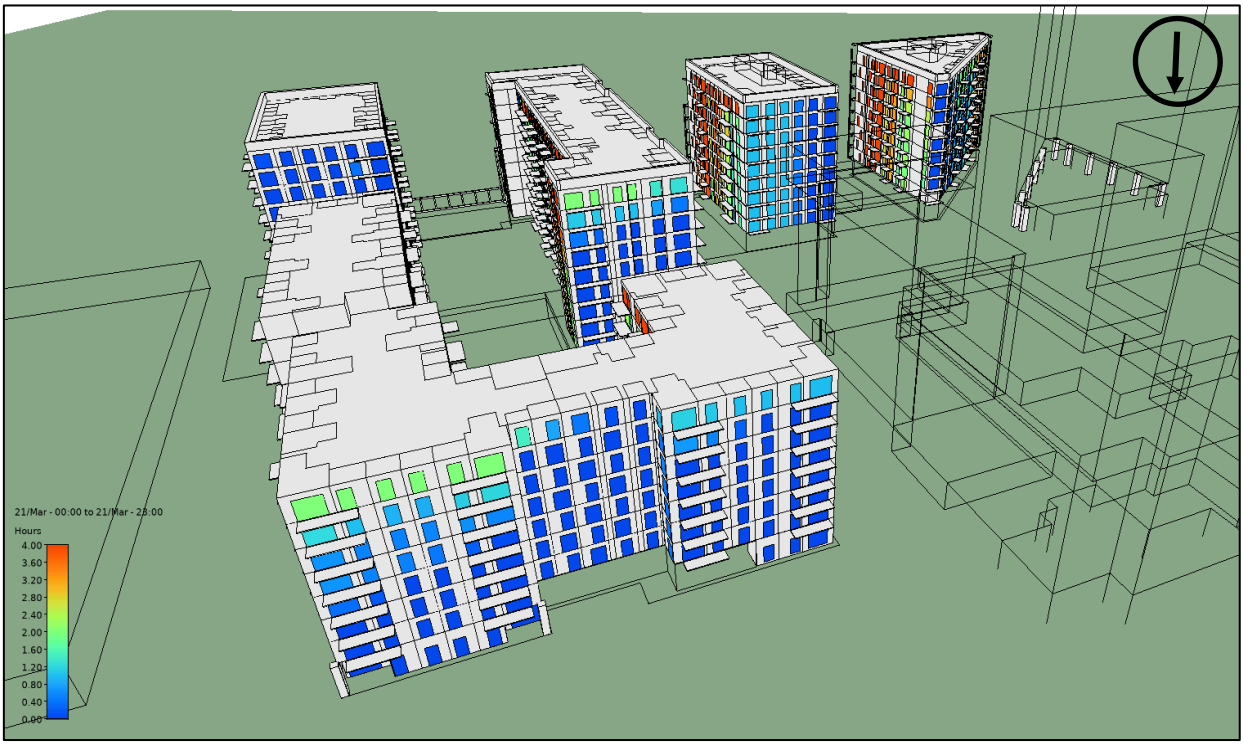


Figure 70: Sunlight Exposure March 21st (2022 Methodology High Level) – North Elevation

It can be seen in the figures above that more than 75% of the windows exceed the minimum values outlined in the BRE guidance document. Of windows falling short of the BRE guidance is mainly due to the north facing orientation which naturally results in less sunlight exposure due to the path of the sun more so exposing the remaining orientations to sunlight.

8 ASSESSING THE IMPACT ON SURROUNDING PROPERTIES

DAYLIGHT & SUNLIGHT IMPACT METHODOLOGY

As per the BRE Guidelines it is important to safeguard the daylight to nearby buildings, from a proposed development, where a reasonable expectation of daylight is required. The flow matrix below outlines the criteria to be assessed, as per the BRE Guidelines, in order to ascertain any potential impact to adjacent buildings from the proposed development.

