# Kilternan Village LRD, Dublin 18

Daylight and Sunlight Assessment Report Applicant: Liscove Limited

"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 than 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." - BR 209



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The following report has been prepared by 3D Design Bureau (3DDB). 3DDB have over 7 years experience in producing daylight and sunlight assessments for large scale planning applications and are recognised as experts in the field. This report has been reviewed and overseen by Nicholas Polley and Richard Dalton. Nicholas is CEO of 3D Design Bureau and is a qualified Building Services Engineer (B.Sc.(Eng) Dip Eng) with over 25 years experience in the industry. Richard is Associate Director of 3DDB and has a bachelors degree in Building Information Modelling (BIM) with over 20 years experience in the industry.



# 1.0 Executive Summary

# 1.1 Summary of Assessment

3D Design Bureau (3DDB) were commissioned to carry out a comprehensive daylight and sunlight assessment, along with an accompanying shadow study for the proposed large-scale residential development at Kilternan Village, Dublin 18.

It should be noted that, at the time of writing this report, planning permission has been granted for a portion of the subject development site, namely Phase 1 (D23A/0616). As the subject of the current application is the proposed LRD development, the daylight and sunlight assessments also include the properties within the approved Phase 1. The current application does not propose any modifications to the granted design and layout of these properties.

Assessments have been broken down into the following two main categories, 'Impact Assessment' and 'Scheme Performance', of which there are subcategories as summarised below:

## **Impact Assessment**

The impact assessment that was carried out for the purpose of this report is in accordance with the BRE Guidelines. The potential levels of effect that the proposed development would have on the surrounding existing environment and/or properties has been assessed. The assessed properties in the impact assessment are indicated in Figure 1.1 below.

The effects were assessed in the baseline state versus the proposed state. For definition of model states, including a visual representation of the model states, please refer to the 'Methodology' section on Page

This impact assessment covers the following metrics:

- Effect on daylight to surrounding properties. The effect to the Vertical Sky Component (VSC) of the windows of the following neighbouring properties was assessed:
  - 1-7-13 Rockville Woods
  - 2- Rockville Hall Apartments
  - 3- Rockville Mews
- Effect on sunlight to surrounding properties. The effect to the annual and winter probable sunlight hours (APSH/WPSH) of the windows of the following neighbouring properties was assessed:

## 1-7-13 Rockville Woods

#### 2- Rockville Hall Apartments

Following advice within the BRE Guidelines, the surrounding context was carefully considered to ensure all properties and amenity spaces that may potentially experience a level of effect have been included in the study.

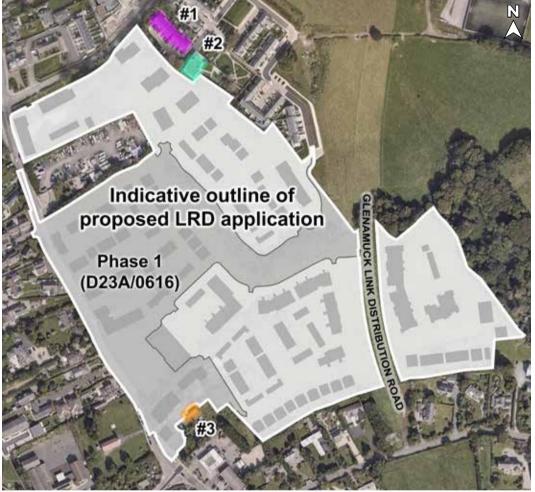


Figure 1.1: Scope of surrounding properties and environment assessed.

It should be noted that a daylight and sunlight report was produced by 3DDB for the previous SHD application in the subject site (ABP31386022). Considering that the site layout and design has evolved since then, the properties assessed for impact for this proposed LRD application have changed from those assessed under the SHD application, as per the BRE Guidelines. This is the case for the properties located across 5-6 Cromlech Close and 10-14 Rockville Avenue, which have been excluded from this study as they do no longer meet the criteria for impact under the BRE Guidelines. Conversely, there are properties that, although not included in the previous study, have been considered for impact assessment as they fall within a distance of three times the height of the proposed development in the current layout. This is the case for the properties to the south of the eastern portion of the site. However, they have not been included in the impact study as they fall outside the second criterion applied, which is further explained in section "4.1 Impact Assessment, Window Selection Criteria" on page 14.

It should be also noted that no Sun on Ground (SOG) impact assessment was deemed necessary, to any of the existing private gardens and public amenity areas, based on the orientation and separation distance of the proposed buildings, to such areas, in the reconfigured layout. The previous study had shown no noticeable impact to any of the existing gardens/ public amenity areas assessed to the north-east. The proposed layout is more favourable in terms of massing and setback away from these existing amenity areas previously assessed. It can then be reasonably assumed that no impact would occur.

The results of the impact assessments can be found in section A.O on page 31. These results are summarised in section 1.2 and explained in section "5.1 Analysis of Impact Assessment Results" on page 22.





Figure 1.2: Apartment blocks and duplex blocks assessed for scheme performance (highlighted)

#### **Scheme Performance**

The scheme performance assessments were carried out on the apartment blocks and the duplex blocks across the LRD development. These are the proposed 3 no. apartment blocks and 15 no. duplex blocks, and the 4 no. duplex blocks within the granted portion of the site.

Daylight access for all the habitable rooms within the aforementioned apartment and duplex blocks has been assessed through a Spatial Daylight Autonomy (SDA) study. Sunlight access for the same rooms has been quantified through a Sunlight Exposure (SE) assessment. A Sun On Ground (SOG) study has also been carried out to indicate the level of sunlight on March 21st in the proposed public and communal external amenity spaces.

The results of these scheme performance assessments, which are in accordance with the BRE Guidelines, can be found in section C.O on page 58. These results are summarised in section 1.3 and explained in section "5.2 Analysis of Scheme Performance Results" on page 23.

Supplementary scheme performance studies have also been carried out. These include an SDA assessment under the I.S. EN 17037 criterion, and a No Sky Line (NSL) study within proposed habitable rooms of the duplex blocks and the apartment blocks. The results of the supplementary scheme performance assessments can be found in section D.0 on page 161.



# 1.2 Impact Assessment Results Overview - Neighbouring Properties:

Effect to Daylight - Vertical Sky Component (VSC):

Effect to Vertical Sky Component (VSC)					
Windows/Rooms Assessed	37				
Negligible	32				
Minor Adverse	5				
Moderate Adverse	0				
Major Adverse	0				
Beneficial Impact*	0				
n.a.**	0				

## **Effect to Sunlight - Annual Probable Sunlight Hours (APSH):**

Effect to Annual Probable Sunlight Hours (APSH)					
Windows/Rooms Assessed	33				
Negligible	33				
Minor Adverse	0				
Moderate Adverse	0				
Major Adverse	0				
Beneficial Impact*	0				
n.a.**	0				

## **Effect to Sunlight - Winter Probable Sunlight Hours (WPSH):**

Effect to Winter Probable Sunlight Hours (WPSH)					
Windows/Rooms Assessed	33				
Negligible	33				
Minor Adverse	0				
Moderate Adverse	0				
Major Adverse	0				
Beneficial Impact*	0				
n.a.**	0				

<sup>\*&#</sup>x27;Beneficial Impact' will only be stated if the ratio of change is greater than 1.20 (an improvement of 20%). Should less perceptible improvements occur a 'Negligible' level of effect will be stated.

<sup>\*\*</sup>In instances where a baseline value is particularly low, levels of effects can appear exaggerated. To mitigate such occurrences, If the baseline value in the VSC, APSH/WPSH or SOG studies is below 1%, 3DDB have categorised the level of effect as n.a. (not applicable). Where windows/gardens/amenity areas are considered non-applicable, these instances are not included in the compliance rates calculation.



#### **Scheme Performance Results Overview:** 1.3

## **Spatial Daylight Autonomy (SDA):**

Spatial Daylight Autonomy (SDA) BRE 209 Criteria					
Unit Count	291				
Rooms Assessed	1022				
Without Tre	ees				
Compliant	996				
Non-compliant	26				
Compliance Rate*	c. 97%				
Trees in Winter State (Proposed and Existing Trees)					
Compliant	979				
Non-compliant	43				
Compliance Rate*	c. 96%				
Trees in Summer State (Proposed and Existing Trees)					
Compliant 959					
Non-compliant	63				
Compliance Rate* c. 94%					
Note: It is the expert opinion of 3DDB that the appropriate criteria for SDA assessments are that of the BRF Guidelines (BRF 209)					

## **Sunlight Exposure (SE):**

Sunlight Exposure (SE)				
Units Assessed	291			
SE with trees as opac	que objects			
Non-Compliant	11			
Minimum	47			
Medium	33			
High	200			
Compliance Rate*	c. 96%			
SE without deciduous trees				
Non-Compliant	5			
Minimum	38			
Medium	27			
High	221			
Compliance Rate*	c. 98%			

<sup>\*</sup> Compliance rates stated for the SE analysis are based on the units that have been assessed (apt and duplex units).

# Sun On Ground (SOG) in proposed amenity areas:

Sun On Ground (SOG) in proposed amenity areas				
Areas Assessed 17				
Areas meeting the guidelines	17			
Areas not meeting the guidelines	0			
Compliance Rate*	100%			

<sup>\*</sup> Compliance rates stated for the SOG assessment are based on the public and communal open spaces only.

<sup>\*</sup> Compliance rates stated for the SDA analysis are based on the rooms that have been assessed (apt and duplex units).



# 1.4 Supplementary Assessment Results Overview

# Spatial Daylight Autonomy (SDA) under I.S. EN 17037 Criterion:

Spatial Daylight Autonomy (SDA) under I.S. EN 17037 Criterion					
Unit Count 291					
Rooms Assessed	1022				
Without Tre	ees				
Compliant	912				
Non-compliant	110				
Compliance Rate* c. 89%					
Trees in Winter State (Proposed and Existing Trees)					
Compliant 844					
Non-compliant	178				
Compliance Rate* c. 83%					
Trees in Summer State (Proposed and Existing Trees)					
Compliant 775					
Non-compliant 247					
Compliance Rate* c. 76%					
Note: The study under the I.S. EN 17037 criterion should be considered a supplementary assessment.					

It is the expert opinion of 3DDB that the appropriate criteria are that of the BRE Guidelines (BRE 209)

## No Sky Line (NSL):

110 513 2116 (1152).					
No Sky Line (NSL):					
Unit Count	291				
Rooms Assessed	1022				
Yes	996				
No	26				
Compliance Rate**	c. 97%				

<sup>\*\*</sup> As the BRE Guidelines do not provide a recommended minimum for NSL in proposed developments, compliance rates for NSL are calculated using a criteria applied by 3DDB.

<sup>\*</sup> Compliance rates stated for the SDA analysis are based on the rooms that have been assessed (apt and duplex units).

<sup>\*</sup> Compliance rates stated for the NSL analysis are based on the rooms that have been assessed (apt and duplex units).



# 2.0 Guidelines / Standards

#### **Summary**

Neither the British Standard, European Standard, British Annex to the European Standard nor the BRE Guide set out rigid standards or limits. They are all considered advisory documents. The BRE Guide is preceded by the following very clear statement as to how the design advice contained therein should be used:

"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 than 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."

That the recommendations of the BRE Guide are not suitable for rigid application to all developments in all contexts, is of particular importance in the context of national and local policies for the consolidation and densification of urban areas or when assessing applications for highly constrained sites (e.g. lands in close proximity or immediately to the south of residential lands). A compromise may have to be made concerning daylight and sunlight compliance to achieve national or local planning objectives.

It is the expert opinion of 3D Design Bureau, that the BRE Guidelines (*BR 209*) are the most appropriate guiding document for daylight and sunlight assessment. For daylight within proposed developments, a supplementary study has also been carried out under the criteria of *I.S. EN 17037*. The rationale for this opinion is outlined below.

#### Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities. (2023)

In July 2023, the Department of Housing, Planning and Local Government published an updated guidance document for new apartments, *Sustainable Urban Housing: Design Standards for New Apartments*. This document makes reference to, *EN 17037:2018: Daylight in Buildings* (the European Standard), *BS EN 17037:2018: Daylight in Buildings* (the UK National Annex to the European Standard) and to the 3rd edition of Building Research Establishment's *Site Layout Planning for Daylight and Sunlight: a Guide to Good Practice* (BR 209 2022).

Paragraph 6.7 of the 2023 apartment guidelines states:

"Where an applicant cannot fully meet all of the requirements of the daylight provisions above, this must be clearly identified and a rationale for any alternative, compensatory design solutions must be set out, which planning authorities should apply their discretion in accepting taking account of its assessment of specific. This may arise due to a design constraints [sic] associated with the site or location and the balancing of that assessment against the desirability of achieving wider planning objectives. Such objectives might include securing comprehensive urban regeneration and or an effective urban design and streetscape solution."

As such, this report identifies where daylight and sunlight recommendations have and have not been achieved. Rationale and compensatory design solutions are the remits of the planning consultant and/or the project architect, these will also be included in this report when possible.

Note: Section 3.2 of the Urban Development and Building Height Guidelines 2018, provides similar guidance as above. However, it should be noted that at the time of publication of the *Urban Development and Building Height Guidelines* (2018), BR 209 was in the 2nd edition, first published in 2011. Since then, a 3rd edition of BR 209 has been published (June 2022) and the 2nd edition has been withdrawn. BR 209 no longer references *BS 8206-2:2008*, which has also been withdrawn. The standard used as reference in BR 209 edition 3 is *BS EN 17037*.

## BRE - Site Layout Planning for Daylight and Sunlight: a Guide to Good Practice (2022)

This document will be referred to as the BRE Guidelines in this report.

At the time of writing this report, the BRE Guidelines are in the third edition (BR 209). The BRE Guidelines set out recommendations for appropriate levels of daylight and sunlight within a proposed development, as well as providing guidance on impacts arising from a proposed development to surrounding properties and amenity areas.

It is the expert opinion of 3D Design Bureau that the BRE Guidelines are the most appropriate guiding document for assessing daylight potential within a proposed development. The rationale for this opinion is outlined in the Dublin City Development Plan (2022-2028), which states:

"Prior to 2018, Ireland had no standard for daylight. In 2018, the National Standards Authority of Ireland adopted EN 17037 to directly become IS EN 17037. It is important to note that no amendments were made to this document and unlike BS EN 317037, it does not contain a national annex. It offers only a single target for new buildings (there are no space by space targets – e.g. a kitchen would have the same target as a warehouse or office). It does not offer guidance on how new developments will impact on surrounding existing environments. These limitations make it unsuitable for use in planning policy or during planning applications. BR 209 must still be used for this purpose."

Whilst BRE Guidelines draws reference from BS EN 17037, there are some subtle differences between BR 209 and BS EN 17037. For the purposes of this report, the BRE Guidelines (BR 209) is considered the appropriate reference document.

A detailed description of the various recommendations for impact assessment and scheme performance is contained in section "4.3 Quantitative Impact Assessment Overview" on page 17 of this report.



#### EN 17037:2018: Daylight in Buildings (2018)

EN 17037 is a European Standard that provides recommendations for daylight within spaces. (Emphasis added)

EN 17037:2018 recommends that 300 lux should be received across 50% of a hypothetical reference plane of any room for half of the daylight hours of the year, with no less than 100 lux received across 95% of the reference plane. No distinction is made for the function of the room for target lux levels within this standard.

It is the opinion of 3D Design Bureau that these target values are less appropriate for proposed residential developments than the recommendations made in the BRE Guidelines, which apply room-specific target values for appropriate LUX levels.

Recommendations made in EN 17037 regarding Sunlight Exposure for proposed developments have been incorporated into the BRE Guidelines. As such, Sunlight Exposure is deemed the appropriate assessment for sunlight within habitable rooms of the proposed development.

EN 17037 also makes recommendations related to glare and quality of view out. These aspects are not addressed in this report as these assessments have less relevance in a residential context where occupants have the freedom to move about in order to improve level of glare or alter the view out.

#### I.S. EN 17037:2018 Daylight in Buildings (2018)

I.S. EN 17037 is a direct adoption of the European Standard EN 17037:2018 that provides recommendations for daylight within spaces.

The target values given within *I.S. EN 17037* are directly adopted from *EN 17037*. As such, there are no room-specific recommendations for daylight. Because of these limitations, it is the expert opinion of 3D Design Bureau, that the recommendations made in the *BRE Guidelines* are more appropriate to use than those within *I.S. EN 17037*.

Regardless, a supplementary SDA study has been carried out on the proposed development using the criterion of *I.S. EN 17037*, with compliance rates stated. However, this should be considered a supplementary study.

#### **BS EN 17037:2018: Daylight in Buildings (2018)**

BS EN 17037 is the British Annex to the European Standard (see above). The British Annex acknowledges that a rigid application of the European Standard "may not be achievable". It states "... it is the opinion of the UK committee that the recommendations for daylight provision in a space [...] may not be achievable for some buildings, particularly dwellings."

In BS EN 17037, daylight recommendations differ depending on the function of a room. Target lux levels are applied across 50% of the reference plane of a room for half of the daylight hours. The target lux levels are:

200 Lux for kitchens
 150 Lux for living rooms
 100 Lux for bedrooms

No minimum is stated to be achieved across 95% of the working plane. If a space has dual purposes it is advised that the higher target value should be applied.

## The Compact Growth Guidelines (2024)

The Compact Growth Guidelines offers guidance on compact growth principles as a means to promote sustainable development, efficient land use, and infrastructure while minimizing sprawl and environmental degradation, contributing to sustainable urban growth, enhance liveability and support broader planning objectives.

In regard to daylight, section 5.3.7 states:

"The provision of acceptable levels of daylight in new residential developments is an important planning consideration, in the interests of ensuring a high quality living environment for future residents. It is also important to safeguard against a detrimental impact on the amenity of other sensitive occupiers of adjacent properties.

(...)

(b) In cases where a technical assessment of daylight performance is considered by the planning authority to be necessary regard should be had to quantitative performance approaches to daylight provision outlined in guides like A New European Standard for Daylighting in Buildings IS EN17037:2018, UK National Annex BS EN17037:2019 and the associated BRE Guide 209 2022 Edition (June 2022), or any relevant future standards or guidance specific to the Irish context.

In drawing conclusions in relation to daylight performance, planning authorities must weigh up the overall quality of the design and layout of the scheme and the measures proposed to maximise daylight provision, against the location of the site and the general presumption in favour of increased scales of urban residential development. Poor performance may arise due to design constraints associated with the site or location and there is a need to balance that assessment against the desirability of achieving wider planning objectives. Such objectives might include securing comprehensive urban regeneration and or an effective urban design and streetscape solution."

The Compact Growth Guidelines should be applied within statutory development plans and during the consideration of individual planning applications. Flexibility in interpretation allows planning authorities to tailor recommendations to specific local contexts and planning objectives.



#### **Dun Laoghaire-Rathdown County Development Plan (2022-2028)**

The guidance provided in the Dun Laoghaire-Rathdown County Development Plan 2022-2028 (DLR) references the 2nd Edition of the BRE guidelines (BR 209).

Section 12.3.4.2 of the DLR Development Plan states:

"Development shall be guided by the principles of Site Layout Planning for Daylight and Sunlight, A guide to good practice (Building Research Establishment Report, 2011) and/or any updated, or subsequent guidance, in this regard."

The DLR Development Plan allows for consideration of any updated or subsequent guidance and, therefore, the 3rd edition of the BRE guidelines (BR 209), which was released in 2022 after the publication of the DLR Development Plan, is considered as the primary document.



# 3.0 Glossary

## 3.1 Terms and Definitions

Below is a list of daylight and sunlight terminology that may be used in this report depending on the assessments carried out.

## Skylight

Non directional ambient light cast from the sky and environment.

#### **Sunlight**

Direct parallel rays of light emitted from the sun.

#### **Daylight**

Combined skylight and sunlight.

## Overcast sky model

A completely overcast sky model, used for daylight calculation.

#### Cloudless sky model

A completely cloudless sky model, used for sunlight exposure calculation.

#### **Model State**

The model state is a term used to describe the configuration of the digital model used to run analysis. Model states will typically reflect a baseline state and a proposed or cumulative state. For a definition of the model states used in the analysis carried out in this report, please refer to "Preparing the analytical model" on page 15.

#### **Vertical Sky Component (VSC)**

Ratio of that part of illuminance, at a point on a given vertical plane, that is received directly from an overcast sky model, to illuminance on a horizontal plane due to an unobstructed hemisphere of this sky. Usually the 'given vertical plane' is the outside of a window wall. The VSC does not include reflected light, either from the ground or from other buildings.

#### Annual Probable Sunlight Hours (APSH) / Winter Probable Sunlight Hours (WPSH)

Annual Probable Sunlight Hours (APSH) and Winter Probable Sunlight Hours (WPSH) are a measure of sunlight that a given window may expect over a year period (1 Jan - 31 Dec), or the winter period (21 Sep - 21 Mar) respectively.

North facing windows may receive sunlight on only a handful of occasions in a year, and windows facing eastwards or westwards will receive sunlight only at certain times of the day. Taking this into account, the BRE Guidelines suggest that windows with an orientation within 90 degrees of due south should be assessed.

#### Sun On Ground (SOG)

Assessment of what portion of a garden or amenity space is capable of receiving 2 hours or more of direct sunlight on March 21st.

## **Sunlight Exposure (SE)**

The number of hours of direct sunlight a room can expect to receive on a given date between February 1st and March 21st at a determined point on the windows.

#### Spatial Daylight Autonomy (SDA)

Spatial Daylight Autonomy assesses whether a space receives sufficient daylight on a working plane during standard operating hours on an annual basis. For compliance, the target value is achieved across 50% of the working plane for half of the occupied period.

#### No Sky Line (NSL)

The no sky line divides points on the working plane which can and cannot see the sky.

#### **Working plane**

Horizontal, vertical or inclined plane in which a visual task lies. Normally the working plane may be taken to be horizontal, 850 mm above the floor in houses and factories, 700 mm above the floor in offices. The plane is offset 300mm from the room boundaries under BR 209 criteria, and 500mm from the room boundaries under I.S. EN 17037 criteria.

#### LKD

Living / Kitchen / Dining room.

## **BRE Target Value**

When assessing the effect a proposed development would have on a neighbouring property, a target value will be applied. This applied target value is generated as per the criteria set out for each study in the BRE Guidelines.

## **Alternative Target Value**

It could be appropriate to use alternative target values when conducting assessment of effect on existing properties. If such instances occur the rationale will be clearly explained and the instances where the alternative target values have been applied will be clearly identified.