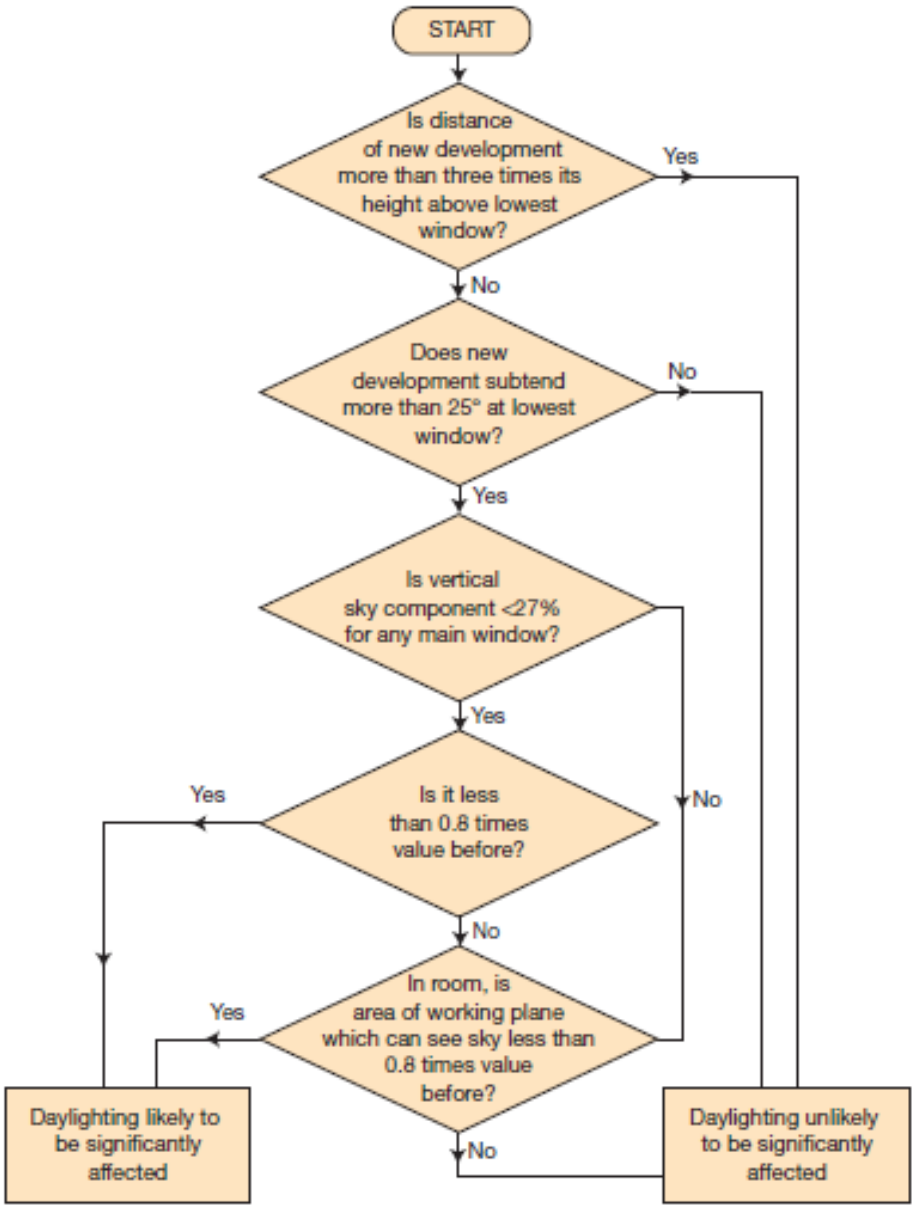


Figure 71: Daylight Assessment Methodology for Adjacent Properties

DISTANCE FROM THE PROPOSED DEVELOPMENT – STEP 1

As per the flow matrix, the loss of light to existing windows is not required to be analysed if the distance of each part of the new development from the existing window is three or more times its height above the centre of the existing windows. Otherwise, BRE guideline provides the following methods for assessing daylight availability.

25° LINE CRITERIA – STEP 2

In the first instance, if a proposed development falls beneath a 25° angle taken from a point 1.6 metres above ground level from any adjacent properties, then the BRE Guidelines say that no further analysis is required in relation to impact on surrounding properties as adequate skylight will still be available. If the proposed development extends beyond the 25° line then further analysis is required (Step 3).

VERTICAL SKY COMPONENT – STEP 3

The following method is known as the Vertical Sky Component (VSC). The VSC calculation is the ratio of the direct sky illuminance falling on the outside of a window, to the simultaneous horizontal illuminance under an unobstructed sky. The BRE Guide sets out two guidelines for the VSC:

- If the VSC at the centre of the existing window exceeds 27% with the new development in place, then enough sky light should still be reaching the existing window;
- If the VSC with the new development in place is both less than 27% and less than 80% its former value, then the reduction in light to the window is likely to be noticeable;
- This means that even if the VSC is less than 27%, as long as the VSC value is still greater than 80% of its former value, this would be acceptable and thus the impact would be considered negligible.

It is important to note that the VSC is a simple geometrical calculation which provides an early indication of the potential for daylight entering the space. However, it does not assess or quantify the actual daylight levels inside the rooms. If the VSC standard is not met on any window, Step 4 is then followed.

NO SKY LINE – STEP 4

This method is the No Sky Line or Daylight Distribution Method. This method assesses the change in position of the No Sky Line between the existing and proposed situations. It does take into account the number and size of windows to a room, but still does not give any qualitative or quantitative assessment of the light in the room, only where sky can or cannot be seen. Thus, as this method is limited, Step 3 is considered more appropriate.

The next two sections on the following pages outline the details of the analysis undertaken in relation to adjacent properties.

IDENTIFYING SENSITIVE RECEPTORS

As per Section 5 of Appendix 16 of the Dublin City Development Plan 2022–2028, the following impacts should be assessed on the relevant surrounding properties:

- Vertical Sky Component on all relevant surrounding windows;
- Annual Probable Sunlight Hours on all relevant surrounding properties;
- Winter Sunlight Hours on all relevant surrounding windows; and
- Sunlight on Ground in all surrounding amenity spaces.

Prior to following the flow matrix, first the key sensitive receptors around the site need to be identified. According to the BRE Guidance, sensitive receptors are described as:

- Habitable rooms in residential buildings, where the occupants have a reasonable expectation of daylight;
- Other sensitive receptors are gardens and open spaces on adjacent properties to the new development, excluding public footpaths, front gardens and car parks. In accordance with the BRE Guide, windows are selected as sensitive receptors on the basis of being a habitable room facing the proposed development.

Similarly, amenities and open spaces are selected on the basis of being in the immediate vicinity of the proposed development. The primary purpose of a daylight, sunlight and overshadowing assessment is to determine the likely loss of light to adjacent buildings resulting from the construction of the proposed development.

Therefore, in this case, the proposed development is identified as the potential source of impact. The sensitive receptors identified for this study are windows of habitable rooms facing proposed development where the occupants have a reasonable expectation of daylight. Table 58 identifies all sensitive receptors analysed, whilst Figure 72 identifies their location.

Development Ref.	Development name	Status
Ref. 1	Block G South Elevation	Permitted
Ref. 2	Block E1 South Elevation	Permitted
Ref. 3	Block E1 & E2 East Elevation	Permitted
Ref. 4	Bluebell Cottages	Existing
Ref. 5	Bluebell Cottages	Existing
Ref. 6	Bluebell Cottages	Existing
Ref. 7	Bluebell Cottages	Existing

Table 58: Sensitive Receptors Surrounding the Proposed Development



Figure 72: Location of Sensitive Receptors

DAYLIGHT IMPACT ON SURROUNDING PROPERTIES

25º line criteria

BRE Guidelines (BR 209) state that if a proposed development falls beneath a 25° line taken from a point 1.6 metres above ground level from any adjacent properties, then no impact is perceived, and further analysis is not required. This methodology was followed for this analysis (to assess the impact of the reduction in block heights), as it was followed for the initial assessment for the permitted.
As the sensitivity receptors fall above the 25° line (Step 2), a VSC assessment was then carried out (Step 3).

VSC > 27%

As previously outlined, sensitive receptor ref. 1 to 7 have been selected for VSC analysis. For sensitive receptors 1 to 3, windows on the lower two floors of the adjacent permitted properties were modelled, as these are expected to experience the greatest potential impact and therefore provide a representative indication of daylight effects. For sensitive receptors 4 to 7, all windows were included within the assessment.

Since the VSC with the proposed development in place is less than 27% to certain spaces as shown in the table 59 to 62, the VSC levels achieved have been compared with previously permitted development in place to assess if the reduction of light is in accordance with BRE Guideline recommendations and continues to achieve at least 80% of its former value once the proposed development is in place. When analysing the VSC of the amended development to the previously permitted development a daylight impact will not be perceived for sensitive receptor ref. 1 to 7 as the VSC remains equal or greater than 100% of its reference value.

REF. 1



Figure 73: Location of sensitive receptors Block G – South Elevation – Ref. 1

Window Legend	VSC Received with Proposed/Amended Development in Place [%]	Meets BRE Guidelines (VSC>27%)	VSC received with the Previously Permitted Development [%]	% of its Former Value	Meets BRE Guidelines (VSC>80% of its Former Value)
1	10.77	N	9.24	116.56%	Y
2	11.92	N	10.28	115.95%	Y
3	11.82	N	9.14	129.32%	Y
4	6.31	N	5.38	117.29%	Y
5	18.23	N	15.46	117.92%	Y
6	20.01	N	18.16	110.19%	Y
7	20.07	N	18.57	108.08%	Y
8	11.17	N	9.74	114.68%	Y
9	11.91	N	9.41	126.57%	Y

Window Legend	VSC Received with Proposed/Amended Development in Place [%]	Meets BRE Guidelines (VSC>27%)	VSC received with the Previously Permitted Development [%]	% of its Former Value	Meets BRE Guidelines (VSC>80% of its Former Value)
10	11.31	N	10.69	105.80%	Y
11	13.85	N	10.5	131.90%	Y
12	11.65	N	9.34	124.73%	Y
13	7.21	N	5.28	136.55%	Y
14	19.54	N	16.39	119.22%	Y
15	20.87	N	18.75	111.31%	Y
16	21.65	N	18.74	115.53%	Y
17	11.62	N	8.94	129.98%	Y
18	12.82	N	10.09	127.06%	Y

Table 59: VSC Results (Ref. 1)

REF. 2

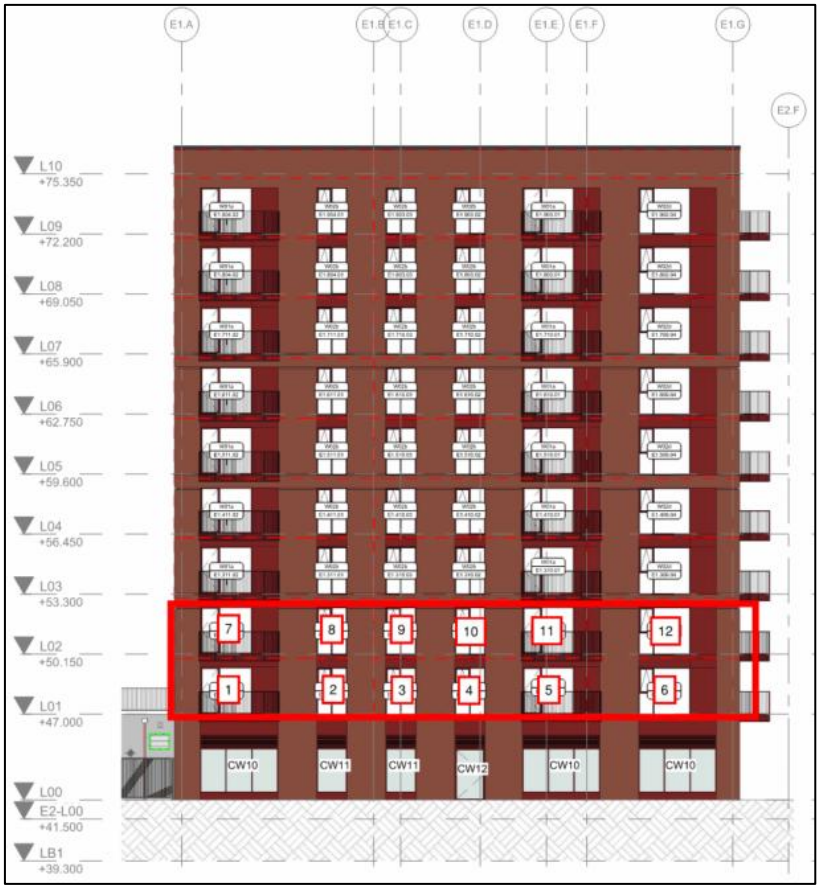


Figure 74: Location of sensitive receptors Block E1 South Elevation– Ref. 2

Window Legend	VSC Received with Proposed/Amended Development in Place [%]	Meets BRE Guidelines (VSC>27%)	VSC received with the Previously Permitted Development [%]	% of its Former Value	Meets BRE Guidelines (VSC>80% of its Former Value)
1	13.69	N	10.37	132.02%	Y
2	21.91	N	19.32	113.41%	Y
3	21.72	N	18.27	118.88%	Y
4	20.67	N	17.69	116.85%	Y
5	9.8	N	8.56	114.49%	Y
6	20.8	N	17.97	115.75%	Y