#### **Level of BRE Compliance**

Each table in the study that has a column identified as "Level of BRE Compliance", identifies how an assessed instance performs in relation to the appropriate target value. If the instance is in compliance with the recommendations as made in the BRE Guidelines the value will be expressed as "BRE Compliant". If the instance does not meet the criteria as set out in the BRE Guidelines a percentage will be expressed to determine the level of compliance with the recommendation. This value determines the definition of effect.

#### **LUX**

Lux is a standardised unit of measurement of light level intensity. A measurement of 1 lux is equal to the illumination of a one metre square surface that is one metre away from a single candle.



# 3.2 Definition of Effects

The BRE Guidelines state that:

"Adverse impacts occur when there is a significant decrease in the amount of skylight and sunlight reaching an existing building where it is required, or in the amount of sunlight reaching an open space. The assessment of impact will depend on a combination of factors, and there is no simple rule of thumb that can be applied."

As such, planning authorities should consider a range of localised factors when making decisions. The terminology suggested in the BRE Guidelines is as listed below, whilst the assessment of impact should depend on a combination of factors. The BRE Guidelines also state:

"Where a new development affects a number of existing buildings or open spaces, the clearest approach is usually to assess the impact on each one separately."

Taking this advice, 3DDB have categorised the level of effect on each window/room/open space on an individual basis. In quantifying the levels of effect, 3DDB have assigned numerical values to the levels of compliance with the BRE recommendations. By applying a numerical logic to the terminology used in defining the levels of effect there is no ambiguity regarding how the levels of effect have been categorised within this report.

The list of definitions given below is taken from 'Appendix H: Environmental impact assessment' of the BR 209 with a clear indication of how they have been applied in the context of this report.

#### Negligible

For the purposes of this Sunlight and Daylight Assessment Report a 'Negligible' level of effect will be stated if the level of effect is within the criteria as recommended in the BRE Guidelines and the applied target value has been achieved.

#### **Minor Adverse**

For the purposes of this Sunlight and Daylight Assessment Report, a 'Minor Adverse' level of effect will be stated if the level of effect is marginally outside of the criteria as stated in the BRE Guidelines. Typically a 'Minor Adverse' level of effect will be applied if the level of daylight or sunlight is reduced to equal or greater than 80% and less than 100% of the applied target value.

## **Moderate Adverse**

For the purposes of this Sunlight and Daylight Assessment Report, a 'Moderate Adverse' level of effect will be stated if the level of daylight or sunlight is reduced to equal or greater than 50% and less than 80% of the applied target value. 'Moderate Adverse' levels of effect are quite typical in instances where a proposed development is planned on an under-developed plot of land.

## **Major Adverse**

An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the environment. For the purposes of this Sunlight and Daylight Assessment Report a 'Major Adverse' level of effect will be stated if the proposed development reduces the availability of daylight or sunlight of a neighbouring property to significantly below a baseline level. A 'Major Adverse' level of effect will be stated if the level of daylight or sunlight is reduced to less than 50% of the applied target value.

#### **Beneficial Impact**

In relation to sunlight or daylight access, it is conceivable that a proposed development could yield positive effects on the neighbouring properties. In such circumstances the development would typically involve a reduction to the size or scale of built form (e.g. such as the demolition of a building or the removal of a large belt of evergreen trees, which might result in an increase in light access). Where such improvements occur, a 'Beneficial Impact' will only be stated if the ratio of change is greater than 1.20 (an improvement of 20%). Should less perceptible improvements occur a 'Negligible' level of effect will be stated.

## Not Applicable (n.a.)

In instances where a baseline value is particularly low, levels of effects can appear exaggerated. To mitigate such occurrences, if the baseline value in the VSC, APSH/WPSH or SOG studies is below 1%, 3DDB have categorised the level of effect as n.a. (not applicable).

#### **Averaged Windows (-)**

If it can be determined or reasonably assumed that multiple windows are servicing the same room, each window will be assessed and a weighted average will be calculated. In such instances the level of effect for the room will be stated, but the level of effect for the individual windows contributing towards the average will be left blank in the table. This will be indicated in the tables with the dash symbol. (-)

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# 3.3 Definition of Levels of Sunlight Exposure

For interiors, access to sunlight can be quantified. BR 209 recommends that a space should receive a minimum of 1.5 hours of direct sunlight on a selected date between 1 February and 21 March with cloudless conditions. It is suggested that 21 March (equinox) be used. The medium level of recommendation is three hours and the high level of recommendation four hours. For dwellings, at least one habitable room, preferably a main living room, should meet at least the minimum criterion.

# **Level of Sunlight Exposure:**

The level of sunlight exposure will be stated for each assessed room in the tables under section "C.4 Sunlight Exposure (SE) in Proposed Units" on page 129. Below is a list of the terms used to categorise the levels of sunlight exposure:

#### **Below Minimum**

Sunlight exposure will be categorised as 'below minimum' if the potential sunlight for the assessed room is less than 1.5 hours on March 21st. Note: the recommendation is that a room within a proposed <u>unit</u> is capable of receiving 1.5 hours of direct sunlight on March 21st. If an individual room does not achieve this recommendation, it does not mean that the unit is non compliant.

#### **Minimum**

A 'minimum' level of sunlight exposure will be stated if the potential sunlight for the assessed room is between 1.5 hours and 3 hours on March 21st.

#### Medium

A 'medium' level of sunlight exposure will be stated if the potential sunlight for the assessed room is between 3 hours and 4 hours on March 21st.

#### High

A 'high' level of sunlight exposure will be stated if the potential sunlight for the assessed room is greater than 4 hours on March 21st.

# **Unit Compliance:**

In addition to the level of sunlight exposure expressed for each room, compliance will be stated on a unit-by-unit basis. A proposed unit is considered to be compliant if any habitable room within the unit is capable of receiving at least 1.5 hours of sunlight on the assessment date.

## Non-Compliant

If no habitable rooms within a proposed unit can receive 1.5 hours of sunlight on the assessment date, the unit will be categorised as 'Non-Compliant'.

#### Compliant

If at least one habitable room within a proposed unit can receive 1.5 hours or more of sunlight on the assessment date, the unit will be categorised as 'Compliant'.

Typically unit compliance will be stated for the best performing room per unit only, with lesser performing rooms indicated with a dash (-). However, if more than one room in a given unit is considered to be the best performing room (i.e. they have the same number of SE hours on March 21st), then the unit compliance column will be populated in the first instance only.



# 4.0 Methodology

# 4.1 Impact Assessment, Window Selection Criteria

To determine the properties to be included in the impact assessment, the decision chart taken from the BRE Guidelines has been followed, as shown in Figure 4.2.

Accordingly, all properties within a distance of three times the height of the proposed development, as illustrated in Figure 4.1, have been considered for impact assessment.



Figure 4.1: Properties within three times the height of the proposed development

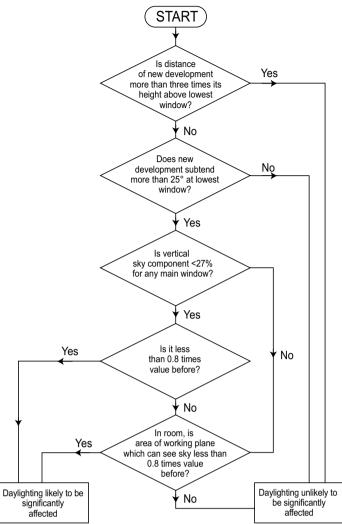


Figure 4.2: VSC decision chart, taken from BR 209.

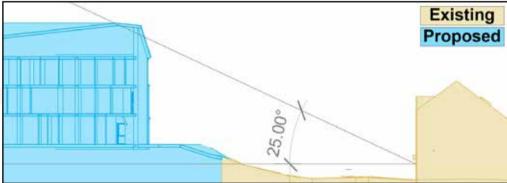


Figure 4.3: Example Section A-A taken through #7 Rockville Woods

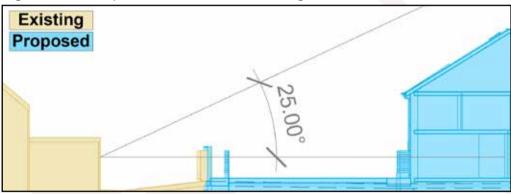


Figure 4.4: Example Section B-B taken through #Dromard, Ballycorus Road When measured in a perpendicular section.

As per the BRE Guidelines, a perpendicular section has been drawn from the main window wall of the potentially affected properties to determine if the proposed development subtends an angle of more than 25° at the lowest window.

If the proposed development subtends 25° in this section, then a VSC assessment should be conducted. Figure 4.3 shows a perpendicular section taken through #7 Rockville Woods which provides an example of where the proposed development subtends 25° when measured in a perpendicular section through an existing window.

However, if the proposed development does <u>not</u> subtend 25° in a perpendicular section, daylight is unlikely to be significantly affected and no further assessment will be carried out. Figure 4.4 shows a perpendicular section taken through #Dromard, Ballycorus Road which provides an example of where an existing window is within 3 times the height of the proposed development but the proposed development does not subtend 25° when measured in a perpendicular section

A detailed description regarding the methodology of the VSC assessment can be found in 4.3.1 on page 17.

It is advised that if a window/room does not meet the BRE criteria in the VSC impact assessment that a no sky line (NSL) assessment should then be carried out. However, a NSL assessment requires accurate dimensions and layouts of the existing rooms and windows. Due to common lack of availability regarding the required information, it is not common practice to carry out a no sky line study when assessing impact on existing properties.

The BRE Guidelines also apply the 25° rule to determine the need for an impact assessment for loss of sunlight (APSH/WPSH). They also advise that only windows with an orientation within 90° of due south should be assessed. It is recommended to assess the main living rooms of dwellings and conservatories, while APSH/WPSH assessments are typically not required for kitchens and bedrooms.

In practice, 3DDB include all windows meeting the proximity criteria in an APSH/WPSH assessment, avoiding the need for assumptions about room functionality in existing dwellings.

While the BRE Guidelines recommend conducting an impact assessment on the lowest window where daylight/sunlight is needed, if a property is found to have a window potentially affected by the proposed development, based on the previously explained criteria, all windows facing the proposed development on that property will be assessed. This approach provides a more comprehensive understanding of the overall impact on the property.



# 4.2 Preparing the analytical model

# 4.2.1 Building the Model States

The project architect, McCrossan O'Rourke Manning Architects (MCORM), supplied 3DDB with AutoCAD drawings of the proposed development from which a 3D analytical model was created. Landscape drawings were issued by NMP Landscape Architects. A combination of survey information, aerial photography, available online photography and/or ordnance survey information were used to model the surrounding context and assessed buildings. **Note:** as the information gathered from online sources is not as accurate as surveyed information, a reasonable tolerance should be allowed to the placement of windows, boundary treatments and the results generated.

#### **Baseline model state**

As illustrated in Figure 4.1, the baseline model state reflects the existing environment. It includes the surrounding context and the subject site in their current standing. This includes any structures that are to be demolished as part of this application. Existing trees were placed using photogrammetry information, with assumptions made regarding exact size, position and species.

The BRE Guidelines recommend that impact assessments should be carried out if any part of a new building or extension, measured in a vertical section perpendicular to a main window wall of an existing building, from the centre of the lowest window, subtends an angle of more than 25° to the horizontal. This criteria has been used to ensure all windows that could possibly sustain an adverse level of effect have been included in the model when running VSC and APSH/WPSH assessments.



Figure 4.1: Model view of the baseline model state

## Proposed model state

As illustrated in Figure 4.2, the proposed model state reflects the subject site if the development is built as proposed. This includes proposed landscaping on the subject site and the demolition of existing structures, etc. Proposed buildings have been positioned in their location on the subject site with relevant surrounding context included. Proposed trees were placed using the information provided by the landscape architect regarding size, position and species.

All of the above information was subsequently used to prepare a digital analytical model in software specifically designed for daylight and sunlight analysis.

Relevant weather and climatic data has been obtained for this report using a localised EnergyPlus Weather File (IRL\_Dublin.039690\_IWEC.epw).



Figure 4.2: Model view of the proposed model state. The granted properties as per Reg. Ref. D23A/0616 are shown in red.



#### **4.2.2 Trees**

It is generally not possible to accurately represent trees in a digital 3D model as the size and shape will differ greatly from tree to tree. When modelling trees for this assessment assumptions have been made and tree geometry has been simplified.

For the purpose of the analysis carried out in this report, the position and size of existing trees have been estimated using photogrammetry information. The shape of the trees have been simplified and the species of each tree has been assumed. Simplified models of proposed trees within the development have also been included according to the information provided by the landscape architect.

BR 209 provides guidance on how trees should be treated depending on the study being carried out, as summarised below:

## Impact to Vertical Sky Component (VSC) and Annual / Winter Probable Sunlight Hours (APSH / WPSH)

The BRE Guidelines state that when assessing the effect a new development would have on existing buildings, it is usual to ignore the effect of deciduous trees. This is because daylight is at its scarcest and most valuable in winter when most trees will not be in leaf. Evergreen trees should be included, particularly where a dense belt or group of evergreens is specifically planned as a windbreak or for privacy purposes.

## Sun On Ground (SOG)

The BRE Guidelines states that when assessing the impact of buildings on sunlight in gardens:

"...trees and shrubs are not normally included in the calculation unless a dense belt or group of evergreens is specifically planned as a windbreak or for privacy purposes. This is partly because the dappled shade of a tree is more pleasant than the deep shadow of a building (this applies especially to deciduous trees)."

As such, deciduous trees have not been included in the calculation of SOG, unless there is a dense belt present or a group of trees specifically planned as a windbreak or for privacy purposes. Evergreen trees are included in the SOG assessment.

#### **Sunlight Exposure (SE)**

The BRE Guidelines state that as deciduous trees would not be in full leaf on the recommended assessment date (March 21st), sunlight would be expected to penetrate deciduous trees. However, as trees have so many variables, it is impossible to accurately represent how they would affect sunlight at a given time. The suggested methodology (BR 209) to allow for this is to run the sunlight exposure study in two states. Once with trees as opaque objects and secondly without deciduous trees in the assessment model. This gives a range of potential sunlight hours.

#### **Spatial Daylight Autonomy (SDA)**

BR 209 recommends when assessing daylight in a proposed building, it is appropriate to run the assessment with trees represented in both winter and summer conditions. Light transmittance values of 60% and 20% have been applied to deciduous tree canopies for winter and summer assessments respectively. A light transmittance value of 20% has been applied to evergreen trees throughout the year. Units have also been assessed without trees to give an understanding of how the architecture performs should trees not be factored into the calculation.

I.S. EN 17037 does not give any guidance on how trees should be represented. For the purpose of this report, the SDA calculation under the I.S. EN 17037 criteria has been carried out with trees represented in both winter and summer conditions. Light transmittance values of 60% and 20% have been applied to deciduous tree canopies for winter and summer assessments respectively. A light transmittance value of 20% has been applied to evergreen trees throughout the year. Units have also been assessed without trees to give an understanding of how the architecture performs should trees not be factored into the calculation.

#### No Sky Line (NSL)

Because some sky can usually be seen through a tree canopy, deciduous trees have not been included in the No Sky Line assessment model. Evergreen trees may be included in this assessment, particularly if there is a dense belt or group planned for windbreak or for privacy purposes.

## **Shadow Study**

The hourly renderings of the shadow study have been generated with evergreen trees represented as opaque objects, where applicable, and without deciduous trees. This method best represents the methodology used for the impact assessment and allows for a better understanding of potential shadows cast by the proposed development through the tree canopy.



# 4.3 Quantitative Impact Assessment Overview

# 4.3.1 Effect on Vertical Sky Component (VSC)

A proposed development could potentially have a negative effect on the level of daylight that a neighbouring property receives, if the obstructing building is large in relation to their distance from the existing dwelling.

Section 4.1 outlines the decision process which was used to determine the appropriate properties to be included in the VSC impact assessment.

For the proposed development, all properties within a radius of three times the height of the proposed development have been considered for impact assessment. Should the angle from the windows to the proposed development subtend 25° in a perpendicular section, then VSC is calculated in both the baseline and proposed model states, and a comparison made.

A no skyline assessment requires accurate dimensions and layouts of both rooms and windows. However, the required information is rarely available for existing dwellings. As such, it is not common practice to carry out a no sky line (NSL) impact assessment.

VSC can be defined as the amount of skylight that falls on a vertical wall or window.

This report assesses the percentage of direct sky illuminance that falls on the assessment point of neighbouring windows that could be affected by the proposed development.

The BRE Guidelines state that if the VSC is:

- · At least 27%, then conventional window design will usually give reasonable results;
- Between 15% and 27%, then special measures (larger windows, changes to room layout) are usually needed to provide adequate daylight;
- Between 5% and 15%, then it is very difficult to provide adequate daylight unless very large windows are used;
- · Less than 5%, then it is often impossible to achieve reasonable daylight, even if the whole window wall is glazed.

The VSC for each window/room will be calculated in the relevant model states, as outlined in section 4.2 on page 15. A comparison between the results generated with these model states will determine the level of effect.

A proposed development could possibly have a noticeable effect on the daylight received by an existing window, if the following occurs:

- The VSC value drops below the guideline value of 27%; and
- The VSC value is less than 0.8 times the existing value.

In instances where a baseline value is less than 1%, the impact will be considered 'non-applicable' (n.a.)

Under BRE Guidelines, only habitable rooms need to be assessed for effect to VSC. In the absence of design layouts or floor plans, or information pertaining to the internal 'as-built' layouts, assumptions have been made regarding the function of the windows of the existing surrounding properties (i.e. what room type is served by the window being assessed).

Typically, the effect on ground floor windows is greater than the effect on windows of subsequent floors. However, floors above ground floor level have been included in this study to give a more comprehensive assessment.

#### **Assessment Points**

The VSC impact assessment has been carried out on the windows/rooms of the neighbouring properties that could be affected by the proposed development as highlighted in Figure 1.1 on page 3.

The assessment points for measuring VSC are taken from the centre point of a standard window. If the window being assessed is a full height window, the assessment point is taken at 1600 mm above the finished floor level.

## **Weighted Averages**

If it can be determined or reasonably assumed that multiple windows are servicing the same room, each window has been assessed and a room VSC has been calculated by applying a weighted average calculation to the results.

When calculating weighted averages the proportion of the total glazing area represented for each window is taken into account. It should be noted that assumptions typically need to be made regarding window sizes, so a tolerance should be applied regarding calculated weighted averages.

In instances where weighted averages have been calculated, the VSC figures will be stated for each window on an individual basis as well as the calculated figure to be applied to the room, but the level of effect will only be stated for the room.

#### **Project Assessment**

Following the BRE decision chart, as illustrated in Figure 4.2 on page 14, a VSC impact assessment has been carried out on the windows/rooms of the neighbouring properties that could be affected by the proposed development as indicated in Figure 1.1 on page 3.

The results for the VSC assessment can be found in the appendix results section A.1 on page 31, with analysis of the results in section 5.1.1 on page 22.



# 4.3.2 Effect on Annual/Winter Probable Sunlight Hours (APSH/WPSH)

Annual/Winter Probable Sunlight Hours (APSH/WPSH) is a measure of sunlight that a given window may expect to receive over the period of a year. The percentage of APSH/WPSH that windows in existing properties receive might be affected by a proposed development.

A proposed development could potentially have a negative effect on the level of sunlight that a neighbouring property receives, if the obstructing building is located to the south and is large in relation to their distance from the existing dwelling. This can be determined if the distance of a proposed development is less than three times its height from an existing dwelling, or if the angle from an existing window to the proposed development subtends 25° to the horizontal when measured in a perpendicular section.

Whether a window is considered for APSH/WPSH impact assessment is based on its orientation. A south-facing window will, in general, receive the most sunlight. North facing windows may receive sunlight on only a handful of occasions in a year, and windows facing eastwards or westwards will receive sunlight only at certain times of the day. Taking this into account, the BRE Guidelines suggest that windows with an orientation within 90 degrees of due south should be assessed.

Section 4.1 outlines the decision process which was used to determine the appropriate properties to be included in the APSH/WPSH impact assessment.

The APSH/WPSH for each of the assessed windows will be calculated in the relevant model states, as outlined in section 4.2 on page 15. A comparison between the results generated with these model states will determine the level of effect.

If it can be determined or reasonably assumed that multiple windows are servicing the same room, the APSH/WPSH has been assessed for the room as opposed to each individual window. When APSH/WPSH is assessed for a room it considers sunlight coming from all windows, but does not double count if sunlight is reaching multiple windows at the same time.

If a room can receive more than 25% of APSH, including at least 5% of the WPSH, then the room should receive enough sunlight.

A proposed development could possibly have a noticeable effect on the sunlight received by an existing window/room, if the following occurs:

- The APSH value drops below the annual (25%) or winter (5%) guidelines; and
- · The APSH value is less than 0.8 times the baseline value; and
- There is a reduction of more than 4% to the annual APSH.

In some circumstances, the available sunlight during the winter period (WPSH) may both drop below the recommended minimum of 5% with a proposed value of less than 0.8 times the baseline value, but the reduction to annual probable sunlight (APSH) is less than 4%. Such occurrences are considered compliant with the BRE Guidelines, and the impact to WPSH will be stated as 'negligible' on that basis.

Additionally, where a baseline value is less than 1%, the impact will be considered 'non-applicable' (n.a.)

Under BRE Guidelines, only main living-rooms need to be assessed for effect on sunlight. In the absence of design layouts or floor plans, or information pertaining to the internal 'as-built' layouts, all windows assumed to be servicing habitable rooms have been included in the APSH/WPSH assessment provided they are orientated within 90° of due south and are in relative close proximity to the proposed development.

Typically, the effect on ground floor windows is greater than the effect on windows of subsequent floors. However, floors above ground floor level have been included in this study to give a more comprehensive assessment.

#### **Assessment Points**

The assessment points for measuring APSH/WPSH are taken from the centre point of a standard window. If the window being assessed is a full height window, the assessment point is taken at 1600 mm above the finished floor level.

#### **Project Assessment**

The APSH/WPSH impact assessment has been carried out on the windows/rooms of the neighbouring properties that could be affected by the proposed development as indicated in Figure 1.1 on page 3, with an orientation within 90 degrees of due south.

The results for the APSH/WPSH assessment can be found in the appendix results section A.2 on page 36, with analysis of the results in section 5.1.2 on page 22.



#### **Qualitative Assessment - Shadow Study** 4.4

A shadow study has been carried out to allow a qualitative comparison between the relevant model states, as outlined in section 4.2 on page 15. This visual representation of the shadows cast by the proposed development can be found in the hourly shadow diagrams in the appendix results section B.0 on page 40.

Hourly renderings have been shown from sunrise to sunset on the following dates in 2024:

March 21st Sunrise 6:32 | Sunset 18:32. (GMT) Spring equinox: June 21st. Summer solstice: Sunrise 5:04 | Sunset 21:49. (BST) Winter solstice: December 21st Sunrise 8:45 | Sunset 16:00. (GMT)

The shadow study has been generated using the same model states as described in section 4.2.1. In certain cases, assumptions or estimations may have been made when modelling elements of the surrounding context and/or proposed site details when creating the various model states. Therefore, it is advisable for a reasonable tolerance to be applied when interpreting shadows in the qualitative assessment.

The hourly renderings of the shadow study will be generated without deciduous trees and with evergreen trees, where applicable, represented as opaque objects when present in the model states.

**Note:** The spring equinox (March 21st) and autumn equinox (21st September) yield similar shadows, albeit with a one hour difference as daylight saving time (BST) would be in effect. Only the spring equinox was included in the shadow study images in accordance with the BRE Guidelines.

#### **Quantitative Scheme Performance Assessment Overview** 4.5 Spatial Daylight Autonomy in Proposed Habitable Rooms (SDA)

Since the publication of the 3rd edition of the BRE Guidelines (BR 209 - 2022), Spatial Daylight Autonomy (SDA) is the recommended metric for assessing daylight access within a proposed development. Spatial Daylight Autonomy replaces Average Daylight Factor (ADF) in this regard, which was the recommended metric under the 2nd edition of the BRE Guidelines (BR 209 - 2011).

Spatial Daylight Autonomy assesses whether a room receives sufficient daylight on a working plane during standard operating hours on an annual basis. A given target value should be achieved across 50% of the working plane for half of the daylight hours.

There are two methods for calculating SDA:

- Calculation method using illuminance level: This requires the use of a detailed daylight calculation method where hourly (or sub-hourly) internal daylight illuminance values for a typical year are computed using hourly (or sub-hourly) sky and sun conditions derived from climate data appropriate to the site. This calculation method determines daylight provision directly from simulated illuminance values on the reference plane. The illuminance value of at least half the required area of the space should equal or exceed the target values.
- Calculation method using daylight factor: The daylight factor method assumes a constant ratio between internal and external illuminance. The daylight factors in the space shall be calculated by any reliable method that is based on the ISO 15469:2004 standard overcast sky (TYPE 1 or TYPE 16). Daylight factors are to be predicted across grid of points on a plane 0.85m above the floor of the space. The daylight factor of at least half the required area of the space should equal or exceed the target values.

It is the opinion of 3DDB that the calculation method using illuminance level better represents a real-world scenario as it accounts for the quality of daylight based on orientation. As such, the illuminance methodology has been adopted for all SDA assessments in this report using a localised EnergyPlus Weather File (IRL\_Dublin.039690\_IWEC.epw) to apply the relevant climate information.

In terms of housing, BR 209 provides target SDA values to be received across at least 50% of the working plane for at least half the daylight hours. The target values differ based on the function of the room assessed:

• 200 Lux for kitchens • 150 Lux for living rooms • 100 Lux for bedrooms

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Where rooms serve more than one function, the higher SDA target value should been taken. In new developments, some internal spaces (e.g. studio apartments, shared communal areas etc.) can possibly be of a nature that do not have a predefined target value in BR 209. In such instances, 3DDB have applied a target value they deem to be appropriate. In the case of the proposed development there is a community space on the ground floor of Duplex Block D and two study rooms on the second floor of Duplex Block C. These spaces are located within the granted Phase 1 of the subject site.

3DDB recommend that an SDA target value of 150 Lux be applied to these spaces. The rationale for this target value is that these spaces will be mostly used during the day and, therefore, the same target value applied to living rooms could be considered appropriate. These rooms have not been included in the calculated compliance rates.

Under I.S. EN 17037 at least 50% of the working plane should receive above 300 lux for at least half the daylight hours, with 95% of the working plane receiving above 100 Lux for all rooms. The target SDA values do not vary depending on the room function under this criteria.

This study has assessed the Spatial Daylight Autonomy (SDA) received in the habitable rooms of the proposed development under the BR 209 criterion. The SDA of the proposed development has been calculated under the I.S. EN 17037 criterion as part of a supplementary assessment.



#### **Defining Rooms**

Definition of rooms has been taken directly from the architectural drawings supplied by the project architect.

In accordance with the BRE Guidelines circulation spaces, corridors, bathrooms etc. have not been assessed.

Indication of the assessed space in each room is provided in the floor plans that correspond to the SDA results in the appendix section "Apartment Blocks Floor Plans" on page 58.

#### **Working Plane**

The calculation of SDA is carried out on a hypothetical working plane which lies 850 mm from the finished floor level in residential units and 700 mm in academic and office spaces.

In the BR 209 study the working plane is offset 300 mm from the room boundaries. Under the I.S. EN 17037 criteria the working plane is offset 500 mm from the room boundaries. The working plane has a grid density of c. 300 mm.

#### **Material Palette**

Following consultation with the design team, material values used for SDA calculations are as per the table below:

Table No. 4.5.1 - Material Palette for SDA Calculations						
Object	Material	Reflectance	Object	Material	Reflectance	
Object	Material	Reflectance		Material	Transmittance	
	Standard Brick	0.3	Interior Walls	Pastel paint	0.70	
	Light Brick	0.4	Interior Ceiling	White paint	0.8	
Exterior walls	Dark Brick	0.15	Interior Floor	Light timber	0.4	
	Render	0.6	Miscellaneous	Miscellaneous	0.5	
	Concrete	0.4		Double glazing	0.80	
	Paving	0.4	Clara.	Maintenance factor	0.91	
Ground cover	Tarmac	0.2	Glass	Glass adjusted for maintenance	0.73	
	Grass	0.2		Frosted glass	0.5	

#### **Project Assessment**

The results for the study on SDA can be found in the appendix results section C.3 on page 100.

Analysis of the results can be found in section 5.2.1 on page 23.

The results of the supplementary SDA study under the I.S. EN 17037 criterion can be found in section D.O on page 161.

## 4.5.2 Sunlight Exposure in Proposed Habitable Rooms (SE)

Since the publication of the 3rd edition of the BRE Guidelines (BR 209 - 2022), Sunlight Exposure (SE) is the recommended metric for assessing sunlight access within a proposed development. Sunlight Exposure replaces APSH/WPSH in this regard, which was the recommended metric under the 2nd edition of the BRE Guidelines (BR 209 - 2011).

Sunlight exposure (SE) is a measure of sunlight that a given window may expect to receive on a given date between the 1st of February and the 21st of March. The BRE guidelines suggest that March 21st (equinox) is used as the assessment date.

In the presence of trees, SE results have been generated, both with deciduous trees as opaque objects and without the inclusion of deciduous trees, in accordance with the BRE Guidelines. Evergreen trees have been included as opaque objects, where applicable, in both states.

The level of sunlight exposure is categorised as follows:

• 1.5 Hours - Minimum • 3 Hours - Medium • 4 Hours - High

The recommendation for dwellings is that at least one habitable room, preferably a main living room, should receive at least the minimum criterion. Should no room within a given unit meet the recommended minimum level of sunlight exposure, it will be stated as non-compliant.

Sunlight exposure is carried out on habitable rooms within a proposed development. The assessment point for windows is 1.2m above the finished floor level, or 0.3m above the sill level (which ever is higher). If a room has multiple windows, the amount of sunlight received by each can be added together provided they occur at different times and sunlight hours are not double counted.

The criterion applies to rooms of all orientations, although if a room faces significantly north of due east or west it is unlikely to be met. As such, it is not always possible to achieve full compliance, especially in developments that contain single aspect units.

The sunlight exposure assessment focuses on habitable residential rooms. Unless sunlight access is deemed important for the functionality of a non-residential room in a proposed development, it will not be included in the study, which remains limited to residential rooms. This is the case of the proposed development.

#### **Project Assessment**

The results for the study on sunlight exposure can be found in the appendix results section C.4 on page 129, with analysis of the results in section 5.2.2 on page 27.



## 4.5.3 Sun On Ground in Proposed Outdoor Amenity Areas (SOG)

The BRE Guidelines recommend that for a garden or amenity area to appear adequately sunlit throughout the year, at least half of it should receive at least two hours of sunlight on March 21st.

March 21st, also known as the spring equinox, is chosen as the assessment date as daytime and night-time are of approximately equal duration on this date.

The analytical model for SOG assessment in proposed amenity areas includes evergreen trees, where applicable, as per the BRE Guidelines. Typically deciduous trees will not be included unless there is a particularly dense belt.

A quantitative SOG assessment has been carried out on the areas as indicated by the project architect. The shadow study and false colour plans allow for a qualitative assessment for all other areas.

The portion of each assessed space capable of receiving 2 hours of direct sunlight on March 21st has been calculated individually. These areas can be combined to give the development average where appropriate.

#### **Project Assessment**

The levels of sunlighting to proposed amenity areas, as indicated by the architect, have been assessed. However, it should be noted that the numbering of these spaces in the Daylight and Sunlight Assessment Report has been assigned by 3DDB specifically for the purposes of this report. If other consultants are referencing these spaces in their own reports, it is unlikely they will be numbered the same.

The results for the study on sun on ground in the proposed outdoor amenity areas (including a visual representation in the form of 2-hour false colour plans) can be found in the appendix results section C.5 on page 158, with analysis of the results in section 5.2.3 on page 27.

## 4.5.4 No Sky Line in Proposed Habitable Rooms (NSL)

The no sky line divides the areas of the working plane which can receive direct skylight, from those which cannot. It indicates the distribution of direct daylight within a room.

The BRE Guidelines recommend the No Sky Line study as an appropriate metric for an impact assessment to daylight, but only where room layouts are known.

"The calculation can only be carried out where room layouts are known. Using estimated room layouts is likely to give inaccurate results and is not recommended."

All advice given for NSL in the BRE Guidelines are in relation to impact assessments. NSL is not mentioned in the BRE section regarding daylight in new developments. Regardless, a NSL assessment was carried out on the proposed development as a supplementary study as it is requested in the DCC development plan 2022-2028. Although the proposed development is not located within Dublin City, the NSL study has been included to provide consistency across 3DDB daylight and sunlight assessments.

As the BRE Guidelines does not give advice on target NSL values for proposed rooms, no compliance rate has been stated. However a no skyline of 80% could be considered an appropriate figure given that the BRE Guidelines state that supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line.

The results of the supplementary NSL study can be found in section D.0 on page 161.



# 5.0 Analysis of Results

# 5.1 Analysis of Impact Assessment Results

## **5.1.1** Effect on Vertical Sky Component (VSC)

The effect on VSC has been assessed for 37 no. windows/rooms across the surrounding properties along 7-13 Rockville Woods, Rockville Hall Apartments and Rockville Mews.

Using the rationale explained in section 3.2 on page 12, the effect to VSC on 32 no. of these windows (or rooms if an average of multiple windows has been taken) would be considered 'negligible' and 5 no. 'minor adverse'.

4 no. of these 5 no. affected windows/rooms are located across the ground and first floors of Rockville Hall Apartments (see Figure 5.1 below). It is noted that since the SHD application, the design team have worked to reduce the impact to the existing properties, particularly in the north-eastern area of the site. The number of windows adversely affected in this particular property, under the SHD application, were 7 no. Of these, 3 no. experienced a more severe level of effect than the 'minor adverse' recorded in this application. The improved results, under this LRD application, were achieved through a more favourable design in terms of massing and setback away from the properties located along the north-eastern boundary (see Figure 5.2). Despite a 'minor adverse' level of effect being recorded to 4 no. of these windows/rooms under the proposed LRD application, it is opinion of 3DDB that this result should be seen as favourable.



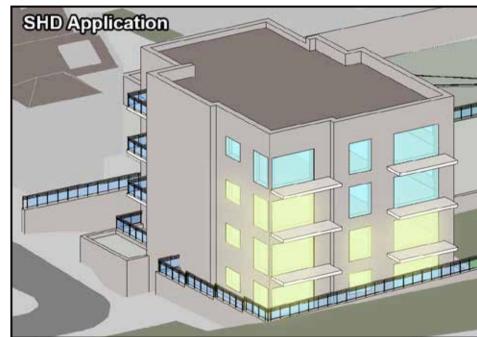
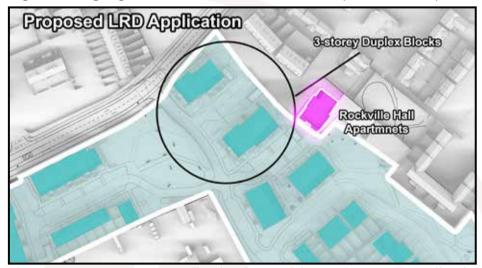


Figure 5.1: Highlighted windows at Rockville Hall Apartments impacted in the current application (L) and in the previous SHD application (R)



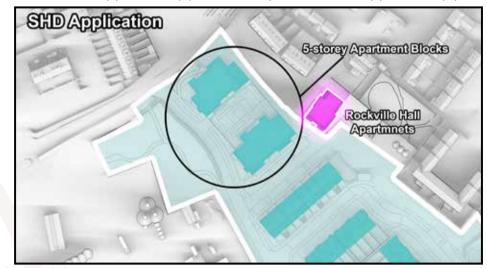


Figure 5.2: Current LRD application layout (L), previous SHD application layout (R)

Finally, the 5th affected window is located at Rockville Mews, with a proposed VSC value of 26.77%, which is marginally shy of the 27% target value as per the BRE Guidelines, and again should not be considered a cause of concern from a planning point of view.

The results of the study on VSC can be found in section A.1 on page 31.

# 5.1.2 Effect on Annual/Winter Probable Sunlight Hours (APSH/WPSH)

The effect on APSH/WPSH has been assessed for 33 no. windows/rooms of the surrounding existing properties across 7-14 Rockville Woods and Rockville Hall Apartments. Only windows that have an orientation within 90 degrees of due south have been included in this assessment.

Using the rationale explained in section 3.2 on page 12, the effect on the APSH and WPSH of all of these windows or rooms would be considered 'negligible'.

It is the opinion of 3DDB, that these results demonstrate a favourable layout, where the proposed dwellings maintain an adequate separation distance from the existing properties, particularly those across the north-eastern boundary. None of the existing properties would experience a noticeable effect on their current levels of sunlight provision.

The results of the study on APSH/WPSH can be found in Section A.2 on page 36.



# 5.2 Analysis of Scheme Performance Results



Figure 5.3: Apartment blocks and duplex blocks assessed for scheme performance (highlighted)

# 5.2.1 Spatial Daylight Autonomy (SDA)

This study has assessed the Spatial Daylight Autonomy (SDA) received in all habitable rooms within the apartment blocks and duplex blocks of the proposed LRD development, which includes the properties within the granted Phase 1 (D23A/0616). This has ensured that a comprehensive understanding has been provided regarding the daylight performance of all the apartment blocks and duplex blocks within the proposed LRD development.

A total of 291 no. units, which makes up approximately 1022 no. habitable rooms, were assessed.

Under the criteria as set out in the BR 209, the SDA value in 959 and 979 no. habitable rooms meets or exceeds the appropriate target values in the summer and winter time calculations respectively. This gives a circa compliance rate of c. 94% with summer trees and c. 96% with the trees represented in the winter state. For a scheme of this size, this is considered a very favourable level of compliance.

The additional SDA assessment that does not include trees has shown a compliance rate of c. 97%. In this no-trees state, of the 26 no. non-compliant rooms, 18 no. display an SDA value above 40%, which is not far from the 50% minimum required value (2 no. of them display a value of 49%). Additionally, with the exception of the 2 no. kitchen/dining rooms within the duplex block A of the granted Phase 1 and the 1 no. LKD in the proposed duplex block F, all of the non-compliant rooms are secondary bedrooms, for which lower than targeted daylight levels could be deemed less concerning.

When existing and proposed trees are included in the calculations, an additional 37 no. rooms fall below the minimum value recommended. 20 no. of these 37 no. fall below the minimum value in the summer tree state only, when trees are represented in full foliage.

Although trees have been shown to reduce the level of daylight access within a select number of units/rooms within the overall development, it should be noted that removal of trees to improve daylight access is not deemed an appropriate mitigation measure by the design team. Preserving existing vegetation and adding proposed trees were important design considerations. This strategy aims to create amenity areas that not only offer a favourable outlook but also can provide protection against heat gain. Additionally, retaining existing tree belts along the site boundaries provides a natural screen, separating the proposed dwellings from the existing properties.

Finally, trees are an integral part of any scheme with regard to environmental and planning grounds along with biodiversity, and therefore achieving compliance rates of c. 94% (summer) and c. 96% (winter) with proposed trees in place should be considered an excellent result.

I.S. EN 17037 sets out more onerous recommendations for SDA. As such, the number of habitable rooms achieving compliance under this standard is 775 with summer trees and 844 with the trees represented in the winter state. This gives a reduced circa compliance rate of c. 76% & c.83% in the summer and winter time calculations respectively. The additional SDA assessment, under this standard, that does not include trees has shown a compliance rate of c. 89%.

In cases where rooms comply with the criteria of BR 209 but do not meet the criteria of I.S. EN 17037, it is the recommendation of 3D Design Bureau that these rooms will appear adequately daylit. This recommendation is based on the fact that BR 209 provides room-specific criteria, unlike I.S. EN 17037. BR 209 considers the varying daylight requirements for different room types, which I.S. EN 17037 does not account for.

With regards to internal daylighting, Section 6.7 of the Sustainable Urban Housing: Design Standards for New Apartments July 2023, states the following:



"Where an applicant cannot fully meet all of the requirements of the daylight provisions above, this must be clearly identified and a rationale for any alternative, compensatory design solutions must be set out, which planning authorities should apply their discretion in accepting taking account of its assessment of specific. This may arise due to a design constraints [sic] associated with the site or location and the balancing of that assessment against the desirability of achieving wider planning objectives. Such objectives might include securing comprehensive urban regeneration and or an effective urban design and streetscape solution."

Based on the above statements, compensatory design solutions have been provided by the project architect where rooms do not achieve the daylight provision targets as set out in the BRE Guidelines. Compensatory design solutions have also been provided for rooms that do not achieve the recommended level of daylight under the supplementary assessment which applies the I.S. EN 17037 criteria.

The following list indicates all units / rooms that do not achieve the recommended level of daylight with regards to BR 209 and the compensatory design solution for each:

#### B1-02:

- · The communal open space provided for this block is above the minimum required
- · This block enjoys views of the high quality landscaped public open space to the west

#### B1-03:

- The communal open space provided for this block is above the minimum required
- · This block enjoys views of the high quality landscaped public open space to the west

#### B1-05:

- · Unit 05 has a total sq.m area of 114.8 m2 over and above the 90 m2 minimum required
- · The communal open space provided for this block is above the minimum required
- · This block enjoys views of the high quality landscaped communal open space to the east

#### B2-05:

- · Unit 05 has a total sq.m area of 114.8 m2 over and above the 90 m2 minimum required
- · The communal open space provided for this block is above the minimum required
- · This block enjoys views of the high quality landscaped communal open space to the east

#### B2-06:

- · The communal open space provided for this block is above the minimum required
- · This block enjoys views of the high quality landscaped communal open space to the east

#### B2-07:

- The communal open space provided for this block is above the minimum required
- · This block enjoys views of the high quality landscaped communal open space to the east

#### B3-01:

- · Unit 01 has a total sq.m area of 80.55 m2 over and above the 73 m2 minimum required
- · The communal open space provided for this block is above the minimum required
- · This block enjoys views of the high quality landscaped Public open space to the west

#### B3-11:

- · Unit 11 has a total sq.m area of 80.55 m2 over and above the 73 m2 minimum required
- · The communal open space provided for this block is above the minimum required
- · This block enjoys views of the high quality landscaped communal open space

#### DA-11:

- · Unit 11 has a total sq.m area of 129.4 m2 over and above the 90 m2 minimum required
- · It also enjoys an oversized private amenity space of 14.3 sq.m
- · The communal open space provided for this block is above the minimum required

#### DA-12:

- · Unit 12 has a total sq.m area of 129.4 m2 over and above the 90 m2 minimum required
- · It also enjoys an oversized private amenity space of 14.3 sq.m

## DC-04:

- · Unit 04 has a total sq.m area of 108 m2 over and above the 73 m2 minimum required
- · The communal open space provided for this block is above the minimum required

#### DD-05:

- · Unit 05 has a total sq.m area of 130 m2 over and above the 90 m2 minimum required
- · It also enjoys an oversized private amenity space of 14.3 sq.m
- · This block enjoys views of the high quality landscaped public open space the Village Green

#### DF-01:

- · Unit 01 has a total sq.m area of 84.5 m2 over and above the 73 m2 minimum required
- · The communal open space provided for this block is above the minimum required



#### DF-02:

- · Unit 02 has a total sq.m area of 84.5 m2 over and above the 73 m2 minimum required
- · The communal open space provided for this block is above the minimum required

#### DF-03:

- · Unit 03 has a total sq.m area of 84.5 m2 over and above the 73 m2 minimum required
- · The communal open space provided for this block is above the minimum required
- · This block enjoys views of the high quality landscaped public open space & Dingle way
- · Unit 03 bedroom has a total sq.m area of 13.1 m2 over and above the 11.4 m2 minimum required

#### DF-04:

- · Unit 04 has a total sq.m area of 84.5 m2 over and above the 73 m2 minimum required
- · The communal open space provided for this block is above the minimum required
- · This block enjoys views of the high quality landscaped public open space & Dingle way
- · Unit 04 bedroom has a total sq.m area of 13.1 m2 over and above the 11.4 m2 minimum required

#### DF-05:

- · Unit 05 has a total sq.m area of 84.5 m2 over and above the 73 m2 minimum required
- · The communal open space provided for this block is above the minimum required
- · This block enjoys views of the high quality landscaped public open space & Dingle way
- · Unit 05 bedroom has a total sq.m area of 13.1 m2 over and above the 11.4 m2 minimum required

#### DF-06:

- · Unit 06 has a total sq.m area of 62.3 m2 over and above the 45 m2 minimum required
- · The communal open space provided for this block is above the minimum required
- · This block enjoys views of the high quality landscaped public open space & Dingle way
- · It also enjoys an oversized private amenity space of 8.4 sq.m

#### DF-08:

- · Unit 08 has a total sq.m area of 84.5 m2 over and above the 73 m2 minimum required
- · The communal open space provided for this block is above the minimum required
- · This block enjoys views of the high quality landscaped Dingle way
- · Unit 08 bedroom has a total sq.m area of 13.1 m2 over and above the 11.4 m2 minimum required