Window Legend	VSC Received with Proposed/Amended Development in Place [%]	Meets BRE Guidelines (VSC>27%)	VSC received with the Previously Permitted Development [%]	% of its Former Value	Meets BRE Guidelines (VSC>80% of its Former Value)
7	14.33	N	11.92	120.22%	Y
8	23.25	N	20.86	111.46%	Y
9	23.18	N	19.62	118.14%	Y
10	22.12	N	18.98	116.54%	Y
11	10.24	N	7.01	146.08%	Y
12	22.79	N	19.38	117.60%	Y

Table 60: VSC Results (Ref. 2)

REF. 3



Figure 75: Location of sensitive receptors Block E East Elevation – Ref. 3

Window Legend	VSC Received with Proposed/Amended Development in Place [%]	Meets BRE Guidelines (VSC>27%)	VSC received with the Previously Permitted Development [%]	% of its Former Value	Meets BRE Guidelines (VSC>80% of its Former Value)
1	15.13	N	12.25	123.51%	Y
2	12.59	N	9.38	134.22%	Y
3	11.67	N	8.85	131.86%	Y
4	15.05	N	11.62	129.52%	Y
5	14.3	N	10.56	135.42%	Y
6	10.75	N	7.57	142.01%	Y
7	9.63	N	6.57	146.58%	Y
8	8.1	N	6.16	131.49%	Y
9	6.08	N	5.97	101.84%	Y
10	9.11	N	8.53	106.80%	Y
11	17.26	N	14.7	117.41%	Y
12	8.98	N	7.19	124.90%	Y
13	17.13	N	13.6	125.96%	Y
14	8.47	N	5.84	145.03%	Y
15	9.41	N	5.23	179.92%	Y
16	17.43	N	13.81	126.21%	Y
17	16.32	N	12.84	127.10%	Y
18	7.55	N	3.77	200.27%	Y
19	5.11	N	2.72	187.87%	Y

Window Legend	VSC Received with Proposed/Amended Development in Place [%]	Meets BRE Guidelines (VSC>27%)	VSC received with the Previously Permitted Development [%]	% of its Former Value	Meets BRE Guidelines (VSC>80% of its Former Value)
20	10.08	N	7.53	133.86%	Y
21	7.75	N	6.75	114.81%	Y
22	17.03	N	14.88	114.45%	Y
23	20.32	N	18.01	112.83%	Y
24	20.7	N	19.67	105.24%	Y
25	13.93	N	13.76	101.24%	Y
26	26.25	N	25.29	103.80%	Y
27	29.23	Y	NA	NA	NA
28	29.07	Y	NA	NA	NA
29	18.66	N	17.6	106.02%	Y
30	17.61	N	17.51	100.57%	Y
31	32.2	Y	NA	NA	NA
32	7.28	N	6.83	106.59%	Y
33	10.58	N	9.38	112.79%	Y
34	19.34	N	16.51	117.14%	Y
35	11.5	N	8.99	127.92%	Y
36	18.82	N	15.72	119.72%	Y
37	10.89	N	8	136.13%	Y
38	11.33	N	7.04	160.94%	Y

Window Legend	VSC Received with Proposed/Amended Development in Place [%]	Meets BRE Guidelines (VSC>27%)	VSC received with the Previously Permitted Development [%]	% of its Former Value	Meets BRE Guidelines (VSC>80% of its Former Value)
39	19.62	N	15.83	123.94%	Y
40	19.19	N	15.18	126.42%	Y
41	9.98	N	5.46	182.78%	Y
42	7.82	N	5.08	153.94%	Y
43	11.4	N	9.21	123.78%	Y
44	8.28	N	7.03	117.78%	Y
45	18.95	N	16.87	112.33%	Y
46	22.72	N	20.55	110.56%	Y

Window Legend	VSC Received with Proposed/Amended Development in Place [%]	Meets BRE Guidelines (VSC>27%)	VSC received with the Previously Permitted Development [%]	% of its Former Value	Meets BRE Guidelines (VSC>80% of its Former Value)
47	22.9	N	20.28	112.92%	Y
48	14.7	N	14.26	103.09%	Y
49	27.01	Y	NA	NA	NA
50	30.08	Y	NA	NA	NA
51	30.47	Y	NA	NA	NA
52	19.73	N	18.95	104.12%	Y
53	18.33	N	17.66	103.79%	Y
54	32.74	Y	NA	NA	NA

Table 61: VSC Results (Ref. 3)

REF. 4, 5, 6 & 7



Figure 76: Location of sensitive receptors adjacent residential – Ref. 4, 5, 6, & 7

Window Legend	VSC Received with Proposed/Amended Development in Place [%]	Meets BRE Guidelines (VSC>27%)	VSC received with the Previously Permitted Development [%]	% of its Former Value	Meets BRE Guidelines (VSC>80% of its Former Value)
1	26.2	N	25.44	102.99%	Y
2	25.81	N	25.4	101.61%	Y
3	24.19	N	23.94	101.04%	Y
4	23.99	N	24.15	99.34%	Y
5	24.06	N	23.94	100.50%	Y
6	23.7	N	23.62	100.34%	Y
7	23.84	N	23.43	101.75%	Y

Window Legend	VSC Received with Proposed/Amended Development in Place [%]	Meets BRE Guidelines (VSC>27%)	VSC received with the Previously Permitted Development [%]	% of its Former Value	Meets BRE Guidelines (VSC>80% of its Former Value)
8	24.36	N	24.06	101.25%	Y
9	24.79	N	24.33	101.89%	Y
10	25.01	N	24.59	101.71%	Y
11	25.29	N	24.51	103.18%	Y
12	24.78	N	24.08	102.91%	Y
13	24.51	N	23.77	103.11%	Y
14	23.92	N	23.26	102.84%	Y

Table 62: VSC Results (Ref. 4, 5, 6, & 7)

ANNUAL PROBABLY SUNLIGHT HOURS AND WINTER SUNLIGHT HOURS (APSH/WPSH) FOR THE SURROUNDING PROPERTIES

In order to assess the amount of sunlight that is received by windows, the Annual Probable Sunlight Hours (APSH) calculation methods as outlined in BRE Guidance should be used.

When designing a new development, consideration should be given to the safeguarding of access to sunlight for both existing dwellings and for any nearby non-domestic buildings where there is a requirement for sunlight. To assess if there will be a loss of sunlight to an existing building, BRE Guidance in section 3.2.3 suggested that all main living rooms of dwellings, and conservatories, should be checked if they have a window facing within 90° of due south. Kitchens and bedrooms are less important, although care should be taken not to block too much sun. If the proposed development is fully north of the existing window, then sunlight need not be assessed.

To calculate this assessment, the Annual and Winter Probable Sunlight Hours (APSH/WPSH) should be used. APSH represents the sunlight that a given window may expect to receive over a year. The probable sunlight hours are expressed as the percentage of direct sunlight hours divided by the number of hours that the sun is expected to shine on unobstructed ground. The APSH uses a full year as the time period, whereas WPSH uses a period from the 21st of September to the 21st of March.

BRE Guidane in section 3.2.13 suggests that the APSH/WPSH should be measured at the centre point of the outside face of the window. It also states that if a room can receive more than 25% of APSH, including at least 5% of WPSH, then it should still receive enough sunlight. Also, if the overall annual loss of APSH is 4% or less, the loss of sunlight is small. Any reductions of sunlight access below the above values should be kept to a minimum. Loss in sunlight will be noticeable by the occupants if the available sunlight hours are both less than the amount above and less than 0.80 times their former value, either over the full year or just in the winter months, and the overall annual loss is greater than 4% of APSH. These criteria can be broken down as follows; noticeable reductions of sunlight access can occur if the following occurs:

- The APSH/WPSH drops below 25% for annual or 5% for winter guidelines, and
- The APSH value is less than 0.80 times the baseline value, and
- There is a reduction of more than 4% of the annual APSH.

As the heights of all blocks within the proposed amended development have been reduced compared to the previously permitted development, an improvement in APSH and WPSH levels is anticipated for adjacent existing and permitted properties, resulting in a positive impact on sunlight availability.

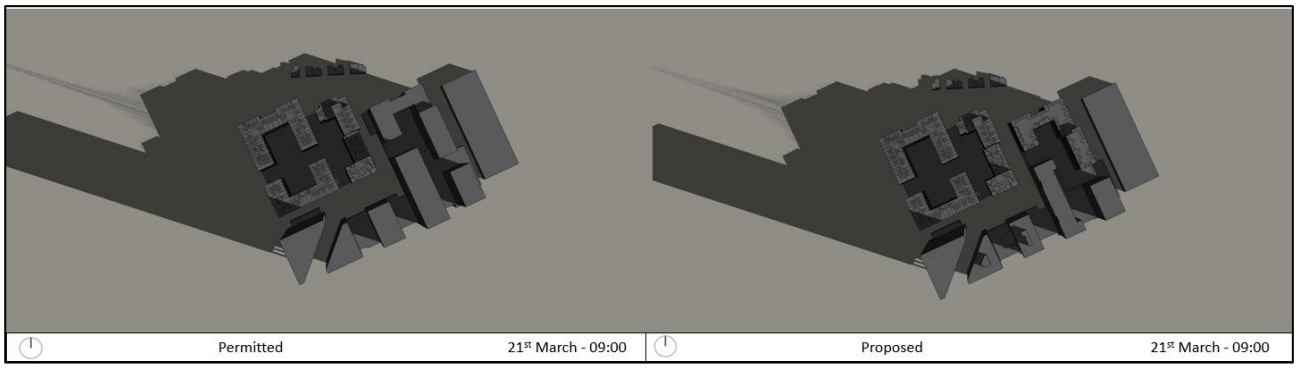
SUNLIGHT IMPACT TO EXISTING SURROUNDING AMENITY SPACES

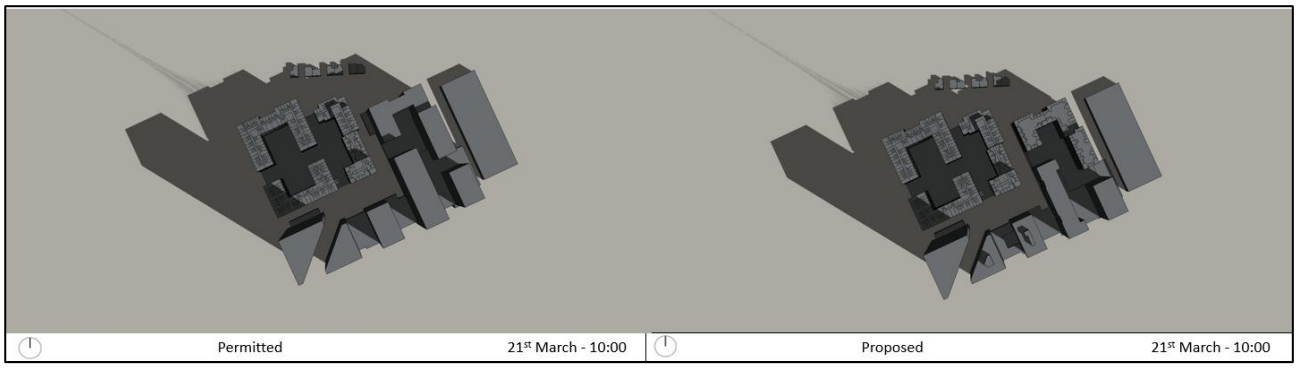
BRE guidance recommends that for external amenity spaces to appear adequately sunlit throughout the year, at least half of the space should receive at least two hours of sunlight on March 21st is chosen as the test date by BRE as it is the equinox and represents the average level of shading across the year.