#### DF-09:

- · Unit 09 has a total sq.m area of 84.5 m2 over and above the 73 m2 minimum required
- · The communal open space provided for this block is above the minimum required
- · This block enjoys views of the high quality landscaped Dingle way
- · Unit 09 bedroom has a total sq.m area of 13.1 m2 over and above the 11.4 m2 minimum required

#### DF-10:

- · Unit 10 has a total sq.m area of 84.5 m2 over and above the 73 m2 minimum required
- The communal open space provided for this block is above the minimum required
- · This block enjoys views of the high quality landscaped Dingle way
- · Unit 10 bedroom has a total sq.m area of 13.1 m2 over and above the 11.4 m2 minimum required

## DF-11:

- · Unit 11 has a total sq.m area of 84.5 m2 over and above the 73 m2 minimum required
- The communal open space provided for this block is above the minimum required
- This block enjoys views of the high quality landscaped Dingle way
- · Unit 11 bedroom has a total sq.m area of 13.1 m2 over and above the 11.4 m2 minimum required

#### DF-12:

- · Unit 12 has a total sq.m area of 84.5 m2 over and above the 73 m2 minimum required
- · The communal open space provided for this block is above the minimum required
- · This block enjoys views of the high quality landscaped Dingle way
- · Unit 12 bedroom has a total sq.m area of 13.1 m2 over and above the 11.4 m2 minimum required

## DG-01 to DG-06:

- · Unit has a total sq.m area of 84.5 m2 over and above the 73 m2 minimum required
- · The communal open space provided for this block is above the minimum required
- · This block enjoys views of the high quality landscaped Public Open Space
- · Unit bedroom has a total sq.m area of 13.1 m2 over and above the 11.4 m2 minimum required
- · It also enjoys an oversized private amenity space of 11.2 sq.m

## DH-01 to DH-06:

- · Unit has a total sq.m area of 84.5 m2 over and above the 73 m2 minimum required
- · The communal open space provided for this block is above the minimum required
- · This block enjoys views of the high quality landscaped Public Open Space
- · Unit bedroom has a total sq.m area of 13.1 m2 over and above the 11.4 m2 minimum required
- · It also enjoys an oversized private amenity space of 11.2 sq.m



#### DJ-01:

- · Unit 01 has a total sq.m area of 85.1 m2 over and above the 73 m2 minimum required
- The communal open space provided for this block is above the minimum required
- · This block enjoys views of the high quality landscaped Public Open Space
- · It also enjoys an oversized private amenity space of 14.7sq.m

#### DJ-02:

- · Unit 02 has a total sq.m area of 87 m2 over and above the 73 m2 minimum required
- The communal open space provided for this block is above the minimum required
- · This block enjoys views of the high quality landscaped Public Open Space
- · It also enjoys an oversized private amenity space of 12.9 sq.m

#### DJ-04:

- · Unit 04 has a total sq.m area of 87 m2 over and above the 73 m2 minimum required
- · The communal open space provided for this block is above the minimum required
- · This block enjoys views of the high quality landscaped Public Open Space
- · It also enjoys an oversized private amenity space of 12.9 sq.m

#### DM-01 to DM-04:

- · Unit has a total sq.m area of 84.5 m2 over and above the 73 m2 minimum required
- · The communal open space provided for this block is above the minimum required
- This block enjoys views of the high quality landscaped Public Open Space
- · It also enjoys an oversized private amenity space (ranging from 13 to 13.6 sq.m)

#### DN-01 to DN-04:

- · Unit has a total sq.m area of 84.5 m2 over and above the 73 m2 minimum required
- · The communal open space provided for this block is above the minimum required
- · It also enjoys an oversized private amenity space (ranging from 11.9 to 13.2 sq.m)
- · Unit bedroom has a total sq.m area of 13.1 m2 over and above the 11.4 m2 minimum required

#### DP-01 to DP-03:

- · Unit has a total sq.m area of 84.5 m2 over and above the 73 m2 minimum required
- · The communal open space provided for this block is above the minimum required
- · This block enjoys views of the high quality landscaped Public Open Space
- · It also enjoys an oversized private amenity space (ranging from 11.7 to 17.6 sq.m)
- · Unit bedroom has a total sq.m area of 13.1 m2 over and above the 11.4 m2 minimum required

#### DP-05:

- · Unit 05 has a total sq.m area of 82.5 m2 over and above the 73 m2 minimum required
- · The communal open space provided for this block is above the minimum required
- · This block enjoys views of the high quality landscaped Public Open Space
- · It also enjoys an oversized private amenity space of 11.4 sq.m

#### DT-01 to DT-04:

- · Unit has a total sq.m area of 84.5 m2 over and above the 73 m2 minimum required
- · The communal open space provided for this block is above the minimum required
- · This block enjoys views of the high quality landscaped Public Open Space
- · It also enjoys an oversized private amenity space (ranging from 12.5 to 14 sq.m)
- · Unit bedroom has a total sq.m area of 13.1 m2 over and above the 11.4 m2 minimum required

#### DU-03 and DU-04:

- · This block enjoys views of the high quality landscaped Public Open Space
- · It also enjoys an oversized private amenity space of 7.5 sq.m

The rationale for all instances of non-compliance with the BR 209 criteria that can be attributed to the effect that trees have on daylight, is that the provision of trees is an important aspect of the proposed site layout. Where trees affect daylight potential, a conscious decision has been made by the design team in balancing daylight provision with an appropriate level of foliage.

Given the site constraints on the proposed site and the fact that an appropriate level of density is being targeted, the results of the SDA study could be considered to be very favourable.

The results for the study on SDA can be seen in section C.3 on page 100.



## 5.2.2 Sunlight Exposure (SE)

A sunlight exposure assessment has been carried out on all habitable rooms within the apartment blocks and duplex blocks of the proposed LRD development, which includes the properties within the granted Phase 1 (D23A/0616).

The assessments have been carried out in two states:

- · All trees represented as opaque objects.
- · With the deciduous trees removed from the analytical model.

This approach is in accordance with the BRE Guidelines. Where a range of values is expressed in the following summary, this refers to the results generated with the deciduous trees included <u>and</u> with deciduous trees not included in the model. Evergreen trees where no light can penetrate all year round, are included in both studies, where applicable.

In total 291 no. units have been assessed. Using the rationale explained in section 3.3 on page 13, the level of sunlight exposure for 200-221 no. units is considered *high*, 33-27 no. *medium*, 47-38 no. have reached the *minimum* recommendation with 11-5 units below the *minimum* recommendation.

The SE assessment has shown that c. 96% - 98% of the proposed units meet the criteria for sunlight exposure as set out in the BRE Guidelines. **Note:** For a unit to be compliant under BR 209, only one habitable room within the unit needs to meet the guideline values.

Whilst the criterion applies to rooms of all orientations, it should be noted that if a room faces significantly north of due east or west it is unlikely to be met. As such, it is not always possible to achieve full compliance. However, the favourable orientation of the apartment blocks, and the dual aspect of the units within the duplex blocks, resulted in the vast majority of units assessed achieving compliance.

No recommendation is made regarding the performance of a development as a whole for SE performance within the BRE Guidelines. However, it is the opinion of 3DDB that, considering the size, the proposed development performs very favourably in this regard.

The results for the study on SE in the habitable rooms of the proposed units can be seen in section C.4 on page 129.

## 5.2.3 Sun On Ground in Proposed Outdoor Amenity Areas

This study has assessed the level of sunlight on March 21st within the proposed amenity areas.

In total 17 no. spaces have been assessed, 10 no. public open spaces and 7 no. communal open spaces. All of them would meet the criteria as set out in the BRE Guidelines.

This result further demonstrates that the site layout allows for adequate separation distances between the proposed dwellings. Consequently, all the proposed amenity spaces display excellent levels of sunlight.

The results for the study on sunlighting in the proposed outdoor amenity spaces can be found in section C.5 on page 158.

A visual representation of these readings can be seen in the false colour plan in section C.5 and in the hourly shadow diagrams for March 21st in section B.1 on page 40 of the appendix section of this report.



# 6.0 Conclusion

3D Design Bureau (3DDB) were commissioned to carry out a daylight assessment, sunlight assessment and shadow study for the proposed large-scale residential development at Kilternan Village, Dublin 18.

At the time of writing this report, planning permission has been granted for a portion of the subject development site, namely Phase 1 (D23A/0616). The current LRD development application does not propose any modifications to the granted design and layout of these properties.

The impact assessment for this report has quantified the effect the proposed development would have on the level of daylight and sunlight received by neighbouring properties/environment that are in close proximity to the proposed development.

The findings for the impact to daylight (VSC) on the neighbouring properties have shown a 'minor adverse' level of effect for 4 no. windows/rooms across the ground and first floor of Rockville Hall Apartments, and one window at Rockville Mews. It should be noted that the design team have worked to reduce the impact to the existing properties since the previous SHD application, through a more favourable design in terms of massing and setback away from the properties located along the north-eastern boundary. As a result, in the current application, not only was the adverse level of effect recorded in fewer windows/rooms but also it was categorised as no more than 'minor adverse'. Additionally, any impact was removed from the windows of the properties across 7-13 Rockville Woods, which under the SHD application had presented an adverse level of effect on the ground floor.

Regarding the impact to the levels of sunlight, both the annual (APSH) and the winter (WPSH) results have shown that the proposed development would not cause any existing window/room to experience an adverse level of effect, demonstrating an adequate separation distance of the proposed structures from the existing properties.

The scheme performance assessment for this report has quantified the level of daylight and sunlight within the apartment blocks and the duplex blocks within the proposed LRD development, including those within the granted Phase 1.

The SDA in the proposed units assessed has yielded very favourable results, with compliance rates of c. 94% (summer) and c. 96% (winter). The additional study with no trees has shown that the trees are responsible for the non-compliance of more than half of the rooms not meeting the guideline value. However, considering the importance of trees for a well balanced scheme, these results should be considered highly favourable.

The Sunlight Exposure (SE) assessment has shown very high levels of compliance for the units assessed. The favourable orientation of the apartment blocks and the dual aspect of the duplex units allows for the majority of units to have access to direct sunlight.

Finally, the results for Sun on Ground (SOG) show that the future occupants will enjoy very well performing open amenity areas, in terms of sunlight access, across the entire scheme. This demonstrates that careful consideration has been given to the layout and orientation of the open spaces.

In conclusion, 3DDB are of the opinion that the scheme is performing very favourably from a daylight and sunlight perspective.

# **Appendix - Results**





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Assessment criteria and detailed analysis of results can be found in the accompanying report.



# **A.0 Impact Assessment Results**

# A.1 Effect on Vertical Sky Component (VSC)

Below is an example of the table used to describe the effect on VSC.

	Table Example. A.1 - VSC Impact Assessment						
Window Number	Baseline VSC Value	Proposed VSC Value	Ratio of Proposed VSC to Baseline VSC	Recommended Minimum VSC	Level of Compliance with BRE Guidelines	Effect of Proposed Development	
Α	В	С	D	E	F	G	

#### A: Window Number

The number in this column will identify the assessed window. All windows are represented visually in the corresponding figure.

#### **B:** Baseline VSC Value

The Baseline VSC Value represents the VSC value of the assessed window which is calculated in the existing baseline model state (as explained in the "Building the Model States" on page 15).

#### C: Proposed VSC Value

The *Proposed VSC Value* represents the VSC value of the assessed window which is calculated in the proposed model state (as explained in the "Building the Model States" on page 15).

## D: Ratio of Proposed VSC to Baseline VSC

This column expressed the ratio of change between the baseline VSC value and the proposed VSC value. The BRE Guidelines recommend that if the proposed value is less than 0.8 times the baseline value, then the reduction in daylight is more likely to be perceptible.

#### E: Recommended minimum VSC

The BRE Target Value for each window has been set according to the BRE Guidelines. The Guidelines state that a proposed development could possibly have a noticeable effect on the daylight received by an existing window, if the VSC value **both** drops below the guideline value of 27% **and** the VSC value is less than 0.8 times the baseline value.

Therefore, to determine the *recommended minimum Value*, 80% of the *Baseline VSC value* has been calculated. If this value is above the 27% threshold, a target value of 27% will be applied. If 80% of the baseline value is below 27%, then 80% of the baseline value is the appropriate target value.

#### F: Level of Compliance with the BRE Guidelines

This column states the compliance of the *Proposed VSC Value* with the *recommended minimum VSC* as per the BRE Guidelines. In essence, it shows whether or not the assessed window would experience a perceptible level of impact. If the window complies with the BRE Guidelines this cell will state "*BRE Compliant*". If the window does not meet the criteria as set out in the BRE Guidelines, a percentage of compliance with the *recommended minimum* will be stated.

#### **G:** Effect of Proposed Development

The levels of effect in this column describe the effect an assessed window will experience, based on its compliance with the *BRE Target Value*. A full list of definitions and a numerical rationale for each can be found in the section "Definition of Effects" on page 12.

It should be noted that the figures displayed in the table of results have been rounded off. A manual calculation of these figures may yield a negligible difference and should not be considered an error.



# A.1.1 Rockville Hall Apartments

Table No. A.1.1 - VSC Results: Rockville Hall Apartments						
Window Number	Baseline VSC Value	Proposed VSC Value	Ratio of Proposed VSC to Baseline VSC	Recommended minimum VSC*	Level of Compliance with BRE Guidelines	Effect of Proposed Development**
0a#1	35.73%	32.06%	0.90	27.00%	BRE Compliant	-
0a#2	36.03%	31.54%	0.88	27.00%	BRE Compliant	-
0a#3	18.91%	9.48%	0.50	15.13%	63%	-
0a#	26.68%	19.65%	0.74	21.35%	92%	Minor Adverse
0b	32.26%	23.89%	0.74	25.81%	93%	Minor Adverse
0c#1	17.66%	9.40%	0.53	14.13%	67%	-
0c#2	38.22%	33.19%	0.87	27.00%	BRE Compliant	-
Oc#	22.55%	15.06%	0.67	18.04%	83%	Minor Adverse
1a#1	37.50%	34.64%	0.92	27.00%	BRE Compliant	-
1a#2	38.00%	34.39%	0.91	27.00%	BRE Compliant	-
1a#3	21.15%	14.32%	0.68	16.92%	85%	-
1a#	28.76%	23.53%	0.82	23.01%	BRE Compliant	Negligible
1b	36.04%	29.16%	0.81	27.00%	BRE Compliant	Negligible
1c#1	20.95%	13.55%	0.65	16.76%	81%	-
1c#2	39.12%	35.63%	0.91	27.00%	BRE Compliant	-
1c#	25.27%	18.80%	0.74	20.22%	93%	Minor Adverse

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the VSC of an existing window, the value needs to both drop below the stated target value of 27% **and** be less than 0.8 times the baseline value.

<sup>#</sup> If it can be determined or reasonably assumed that multiple windows are servicing the same room, each window has been assessed and a weighted average has been calculated to determine the level of effect of the room. In such instances, the 'effect of proposed development' column will have the symbol "-" for the individual windows, with the level effect stated in the row associated with the corresponding room.

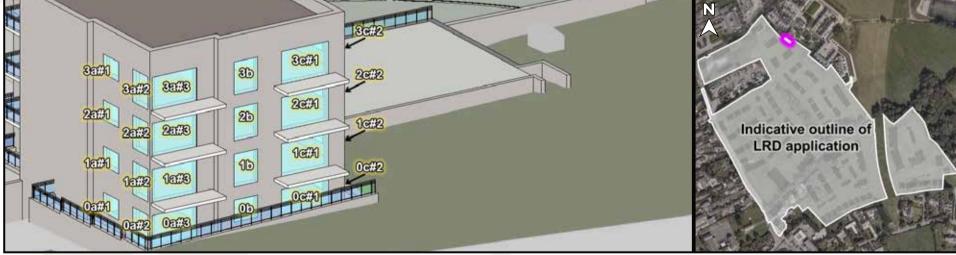


Figure A.1: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

<sup>\*\*</sup> For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 12.



# A.1.2 Rockville Hall Apartments

Table No. A.1.2 - VSC Results: Rockville Hall Apartments						
Window Number	Baseline VSC Value	Proposed VSC Value	Ratio of Proposed VSC to Baseline VSC	Recommended minimum VSC*	Level of Compliance with BRE Guidelines	Effect of Proposed Development**
2a#1	38.61%	36.79%	0.95	27.00%	BRE Compliant	-
2a#2	39.01%	36.68%	0.94	27.00%	BRE Compliant	-
2a#3	21.61%	16.90%	0.78	17.29%	98%	-
2a#	29.49%	25.96%	0.88	23.59%	BRE Compliant	Negligible
2b	37.48%	32.63%	0.87	27.00%	BRE Compliant	Negligible
2c#1	21.41%	16.20%	0.76	17.13%	95%	-
2c#2	39.47%	37.17%	0.94	27.00%	BRE Compliant	-
2c#	25.71%	21.19%	0.82	20.56%	BRE Compliant	Negligible
3a#1	39.19%	38.23%	0.98	27.00%	BRE Compliant	-
3a#2	39.51%	38.28%	0.97	27.00%	BRE Compliant	-
3a#3	39.19%	36.52%	0.93	27.00%	BRE Compliant	-
3a#	39.28%	37.32%	0.95	27.00%	BRE Compliant	Negligible
3b	39.32%	36.52%	0.93	27.00%	BRE Compliant	Negligible
3c#1	39.32%	36.31%	0.92	27.00%	BRE Compliant	-
3c#2	39.54%	38.29%	0.97	27.00%	BRE Compliant	-
3c#	39.37%	36.78%	0.93	27.00%	BRE Compliant	Negligible

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the VSC of an existing window, the value needs to both drop below the stated target value of 27% **and** be less than 0.8 times the baseline value.

<sup>#</sup> If it can be determined or reasonably assumed that multiple windows are servicing the same room, each window has been assessed and a weighted average has been calculated to determine the level of effect of the room. In such instances, the 'effect of proposed development' column will have the symbol "-" for the individual windows, with the level effect stated in the row associated with the corresponding room.

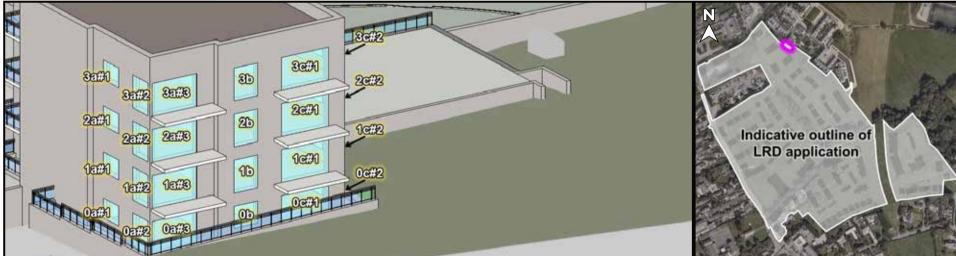


Figure A.2: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

<sup>\*\*</sup> For the interpretation of level of effects please refer to"3.2 Definition of Effects" on page 12.



## A.1.3 Rockville Mews

Table No. A.1.3 - VSC Results: Rockville Mews							
Window Number	Baseline VSC Value	Proposed VSC Value	Ratio of Proposed VSC to Baseline VSC	Recommended minimum VSC*	Level of Compliance with BRE Guidelines	Effect of Proposed Development**	
RMa	31.22%	28.18%	0.90	24.98%	BRE Compliant	Negligible	
RMb	33.31%	28.22%	0.85	26.65%	BRE Compliant	Negligible	
RMc	33.96%	26.76%	0.79	27.00%	99%	Minor Adverse	
RMd	36.78%	30.66%	0.83	27.00%	BRE Compliant	Negligible	

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the VSC of an existing window, the value needs to both drop below the stated target value of 27% **and** be less than 0.8 times the baseline value.

<sup>#</sup> If it can be determined or reasonably assumed that multiple windows are servicing the same room, each window has been assessed and a weighted average has been calculated to determine the level of effect of the room. In such instances, the 'effect of proposed development' column will have the symbol "-" for the individual windows, with the level effect stated in the row associated with the corresponding room.

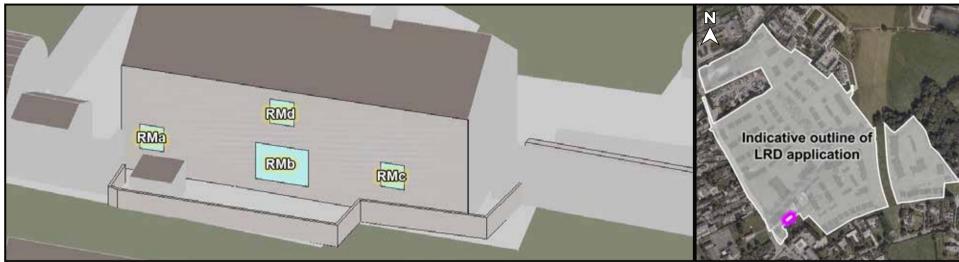


Figure A.3: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

<sup>\*\*</sup> For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 12.



## A.1.4 7-13 Rockville Woods

Table No. A.1.4 - VSC Results: 7-13 Rockville Woods						
Window Number	Baseline VSC Value	Proposed VSC Value	Ratio of Proposed VSC to Baseline VSC	Recommended minimum VSC*	Level of Compliance with BRE Guidelines	Effect of Proposed Development**
7a	25.87%	21.07%	0.81	20.70%	BRE Compliant	Negligible
7b#1	35.76%	32.23%	0.90	27.00%	BRE Compliant	-
7b#2	31.20%	30.74%	0.99	24.96%	BRE Compliant	-
7b#	34.35%	31.77%	0.92	27.00%	BRE Compliant	Negligible
7c	37.41%	34.71%	0.93	27.00%	BRE Compliant	Negligible
8a	29.83%	24.84%	0.83	23.86%	BRE Compliant	Negligible
8b	37.32%	33.56%	0.90	27.00%	BRE Compliant	Negligible
8c	38.13%	35.36%	0.93	27.00%	BRE Compliant	Negligible
9a	29.14%	24.32%	0.83	23.31%	BRE Compliant	Negligible
9b	37.81%	34.17%	0.90	27.00%	BRE Compliant	Negligible
9c	38.46%	35.71%	0.93	27.00%	BRE Compliant	Negligible
10a	28.96%	24.54%	0.85	23.17%	BRE Compliant	Negligible
10b	38.34%	35.09%	0.92	27.00%	BRE Compliant	Negligible
10c	38.80%	36.38%	0.94	27.00%	BRE Compliant	Negligible
11a	28.02%	23.75%	0.85	22.42%	BRE Compliant	Negligible
11b	38.35%	35.32%	0.92	27.00%	BRE Compliant	Negligible
11c	38.81%	36.61%	0.94	27.00%	BRE Compliant	Negligible
12a	27.48%	23.28%	0.85	21.98%	BRE Compliant	Negligible
12b	38.34%	35.61%	0.93	27.00%	BRE Compliant	Negligible
12c	38.81%	36.87%	0.95	27.00%	BRE Compliant	Negligible
13a	27.00%	22.58%	0.84	21.60%	BRE Compliant	Negligible
13b#1	39.12%	39.11%	1.00	27.00%	BRE Compliant	-
13b#2	38.32%	35.74%	0.93	27.00%	BRE Compliant	-
13b#	38.56%	36.76%	0.95	27.00%	BRE Compliant	Negligible
13c	38.80%	36.96%	0.95	27.00%	BRE Compliant	Negligible

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the VSC of an existing window, the value needs to both drop below the stated target value of 27% and be less than 0.8 times the baseline value.