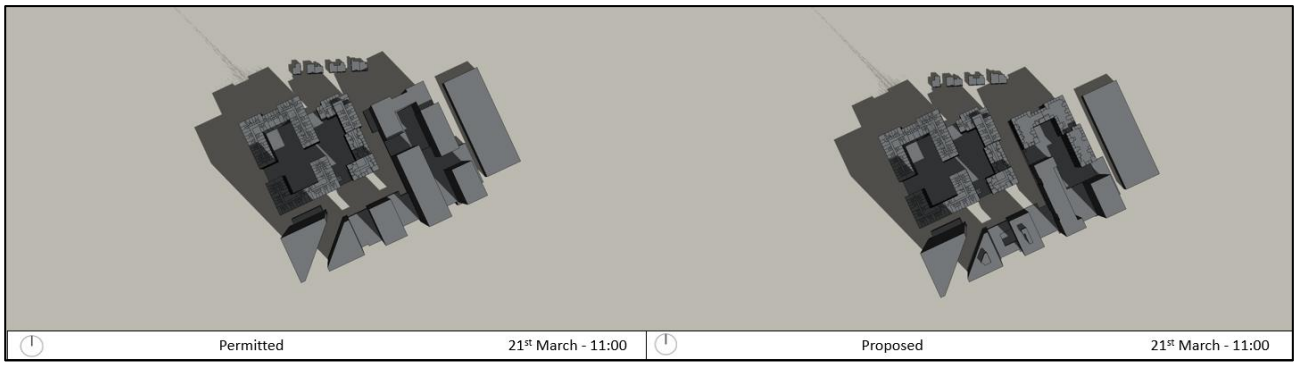
Where an existing amenity space already receives less than 50% sunlight, the BRE Guide recommends that the available sunlight should not be reduced to less than 0.8 times its former value. As the heights of all blocks have been reduced in the proposed amended development compared to the previously permitted development, a positive effect on sunlight access to adjacent existing and permitted amenity spaces is anticipated.

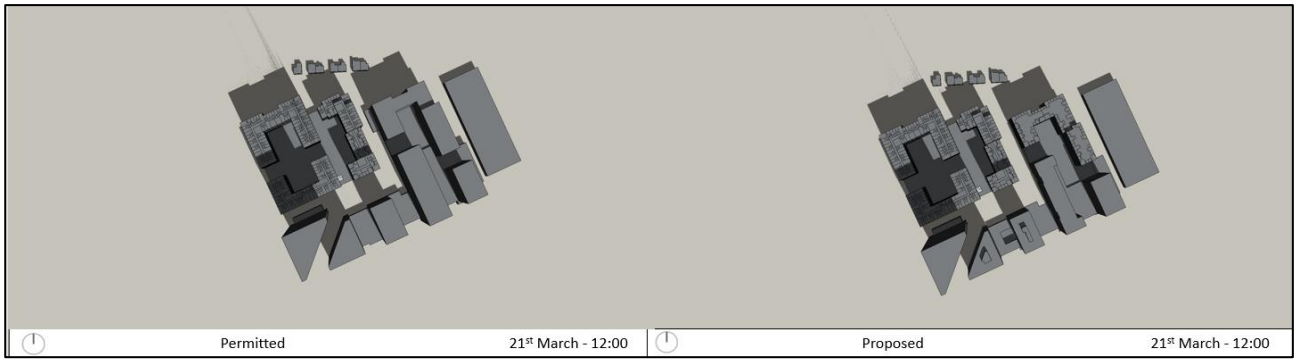
9 OVERSHADOWING IMPACT TO PROPERTIES

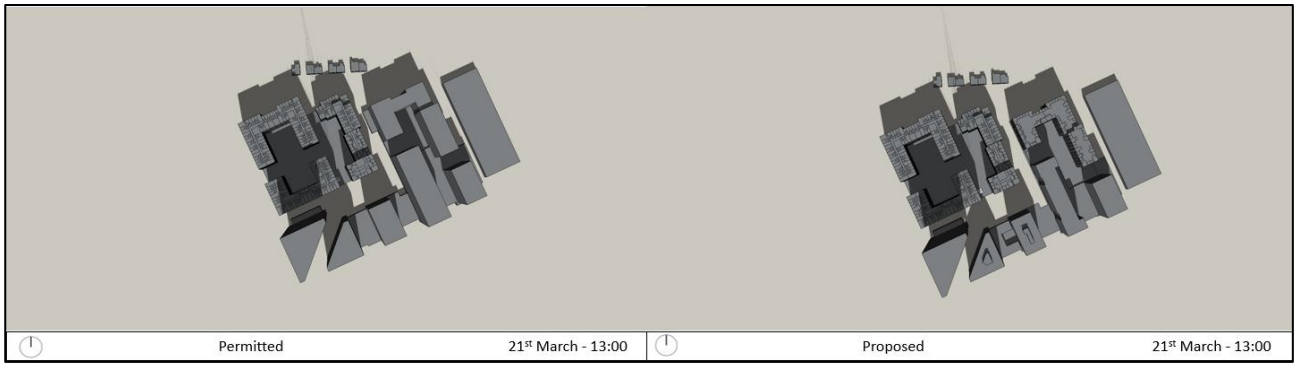
The overshadowing impact on adjacent properties has been assessed and compared with the originally permitted development, as illustrated in the figures below. As the height of all blocks within the new proposed amended development has been reduced compared to the originally permitted development, the level of overshadowing is reduced, resulting in a positive impact on neighbouring properties and amenity spaces.