<sup>#</sup> If it can be determined or reasonably assumed that multiple windows are servicing the same room, each window has been assessed and a weighted average has been calculated to determine the level of effect of the room. In such instances, the 'effect of proposed development' column will have the symbol "-" for the individual windows, with the level effect stated in the row associated with the corresponding room.



Figure A.4: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

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<sup>\*\*</sup> For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 12.



# A.2 Effect on Annual/Winter Probable Sunlight Hours (APSH/WPSH)

Below is an example of the table used to describe the effect to the APSH/WPSH of existing windows.

	Table Example. A.2 - APSH/WPSH Impact Assessment						
Window Number	Baseline APSH/WPSH	Proposed APSH/WPSH	Ratio of Proposed to Baseline APSH/ WPSH	Recommended Minimum APSH/WPSH	Level of Compliance with BRE Guidelines	Effect of Proposed Development	
Α	В	С	D	E	F	G	

#### **A: Window Number**

The number in this column will identify the assessed window. All windows are represented visually in the corresponding figure.

#### **B:** Baseline APSH/WPSH

The Baseline APSH/WPSH Value represents the percentage of the probable sunlight hours that the assessed window can receive, calculated in the existing baseline model state (as explained in the "Building the Model States" on page 15). The <u>annual</u> and <u>winter</u> assessments will be represented in separate tables.

#### C: Proposed APSH/WPSH

The *Proposed APSH/WPSH Value* represents the percentage of probable sunlight hours that the assessed window can receive, calculated in the proposed model state (as explained in the "Building the Model States" on page 15).

#### D: Ratio of Proposed to Baseline APSH/WPSH

This column expressed the ratio of change between the baseline APSH/WPSH value and the proposed APSH/WPSH value. The BRE Guidelines recommend that if the proposed value is less than 0.8 times the baseline value, then the reduction to sunlight is more likely to be perceptible.

#### E: Recommended Minimum APSH/WPSH

The BRE Target Value for each window has been set according to the BRE Guidelines. The Guidelines state that a proposed development could possibly have a noticeable effect on the sunlight received by an existing window, if the APSH value drops below the annual (25%) or WPSH value below the winter (5%) guidelines; **and** the APSH/WPSH value is less than 0.8 times the baseline value; **and** there is a reduction of more than 4% to the APSH.

Therefore, to determine the *recommended minimum APSH Value* for the <u>annual</u> study, 80% of the *Baseline APSH value* has been calculated. If this value is above the 25% threshold, a target value of 25% will be applied. If 80% of the baseline value is below 25%, then 80% of the baseline value is the appropriate target value.

To determine the recommended minimum WPSH Value for the winter study, 80% of the Baseline winter APSH value has been calculated. If this value is above the 5% threshold, a target value of 5% will be applied. If 80% of the baseline value is below 5%, then 80% of the baseline value is the appropriate target value.

#### F: Level of Compliance with BRE Guidelines

This column states the compliance of the *Proposed APSH/WPSH Value* with the *recommended minimum APSH/WPSH* as per the BRE Guidelines. In essence, it shows whether or not the assessed window would experience a perceptible level of impact. If the window complies with the BRE Guidelines this cell will state "*BRE Compliant*". If the window does not meet the criteria as set out in the BRE Guidelines, a percentage of compliance with the *recommended minimum* will be stated.

#### **G:** Effect of Proposed Development

The levels of effect in this column describe the effect an assessed window will experience, based on its compliance with the *BRE Target Value*. A full list of definitions and a numerical rationale for each can be found in the section "Definition of Effects" on page 12.

It should be noted that the figures displayed in the table of results have been rounded off. A manual calculation of these figures may yield a negligible difference and should not be considered an error.



#### A.2.1 Rockville Hall Apartments - Annual Probable Sunlight Hours

Table No. A.2.1 - APSH Results: Rockville Hall Apartments						
Window Number	Baseline APSH	Proposed APSH	Ratio of Proposed APSH to Baseline APSH	Recommended minimum APSH*	Level of Compliance with BRE Guidelines**	Effect of Proposed Development
0a#	48.72%	32.40%	0.67	25.00%	BRE Compliant	Negligible
0b	64.71%	44.83%	0.69	25.00%	BRE Compliant	Negligible
0c#	86.87%	70.12%	0.81	25.00%	BRE Compliant	Negligible
1a#	48.87%	40.71%	0.83	25.00%	BRE Compliant	Negligible
1b	65.73%	54.55%	0.83	25.00%	BRE Compliant	Negligible
1c#	87.65%	78.63%	0.90	25.00%	BRE Compliant	Negligible
2a#	49.03%	46.15%	0.94	25.00%	BRE Compliant	Negligible
2b	71.10%	65.97%	0.93	25.00%	BRE Compliant	Negligible
2c#	87.72%	83.14%	0.95	25.00%	BRE Compliant	Negligible
3a#	74.13%	74.13%	1.00	25.00%	BRE Compliant	Negligible
3b	76.77%	76.07%	0.99	25.00%	BRE Compliant	Negligible
3c#	100.00%	100.00%	1.00	25.00%	BRE Compliant	Negligible

#### A.2.2 Rockville Hall Apartments - Winter Probable Sunlight Hours

Table No. A.2.2 - WPSH Results: Rockville Hall Apartments						
Window Number	Baseline WPSH	Proposed WPSH	Ratio of Proposed WPSH to Baseline WPSH	Recommended minimum WPSH*	Level of Compliance with BRE Guidelines**	Effect of Proposed Development
0a#	24.09%	11.34%	0.47	5.00%	BRE Compliant	Negligible
0b	22.83%	6.60%	0.29	5.00%	BRE Compliant	Negligible
0c#	31.32%	18.06%	0.58	5.00%	BRE Compliant	Negligible
1a#	24.24%	17.02%	0.70	5.00%	BRE Compliant	Negligible
1b	23.78%	14.22%	0.60	5.00%	BRE Compliant	Negligible
1c#	32.09%	23.78%	0.74	5.00%	BRE Compliant	Negligible
2a#	24.40%	21.52%	0.88	5.00%	BRE Compliant	Negligible
2b	23.78%	18.65%	0.78	5.00%	BRE Compliant	Negligible
2c#	32.17%	27.58%	0.86	5.00%	BRE Compliant	Negligible
3a#	26.81%	26.81%	1.00	5.00%	BRE Compliant	Negligible
3b	28.59%	27.89%	0.98	5.00%	BRE Compliant	Negligible
3c#	32.17%	32.17%	1.00	5.00%	BRE Compliant	Negligible

<sup>\*</sup> The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the APSH/WPSH of an existing window, the value needs to drop below the stated target value of 25% (annual) / 5% (winter) **and** be less than 0.8 times the baseline value **and** it has to have a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.

<sup>#</sup> If it can be determined or reasonably assumed that multiple windows are servicing the same room, APSH/WPSH has been calculated for the room rather than the individual windows.

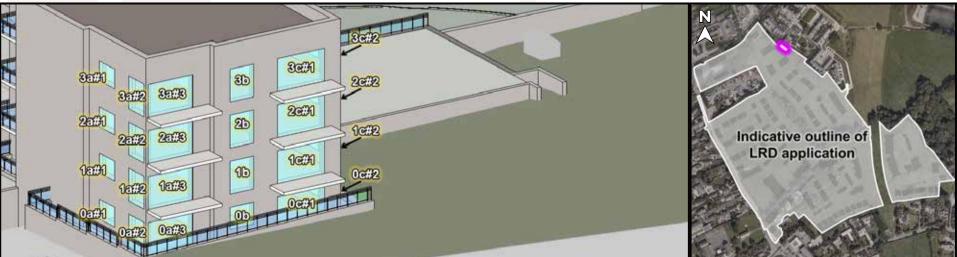


Figure A.1: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

<sup>\*\*</sup> For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 12.



#### A.2.3 7-13 Rockville Woods - Annual Probable Sunlight Hours

Table No. A.2.3 - APSH Results: 7-13 Rockville Woods						
Window Number	Baseline APSH	Proposed APSH	Ratio of Proposed APSH to Baseline APSH	Recommended minimum APSH*	Level of Compliance with BRE Guidelines**	Effect of Proposed Development
7a	48.95%	43.75%	0.89	25.00%	BRE Compliant	Negligible
7b#	85.31%	83.14%	0.97	25.00%	BRE Compliant	Negligible
7c	68.76%	67.75%	0.99	25.00%	BRE Compliant	Negligible
8a	56.72%	51.52%	0.91	25.00%	BRE Compliant	Negligible
8b	68.45%	65.19%	0.95	25.00%	BRE Compliant	Negligible
8c	71.48%	69.31%	0.97	25.00%	BRE Compliant	Negligible
9a	56.57%	49.57%	0.88	25.00%	BRE Compliant	Negligible
9b	71.79%	68.53%	0.95	25.00%	BRE Compliant	Negligible
9с	73.74%	72.57%	0.98	25.00%	BRE Compliant	Negligible
10a	54.23%	49.26%	0.91	25.00%	BRE Compliant	Negligible
10b	70.71%	68.76%	0.97	25.00%	BRE Compliant	Negligible
10c	71.17%	71.10%	1.00	25.00%	BRE Compliant	Negligible
11a	52.99%	49.11%	0.93	25.00%	BRE Compliant	Negligible
11b	70.78%	69.31%	0.98	25.00%	BRE Compliant	Negligible
11c	71.79%	71.72%	1.00	25.00%	BRE Compliant	Negligible
12a	51.36%	46.93%	0.91	25.00%	BRE Compliant	Negligible
12b	71.02%	69.62%	0.98	25.00%	BRE Compliant	Negligible
12c	72.57%	72.26%	1.00	25.00%	BRE Compliant	Negligible
13a	51.13%	46.78%	0.91	25.00%	BRE Compliant	Negligible
13b#	71.64%	69.62%	0.97	25.00%	BRE Compliant	Negligible
13c	72.57%	71.56%	0.99	25.00%	BRE Compliant	Negligible

<sup>\*</sup>The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the APSH/WPSH of an existing window, the value needs to drop below the stated target value of 25% (annual) / 5% (winter) **and** be less than 0.8 times the baseline value **and** it has to have a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.

<sup>#</sup> If it can be determined or reasonably assumed that multiple windows are servicing the same room, APSH/WPSH has been calculated for the room rather than the individual windows.



Figure A.2: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

<sup>\*\*</sup> For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 12.



#### A.2.4 7-13 Rockville Woods - Winter Probable Sunlight Hours

Table No. A.2.4 - WPSH Results: 7-13 Rockville Woods						
Window Number	Baseline WPSH	Proposed WPSH	Ratio of Proposed WPSH to Baseline WPSH	Recommended minimum WPSH*	Level of Compliance with BRE Guidelines**	Effect of Proposed Development
7a	15.46%	10.33%	0.67	5.00%	BRE Compliant	Negligible
7b#	17.56%	15.38%	0.88	5.00%	BRE Compliant	Negligible
7c	20.59%	19.58%	0.95	5.00%	BRE Compliant	Negligible
8a	18.26%	13.44%	0.74	5.00%	BRE Compliant	Negligible
8b	20.28%	17.02%	0.84	5.00%	BRE Compliant	Negligible
8c	23.31%	21.13%	0.91	5.00%	BRE Compliant	Negligible
9a	21.21%	14.45%	0.68	5.00%	BRE Compliant	Negligible
9b	23.62%	20.36%	0.86	5.00%	BRE Compliant	Negligible
9c	25.56%	24.40%	0.95	5.00%	BRE Compliant	Negligible
10a	21.68%	17.33%	0.80	5.00%	BRE Compliant	Negligible
10b	24.86%	23.23%	0.93	5.00%	BRE Compliant	Negligible
10c	25.33%	25.25%	1.00	5.00%	BRE Compliant	Negligible
<b>11</b> a	21.37%	17.87%	0.84	5.00%	BRE Compliant	Negligible
11b	24.94%	23.47%	0.94	5.00%	BRE Compliant	Negligible
11c	25.95%	25.87%	1.00	5.00%	BRE Compliant	Negligible
12a	21.52%	17.09%	0.79	5.00%	BRE Compliant	Negligible
12b	25.17%	23.78%	0.94	5.00%	BRE Compliant	Negligible
12c	26.73%	26.42%	0.99	5.00%	BRE Compliant	Negligible
13a	22.14%	17.79%	0.80	5.00%	BRE Compliant	Negligible
13b#	25.80%	23.78%	0.92	5.00%	BRE Compliant	Negligible
13c	26.73%	25.72%	0.96	5.00%	BRE Compliant	Negligible

<sup>\*</sup>The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the APSH/WPSH of an existing window, the value needs to drop below the stated target value of 25% (annual) / 5% (winter) **and** be less than 0.8 times the baseline value **and** it has to have a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.

<sup>#</sup> If it can be determined or reasonably assumed that multiple windows are servicing the same room, APSH/WPSH has been calculated for the room rather than the individual windows.

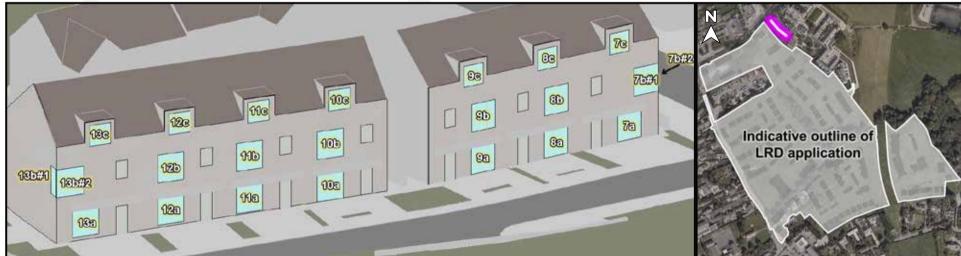


Figure A.3: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

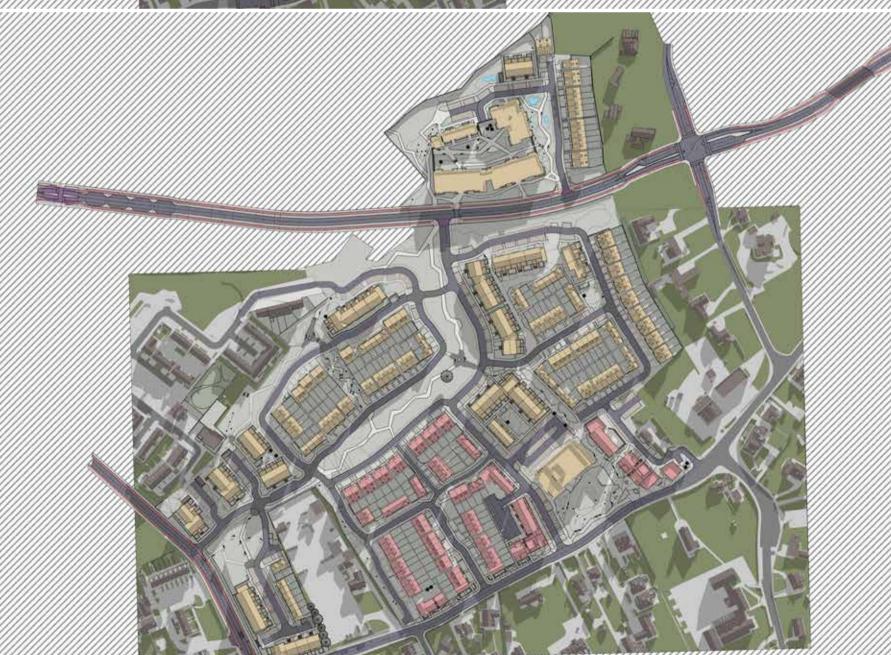
39

<sup>\*\*</sup> For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 12.









B.0	Shadow Studies
B.1	Shadow Study 21 March
	March 21st Sunrise 6:32   Sunset 18:32

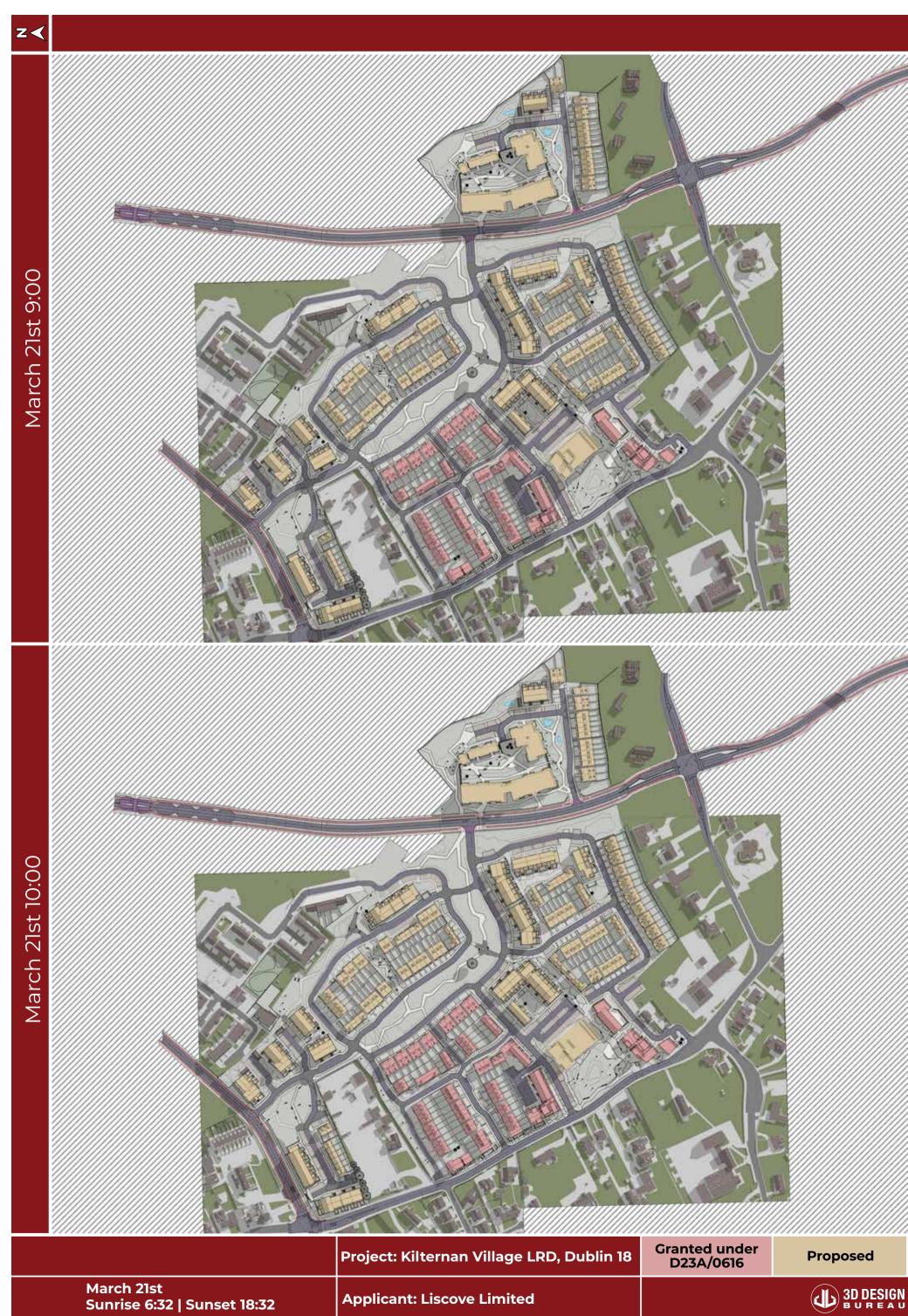
Project: Kilternan Village LRD, Dublin 18

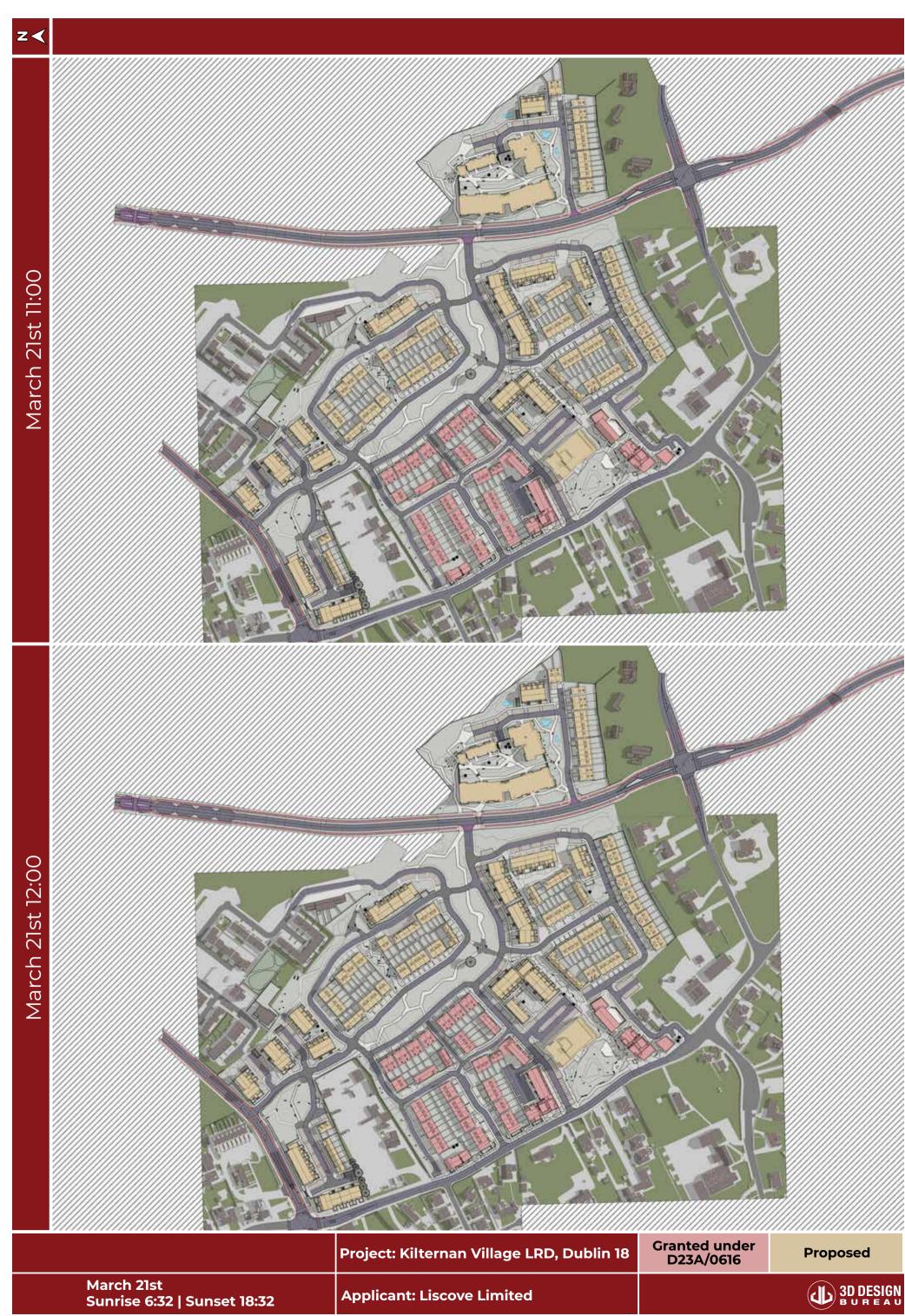
**Applicant: Liscove Limited** 

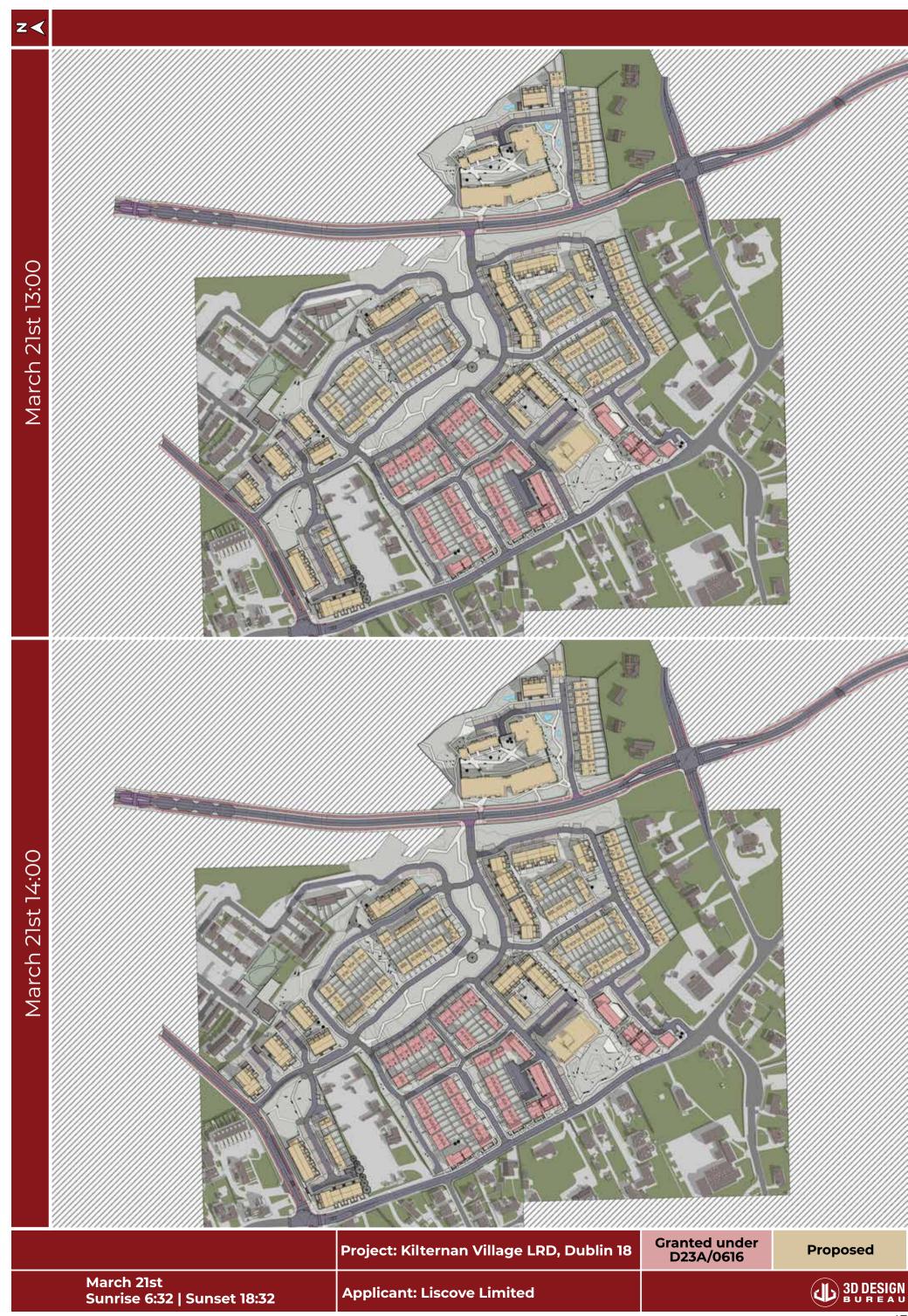
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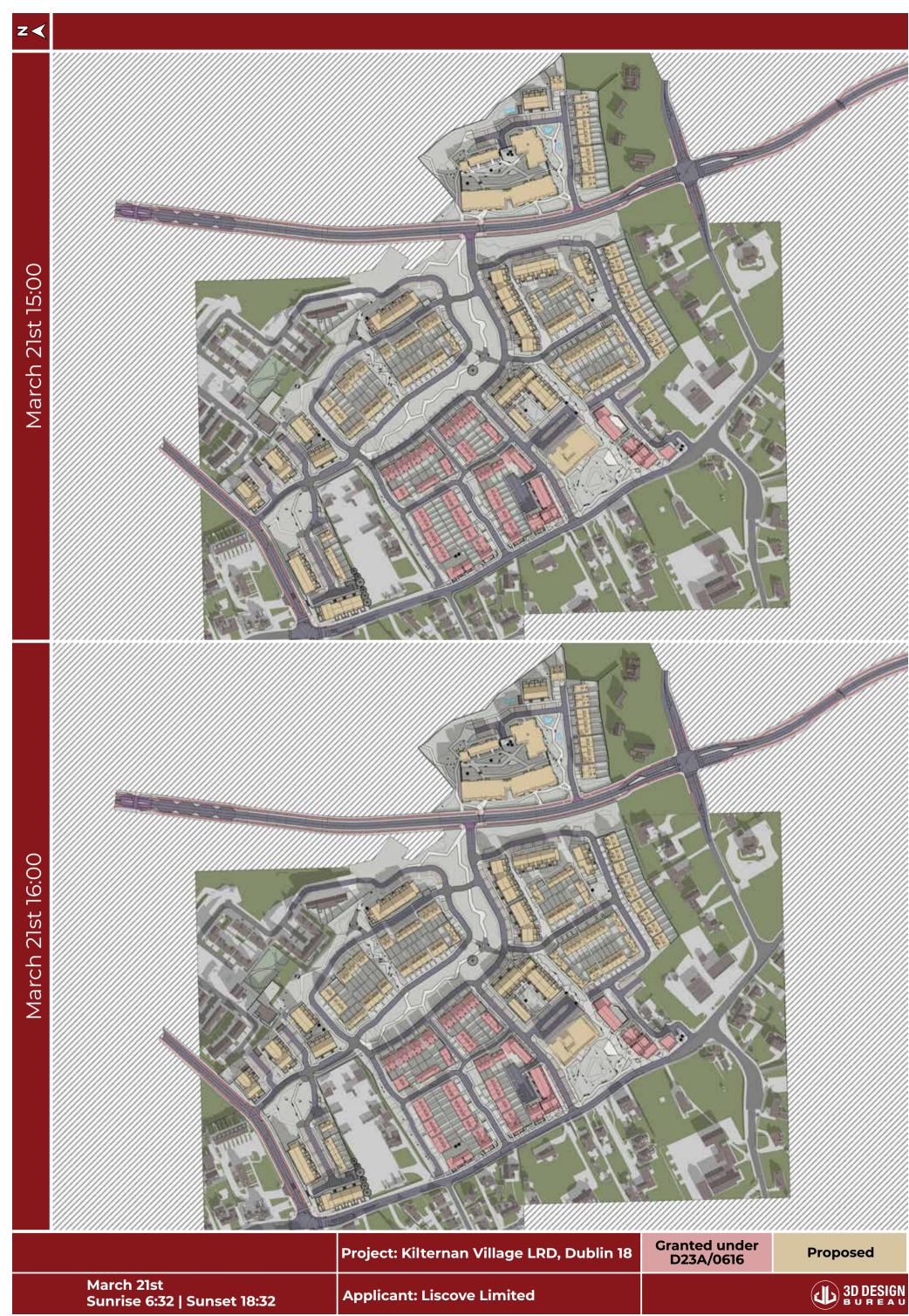
Proposed