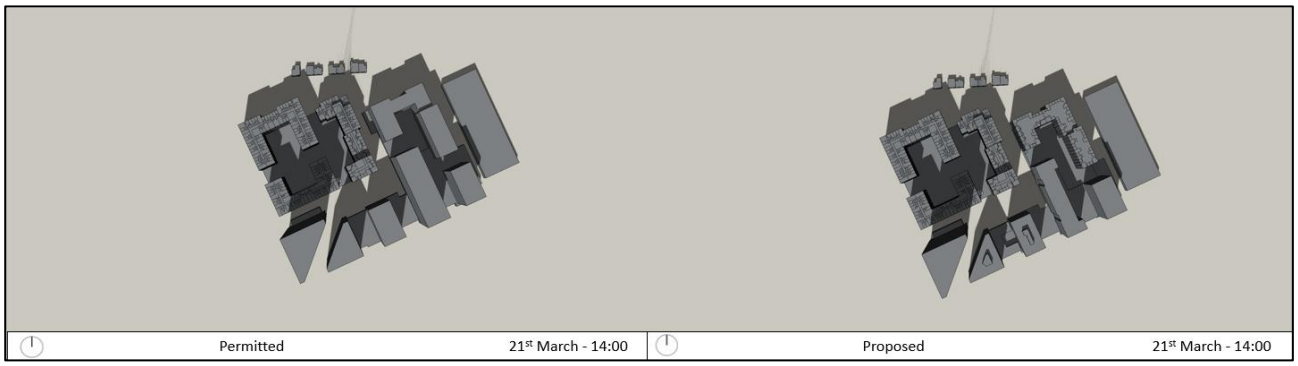


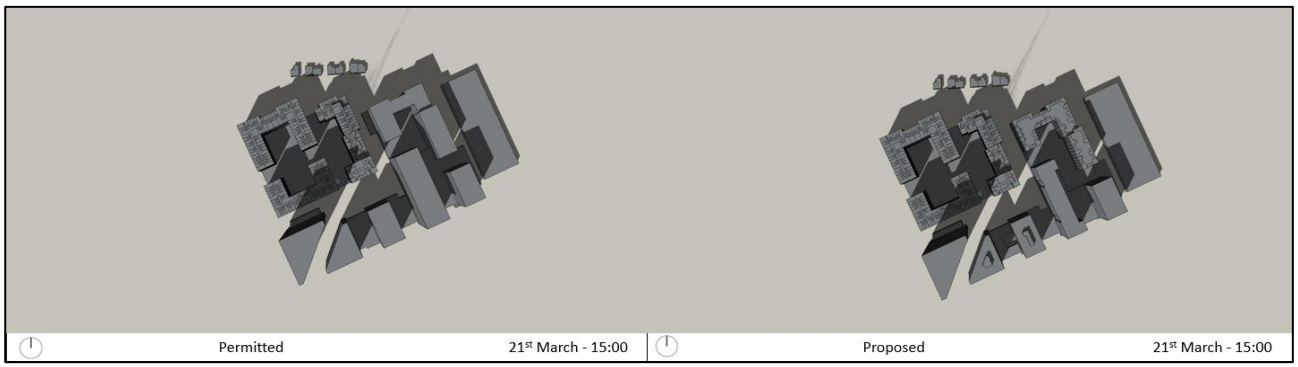


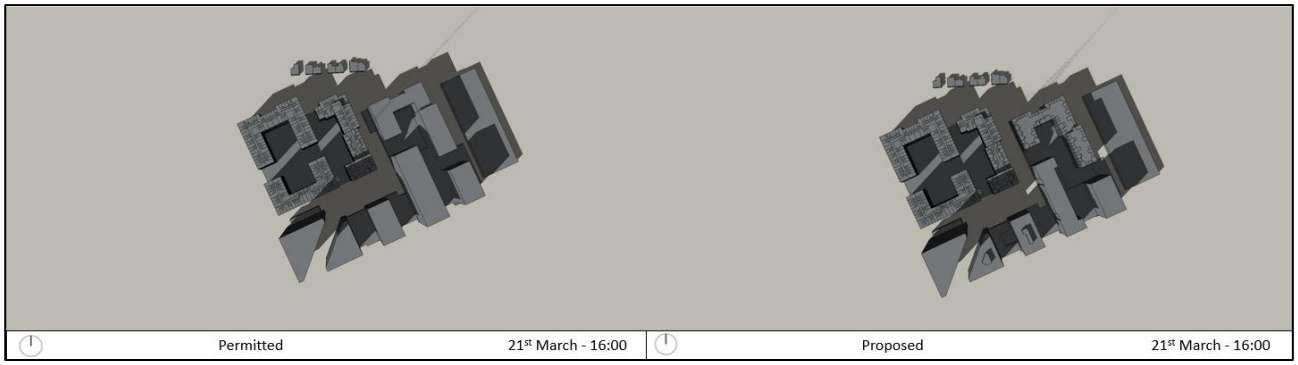


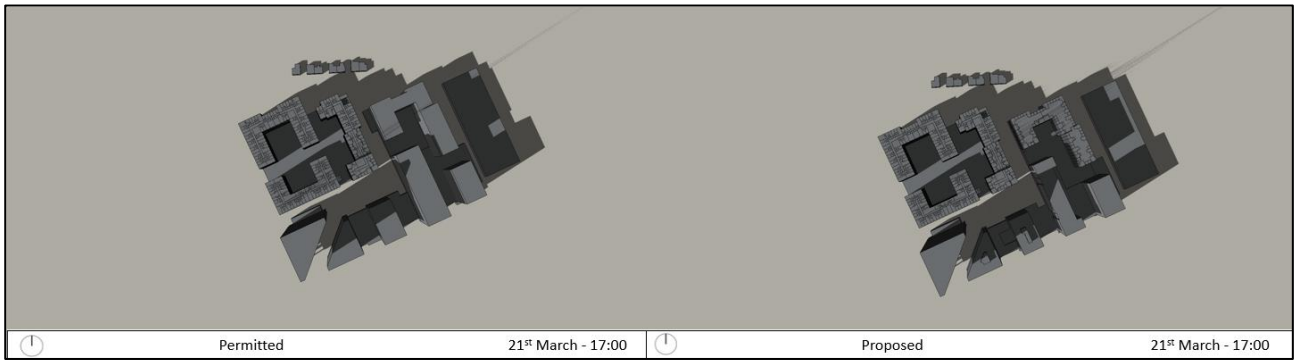

Permitted
21st March - 12:00
Proposed
21st March - 12:00

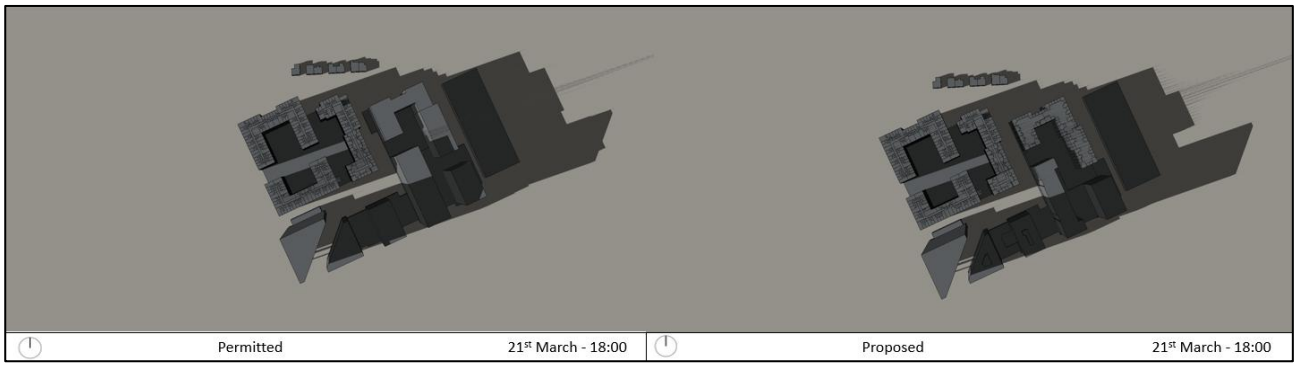

Permitted
21st March - 13:00
Proposed
21st March - 13:00


Permitted
21st March - 14:00
Proposed
21st March - 14:00


Permitted
21st March - 15:00
Proposed
21st March - 15:00


Permitted
21st March - 16:00
Proposed
21st March - 16:00


Permitted
21st March - 17:00
Proposed
21st March - 17:00


Permitted
21st March - 18:00
Proposed
21st March - 18:00

10 CONCLUSION

Royal Liver residential development Phase 2 – New Proposed Amended Development comprises revisions to the originally permitted development, including changes to the number of storeys and overall building heights across all blocks The amended development results in an overall reduction in building heights compared to the previously permitted development, which will improve daylight and sunlight conditions for adjacent existing and permitted properties, while also enhancing sunlight access to the proposed amenity spaces.

The amended development has been analysed in order to determine the following:

- The daylight levels within all occupied rooms throughout the proposed units within the development;
- The quality of amenity space being provided as part of the development, in relation to sunlight;
- The impact of the new proposed amended development to the adjacent permitted and existing properties surrounding the proposed development.

Calculations and methodology used are in accordance with BRE Guidelines for daylight and sunlight and based on the Building Research Establishments "Site Layout Planning for Daylight and Sunlight: A Good Practice Guide" by PJ Littlefair, 2022 Third Edition (BR 209). However, the following text from BS 8206 should be reiterated as previously outlined:

"The advice given here is not mandatory and this document should not be seen as an instrument of planning policy. Its aim is to help rather that constrain the designer. Although it gives numeral guidelines these should be interpreted flexibly because natural lighting is only one of the many factors in site layout design"