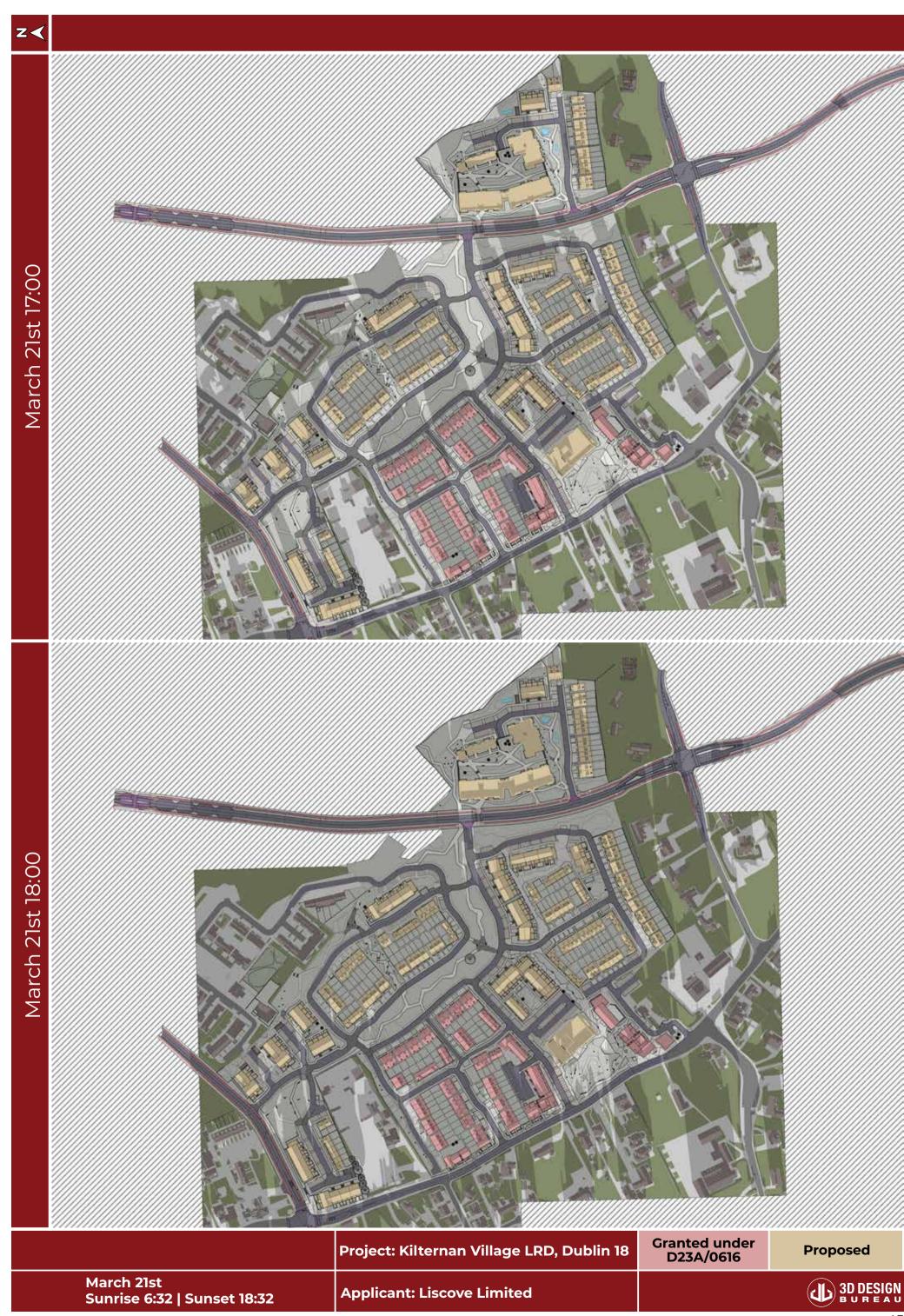


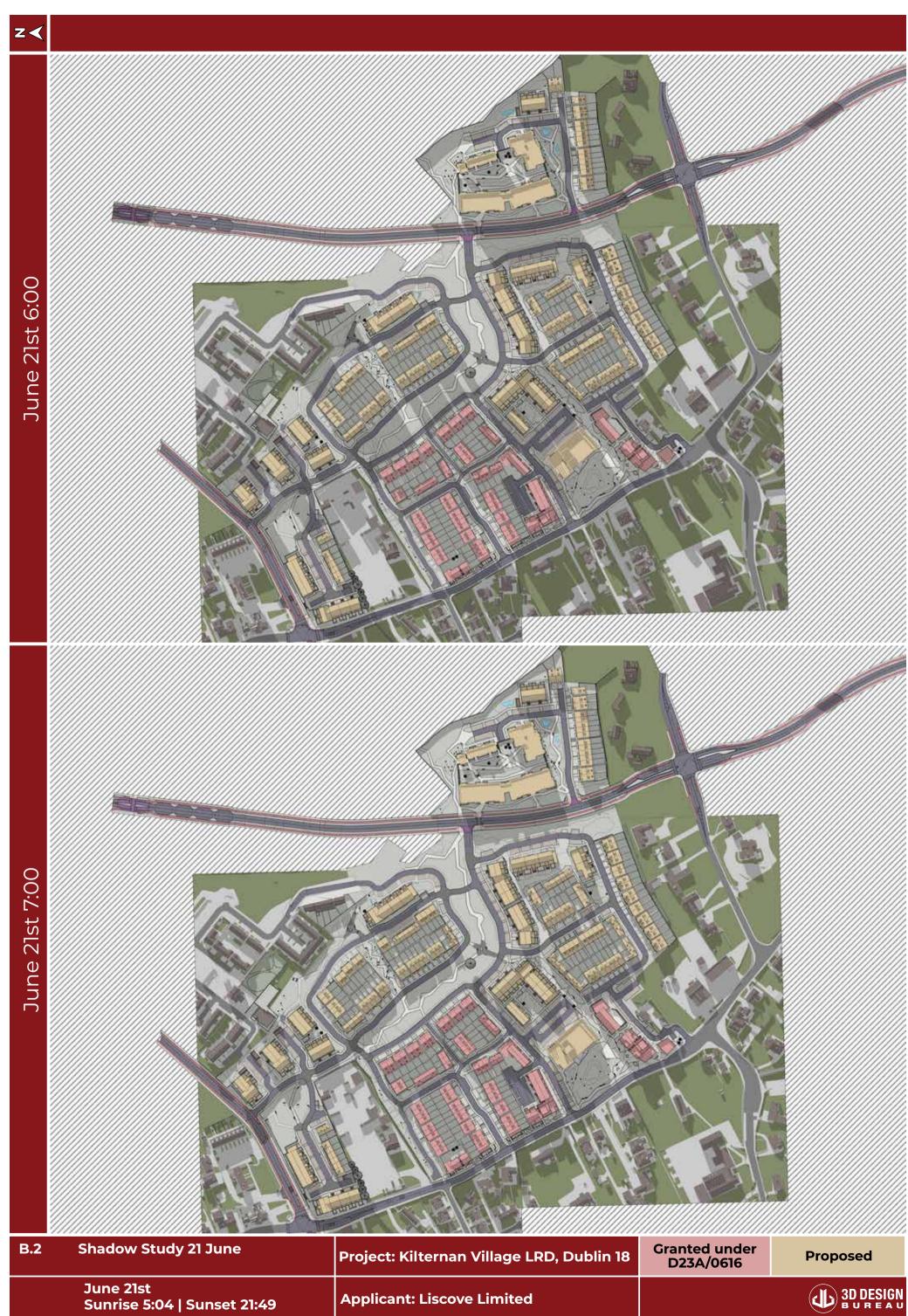


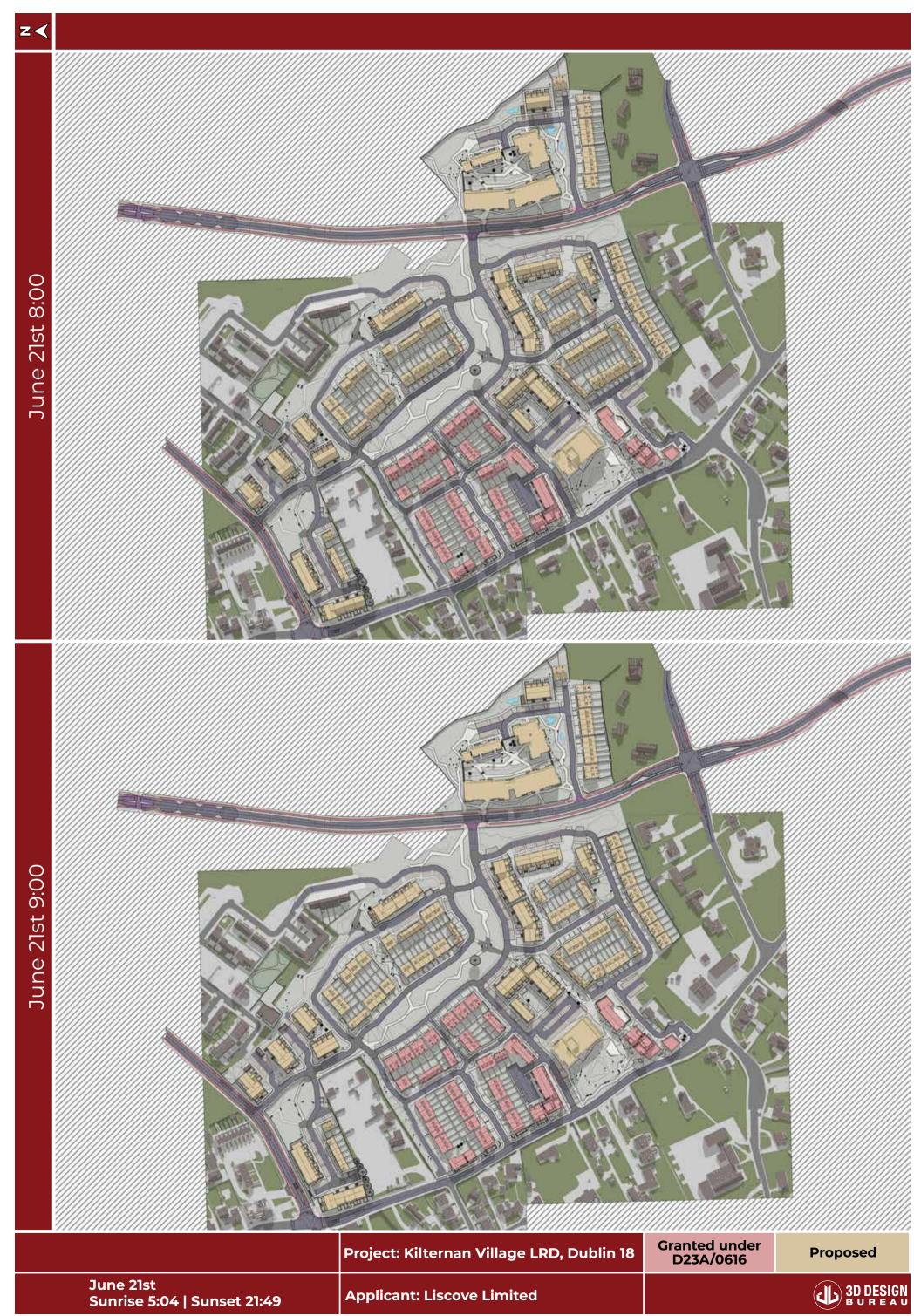


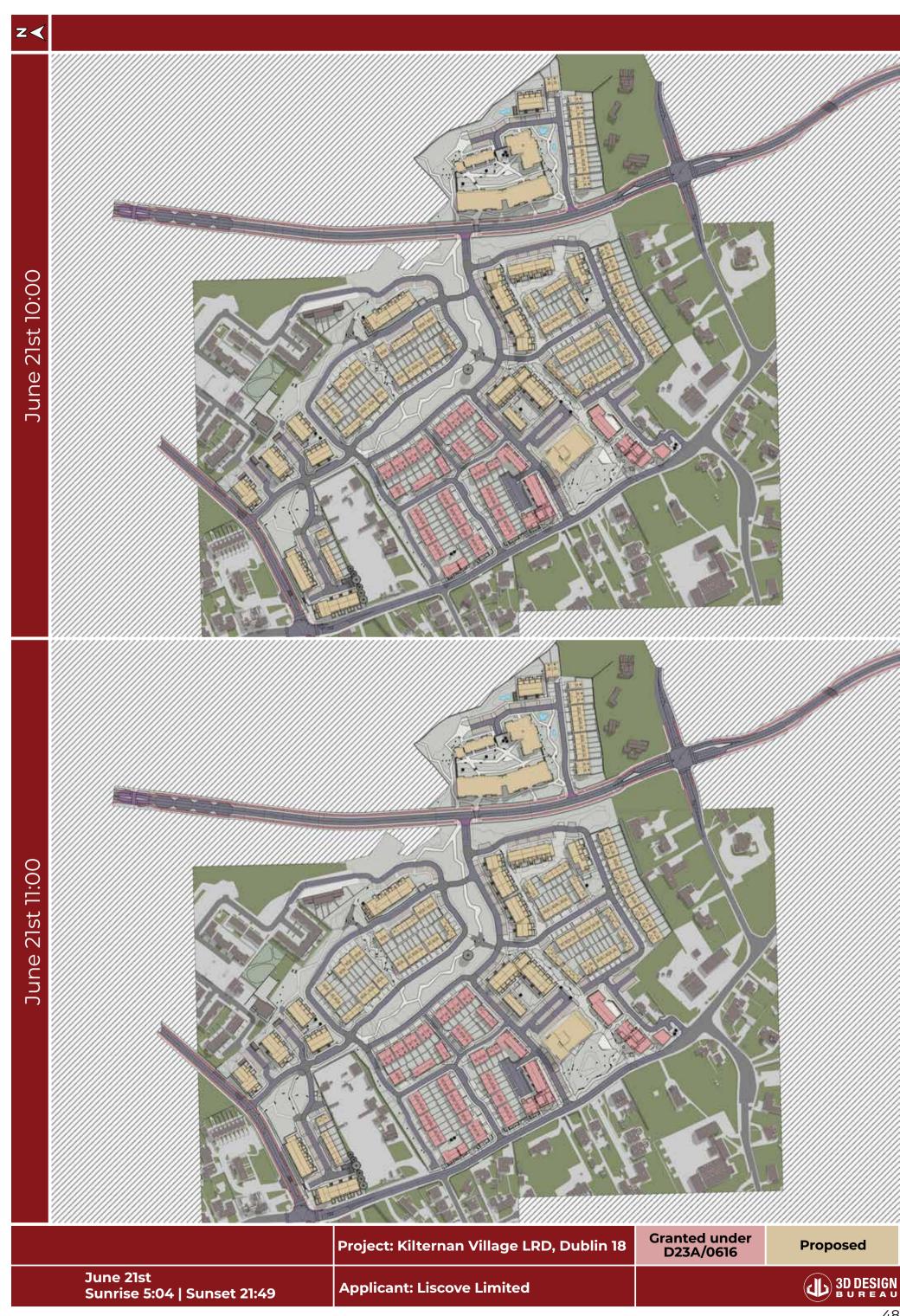


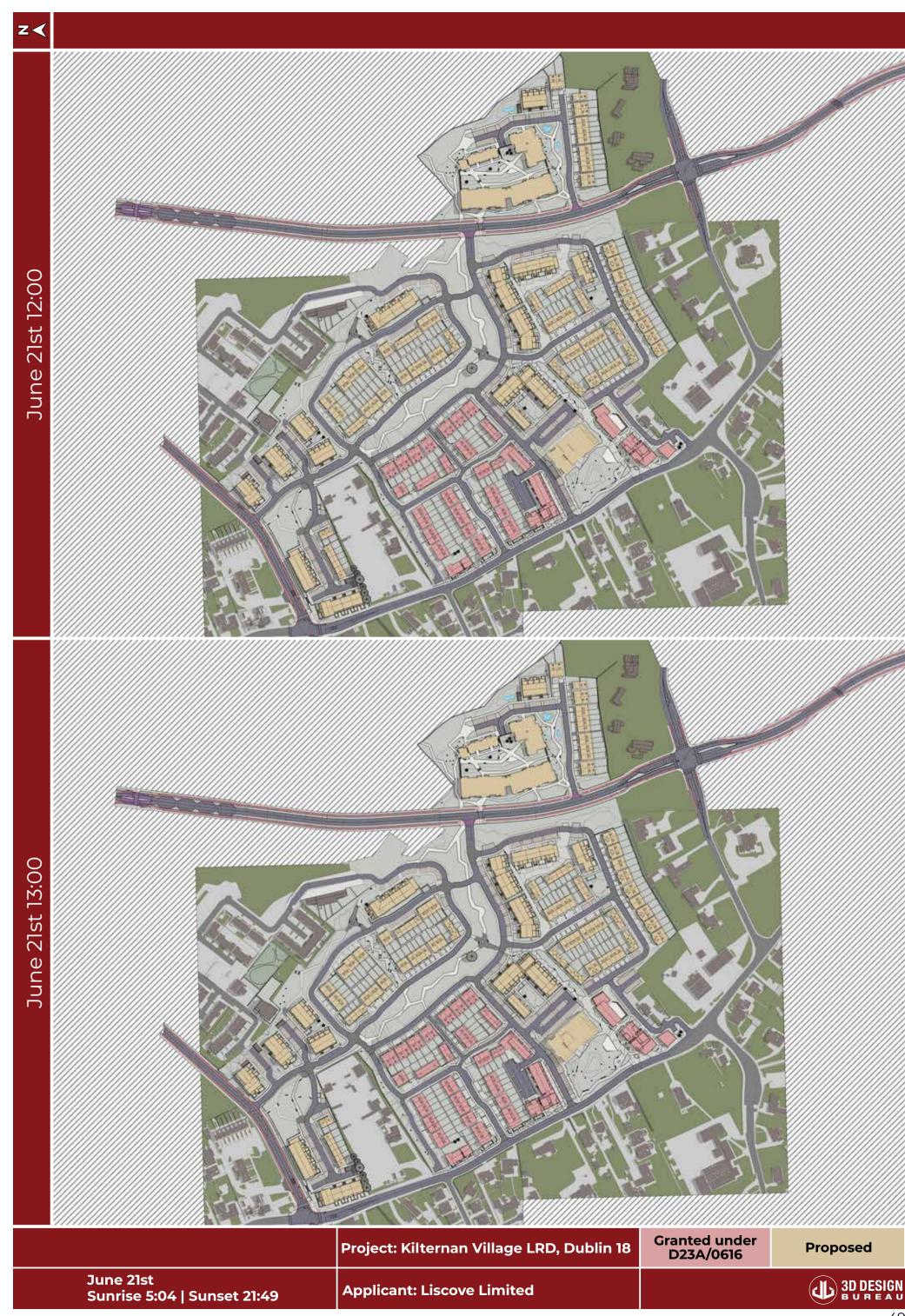


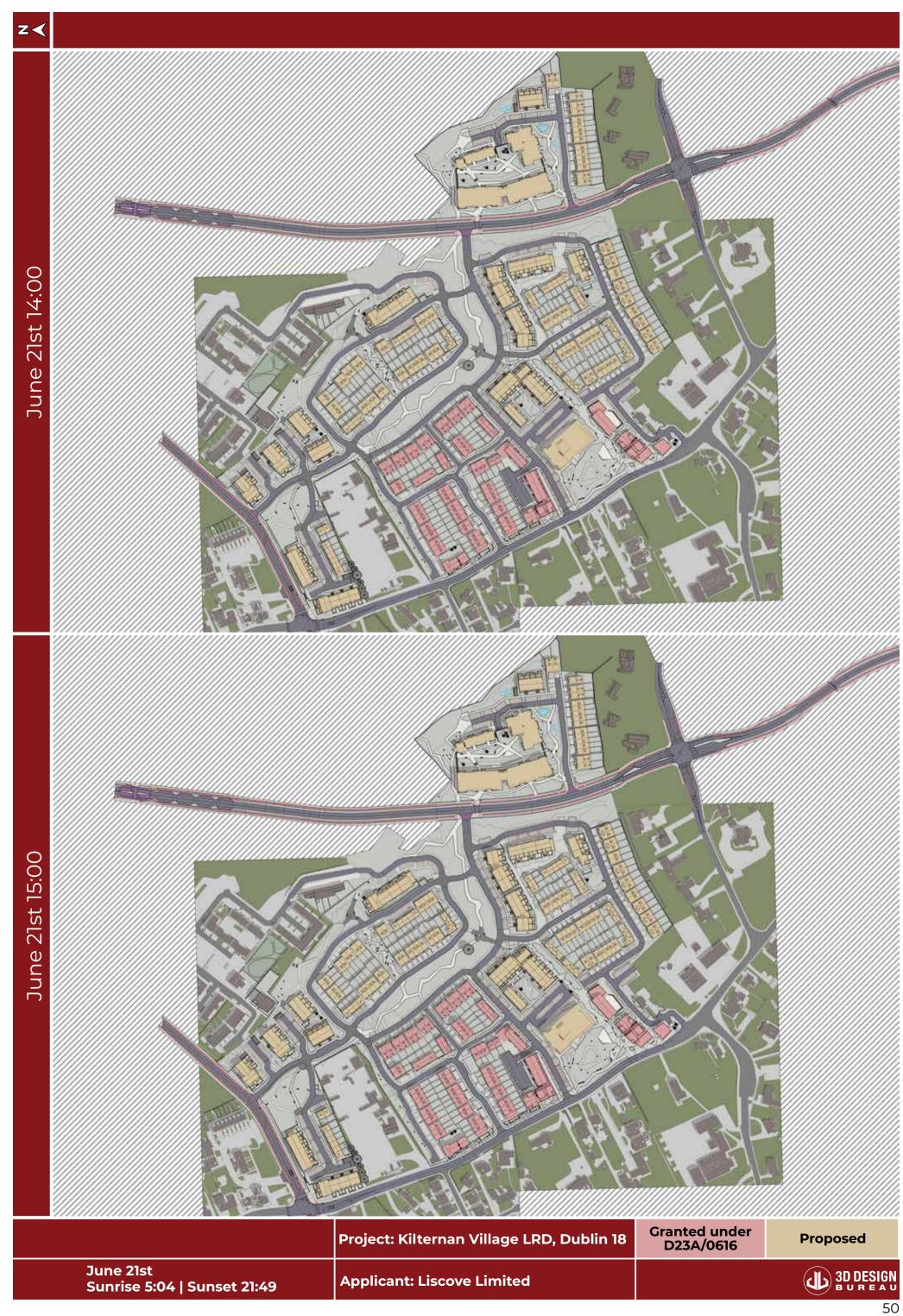


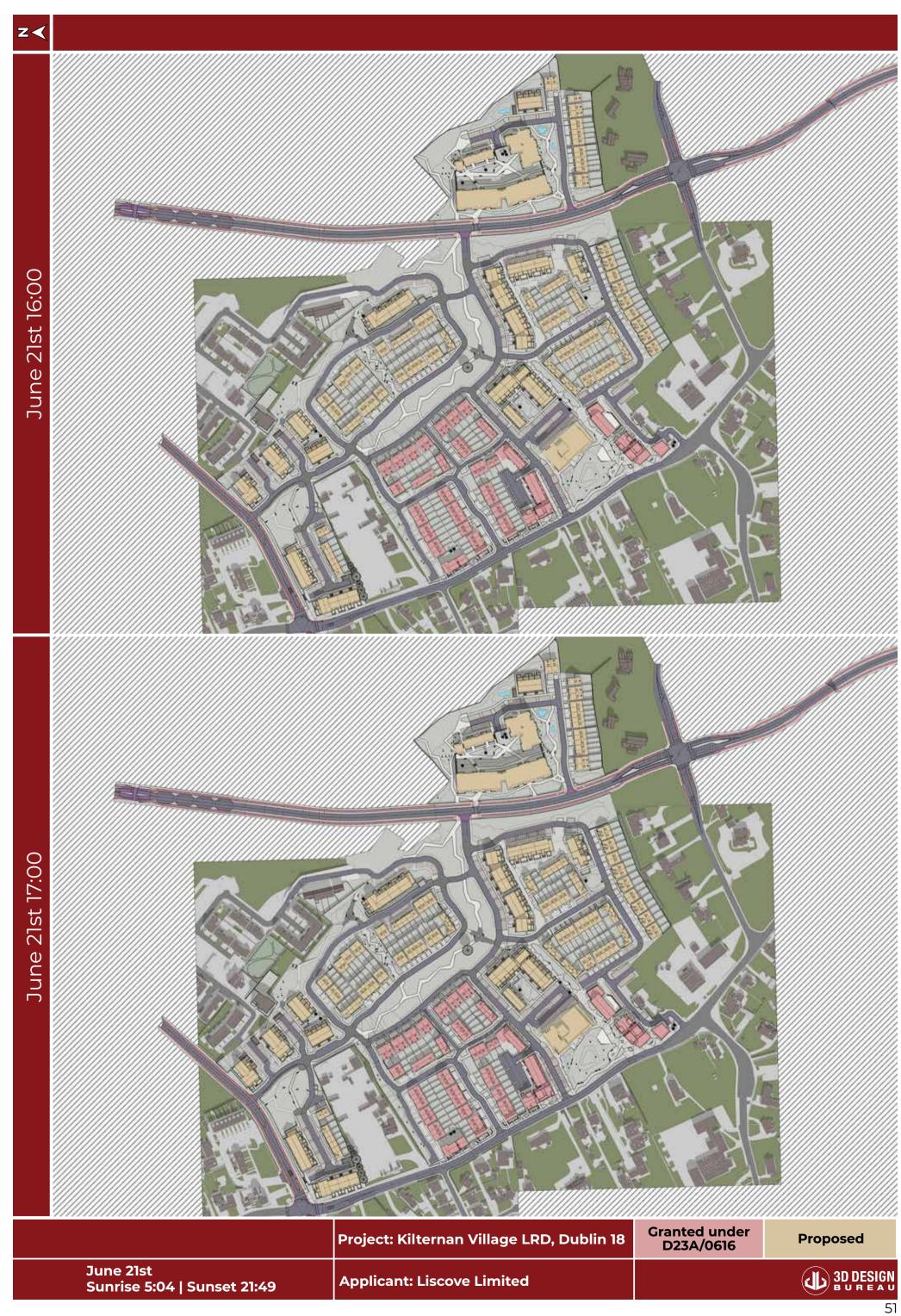


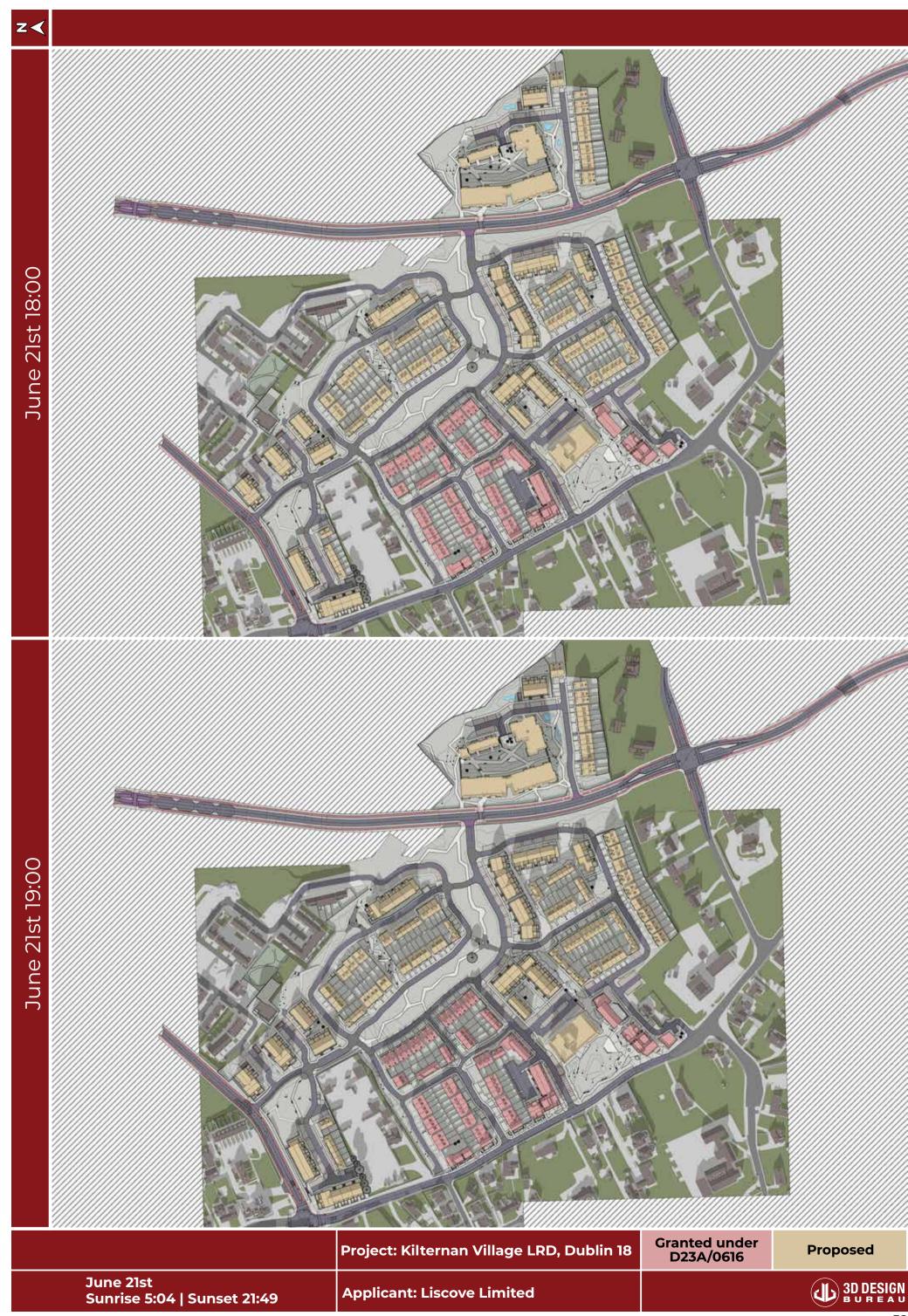


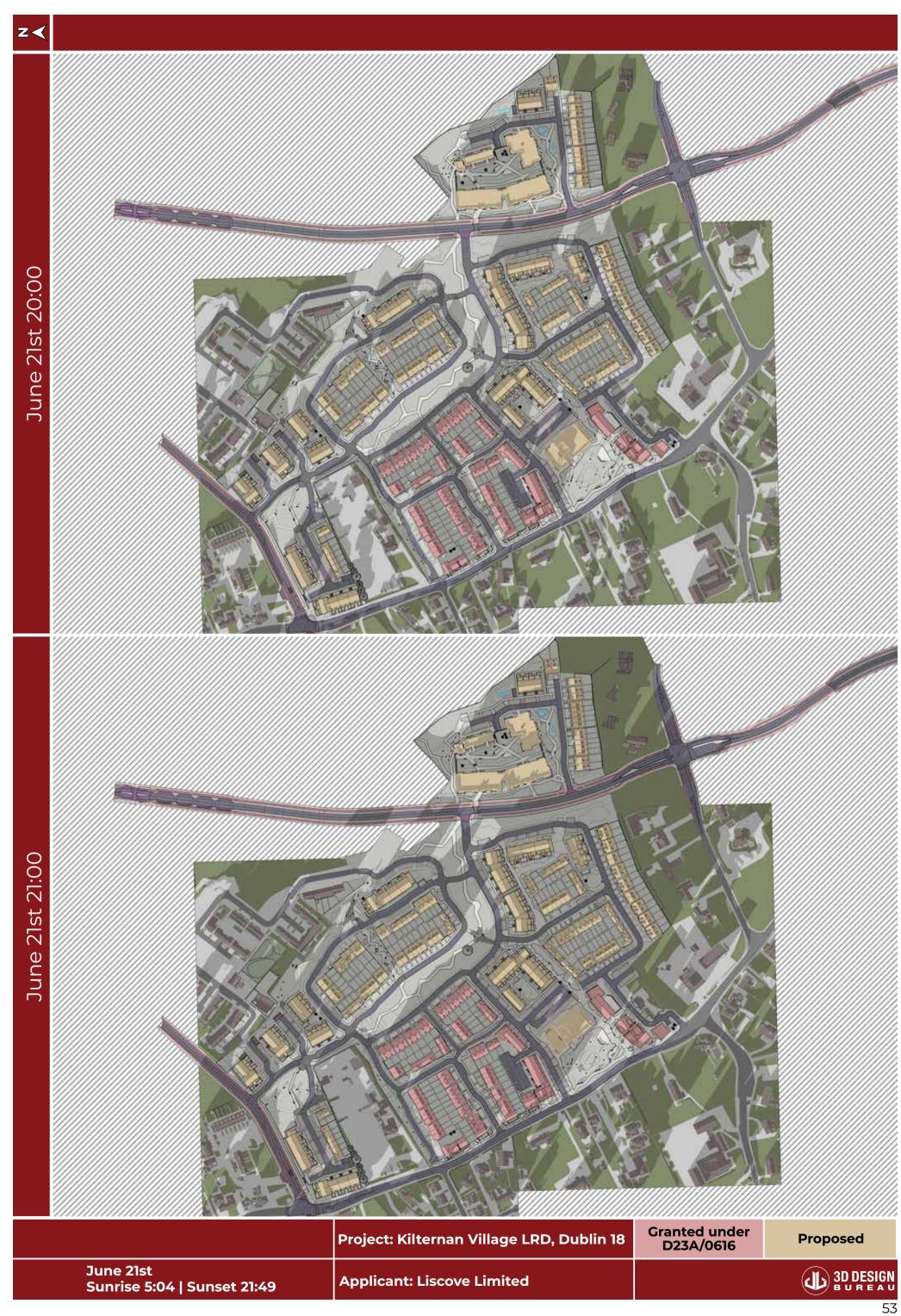


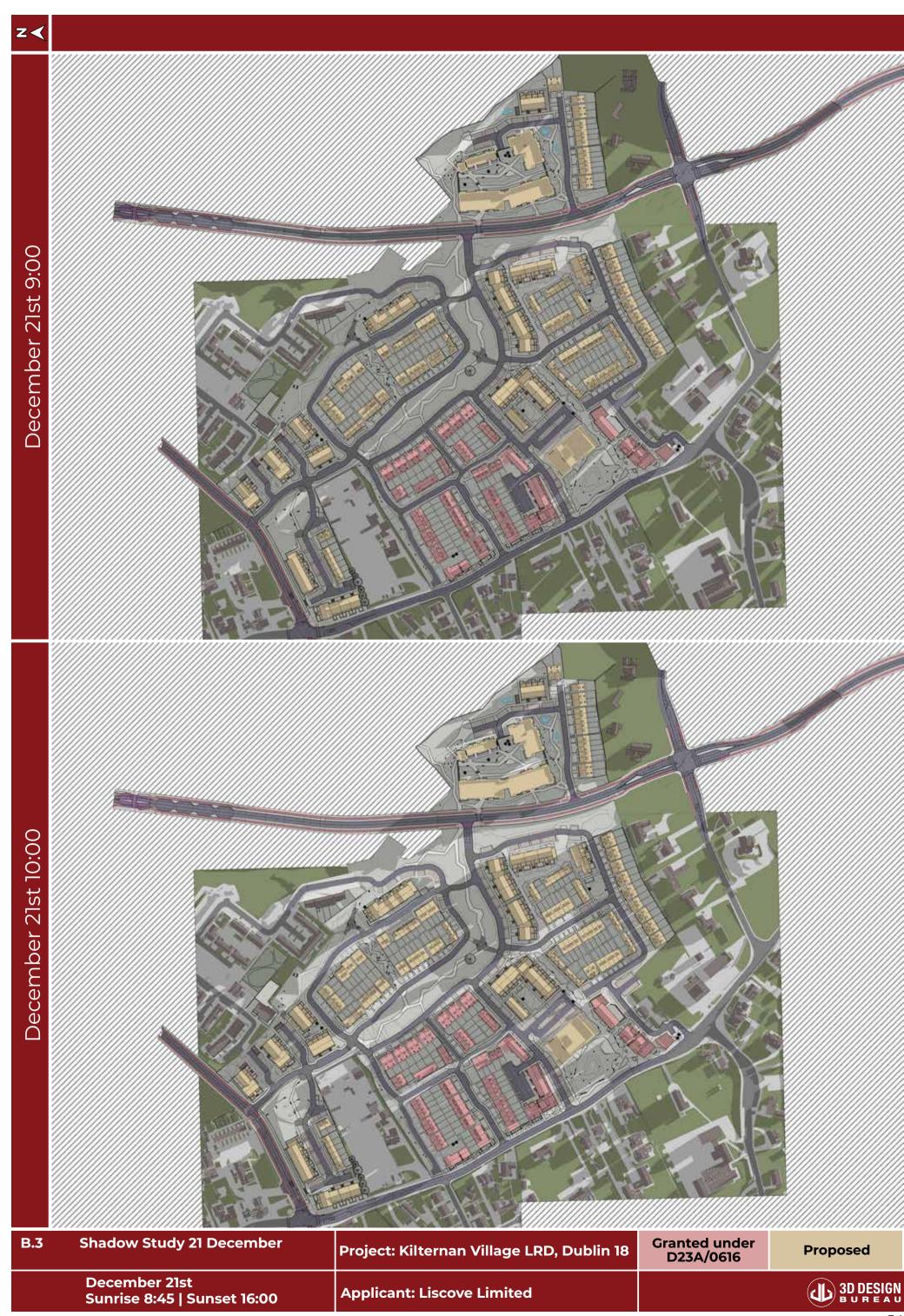


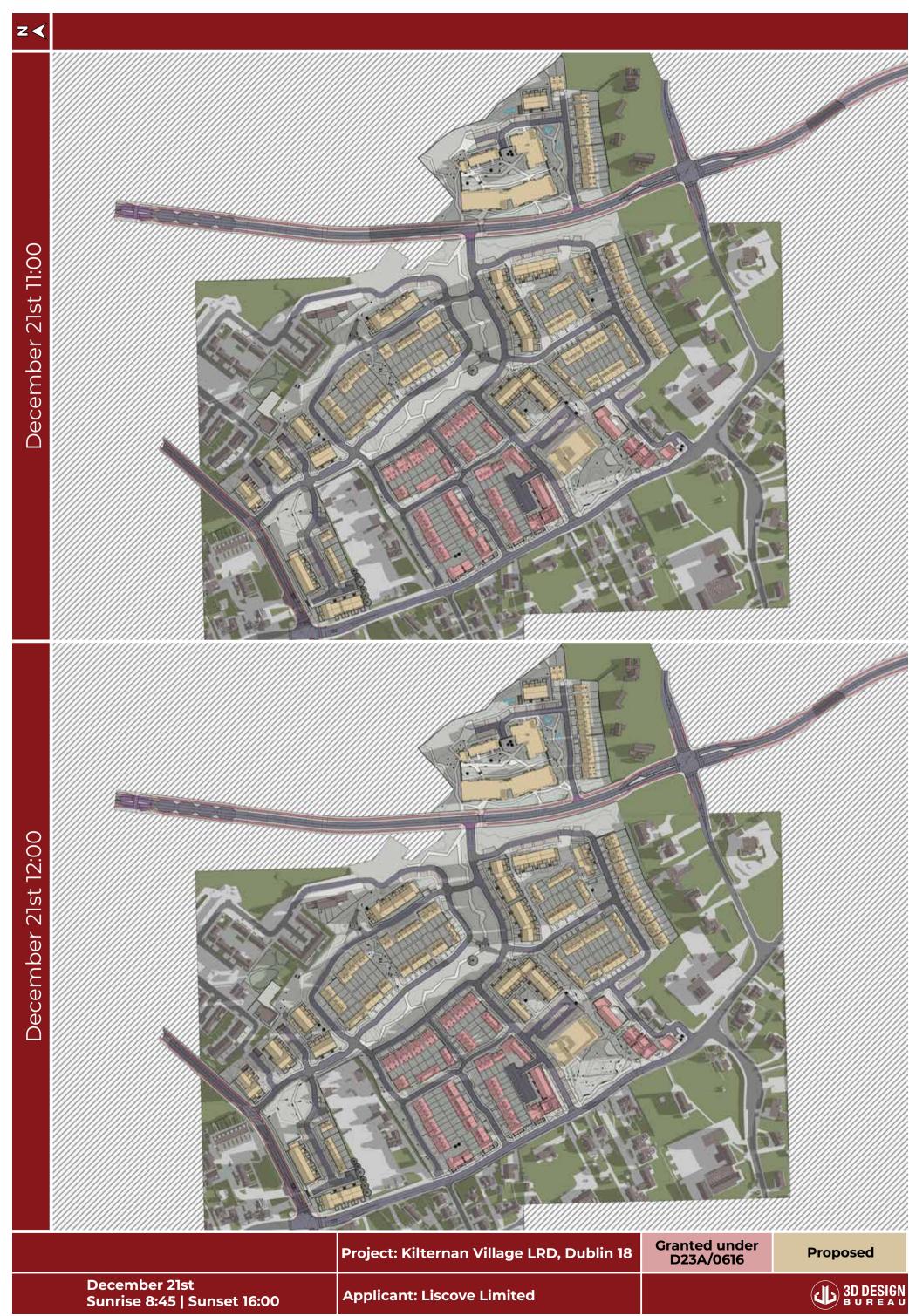


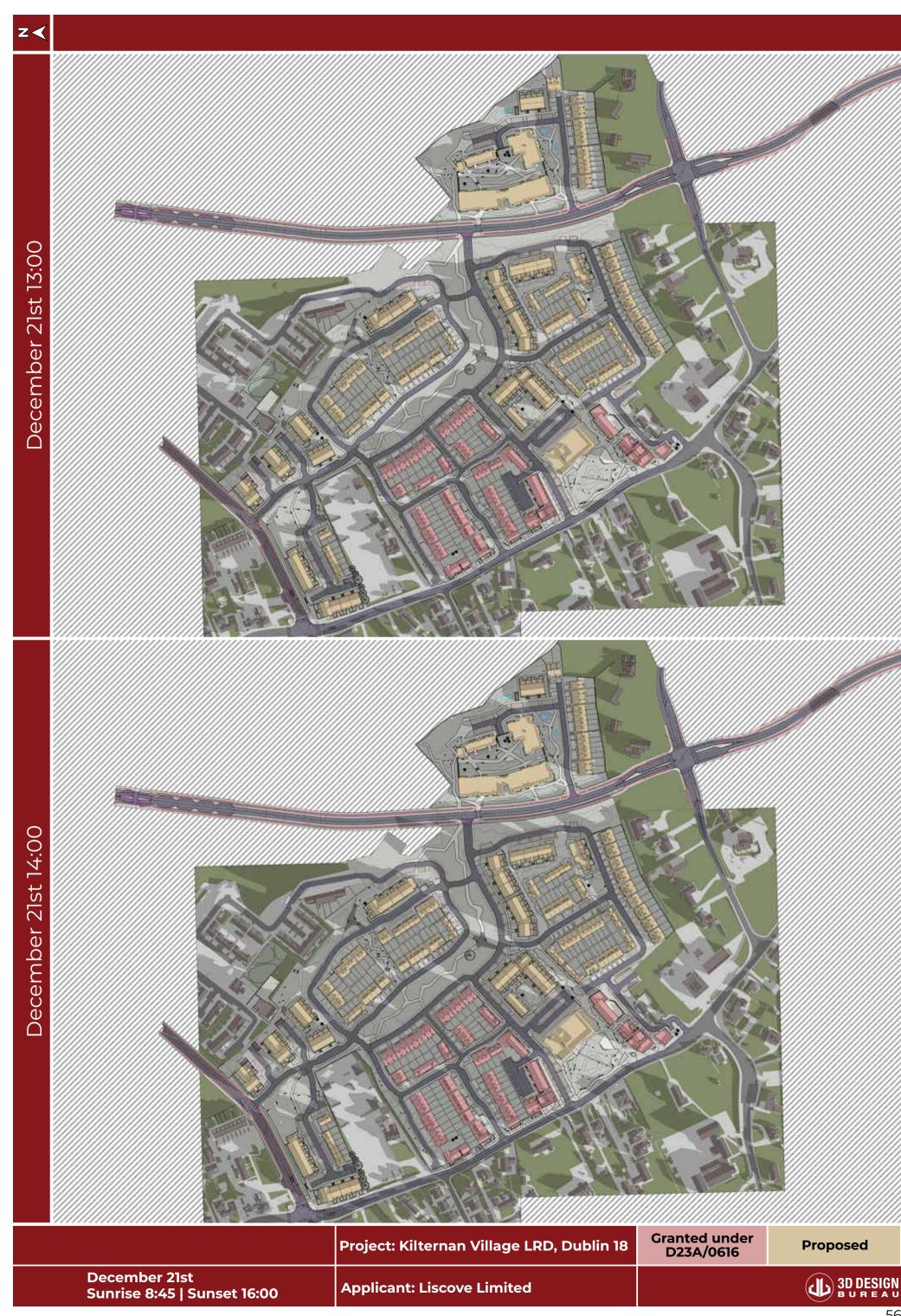


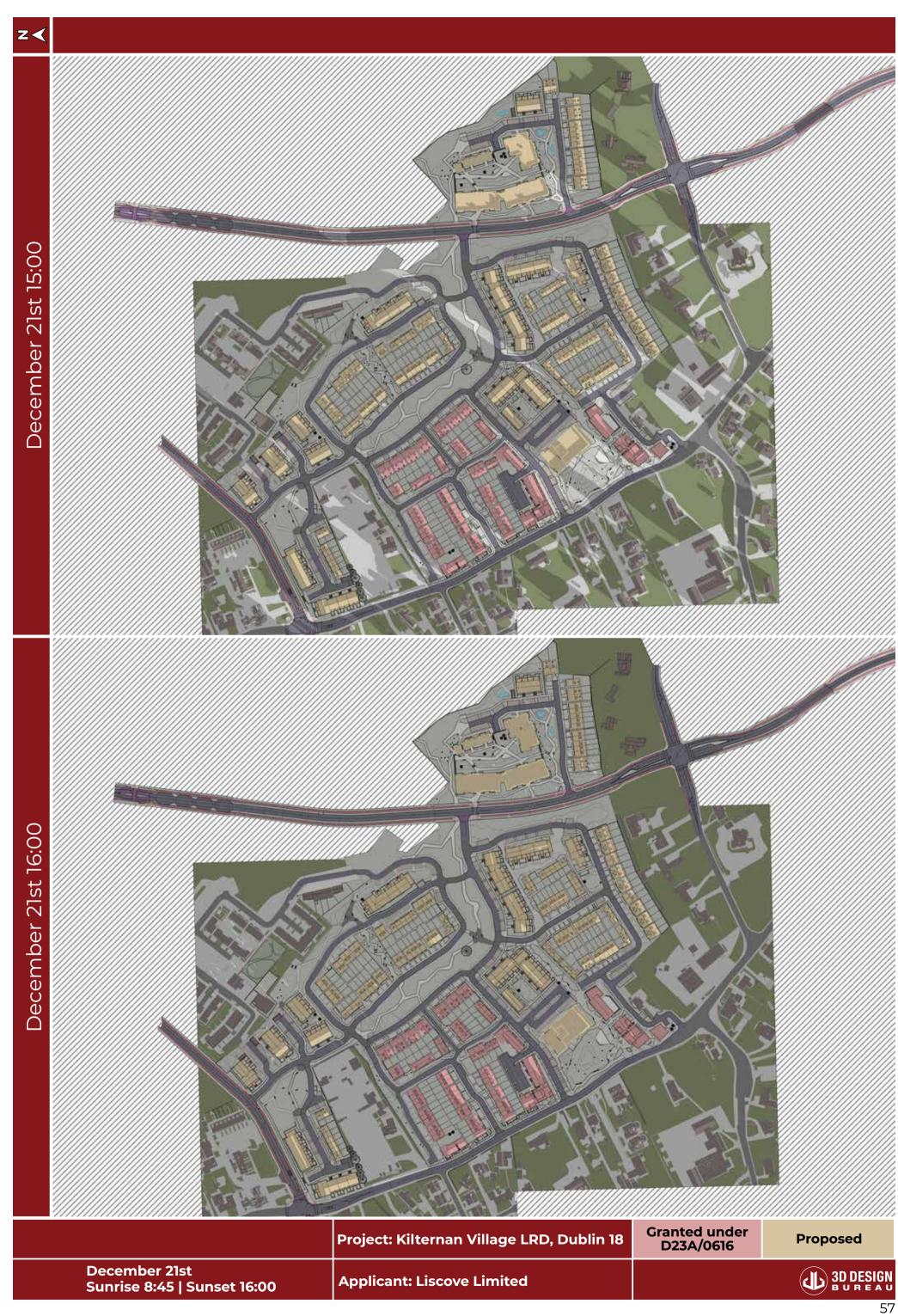










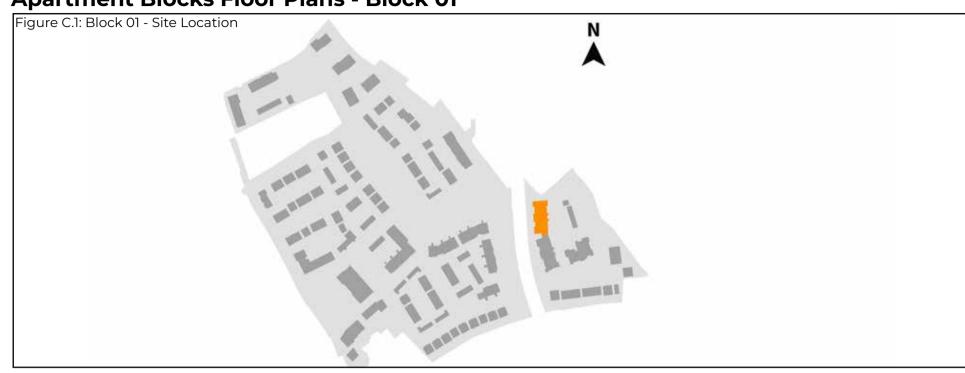