Internal Daylight

The analysis confirms that the majority of spaces not only meet but greatly exceed the recommendations outlined within the BRE guidance, 99.31% for criterion 1 and 96.94% for Criterion 2 within the new proposed amended development has been achieved.

Throughout the development, comfortable and desirable spaces have been designed to enhance the opportunity for improved daylight levels and extensive glazing to every room enabling deep daylight penetration and providing enhanced views to landscaped open spaces.

Sunlight

In relation to amenity space sunlight, the overall amenity space in the development shows compliance with the BRE Guidance, with more than 50% of the total amenity space receiving more than 2 hours of sunlight on March 21st test day.

Overshadowing

The overshadowing assessment demonstrates a positive or negligible change relative to the originally permitted development, owing to the reduction in height across all proposed blocks. As a result, the new proposed amended development is expected to have a positive or negligible effect on surrounding properties and amenity spaces when assessed on the test date of 21st March.

Impact to neighbouring properties

The VSC at all assessed windows within the surrounding existing and permitted properties has been evaluated. The analysis demonstrates that the VSC values achieved under the new proposed amended development are equal to or greater than those associated with the originally permitted development, reflecting the reduction in building heights across all blocks. Consequently, the amended proposals are not expected to adversely affect daylight levels to surrounding existing or permitted properties and will provide a neutral or improved daylight outcome when compared with the previously approved development.

11 VERIFICATION

This report was verified by:

Ashish Nautiyal, B. Tech. Mechanical Engineering

Senior Sustainability Engineer

O'Connor Sutton Cronin & Associates

OCSC

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