# **C.0 Scheme Performance**

### **C.1** Apartment Blocks Floor Plans

### C.1.1 Apartment Blocks Floor Plans - Block 01







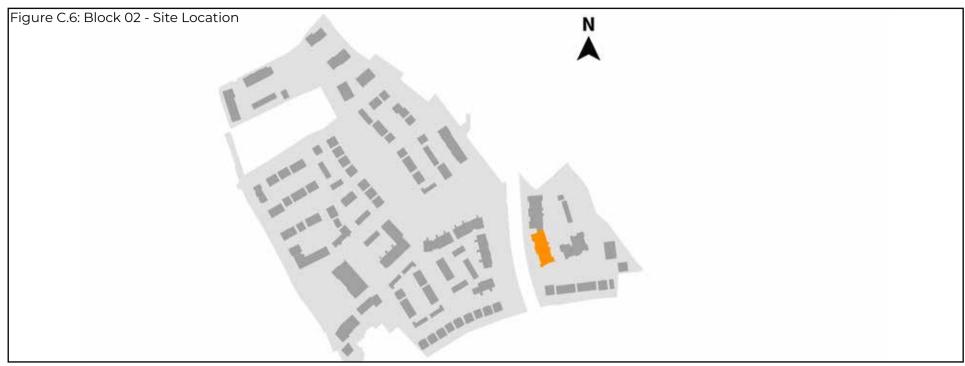








### C.1.2 Apartment Blocks Floor Plans - Block 02















# C.1.3 Apartment Blocks Floor Plans - Block 03













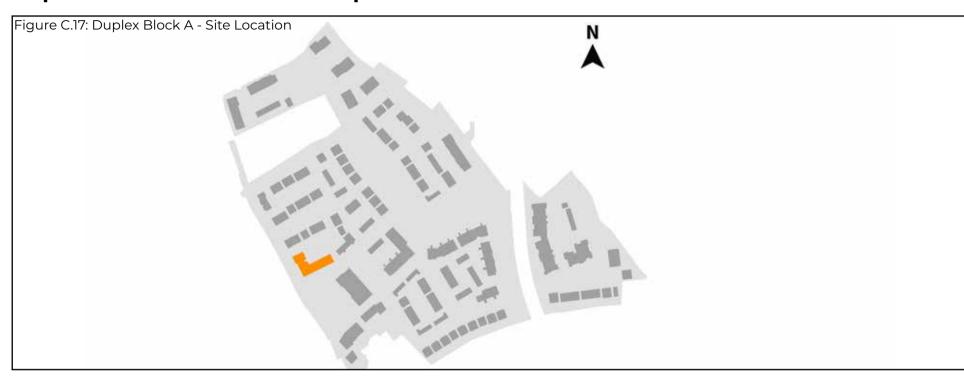


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# **C.2** Duplex Blocks Floor Plans

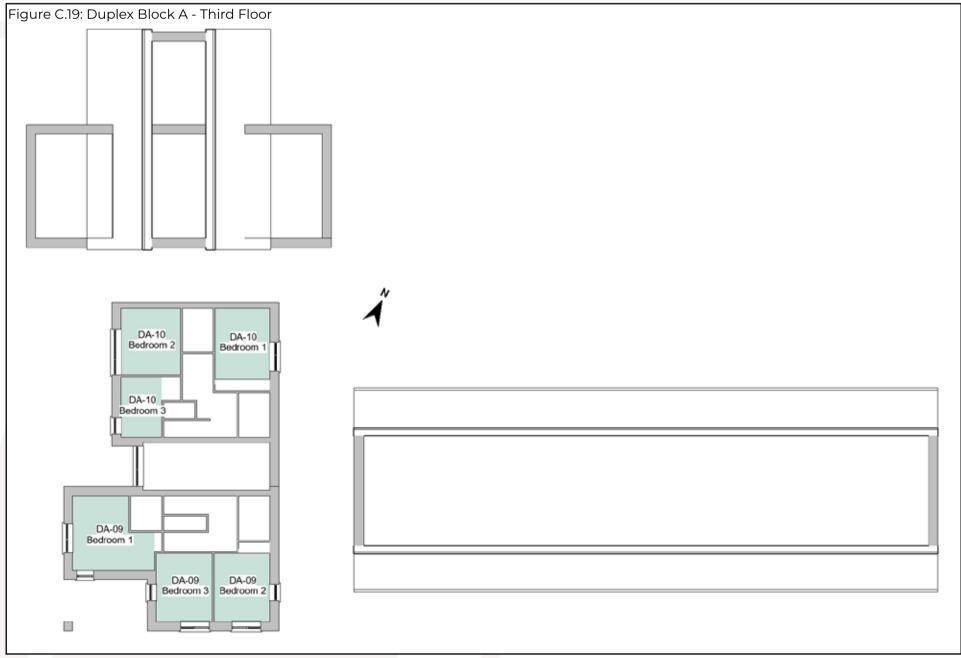
# C.2.1 Duplex Blocks Floor Plans - Duplex Block A





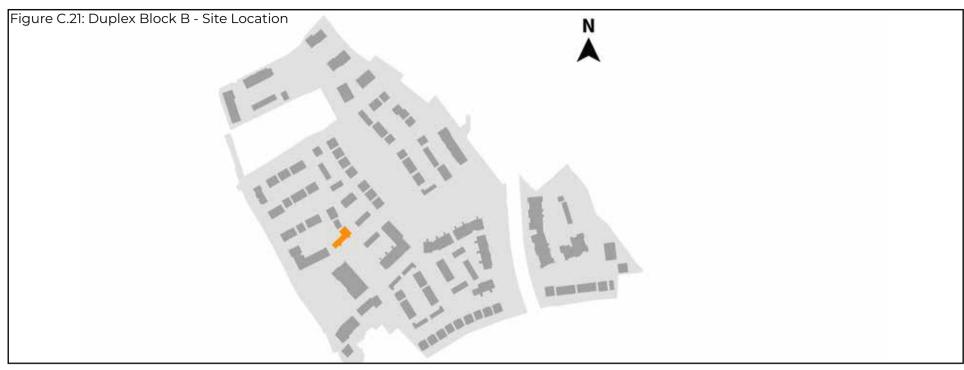


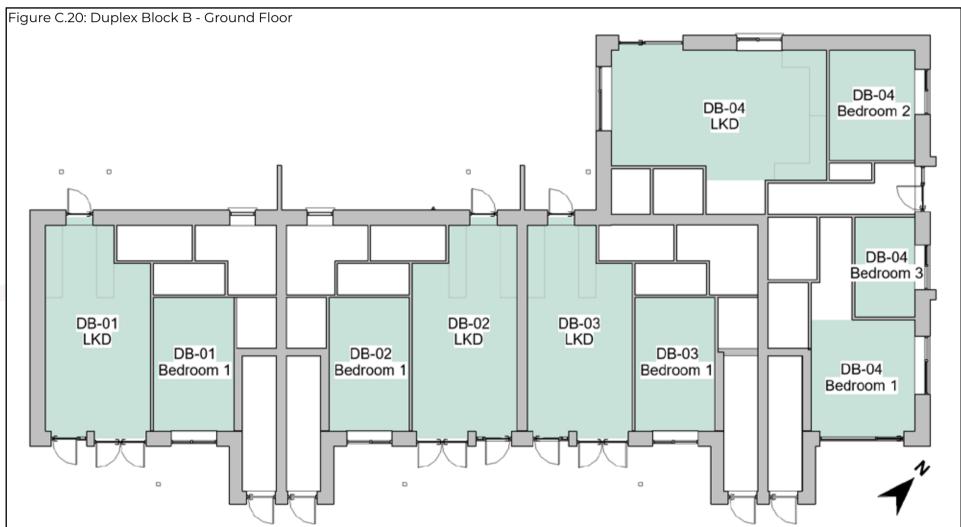




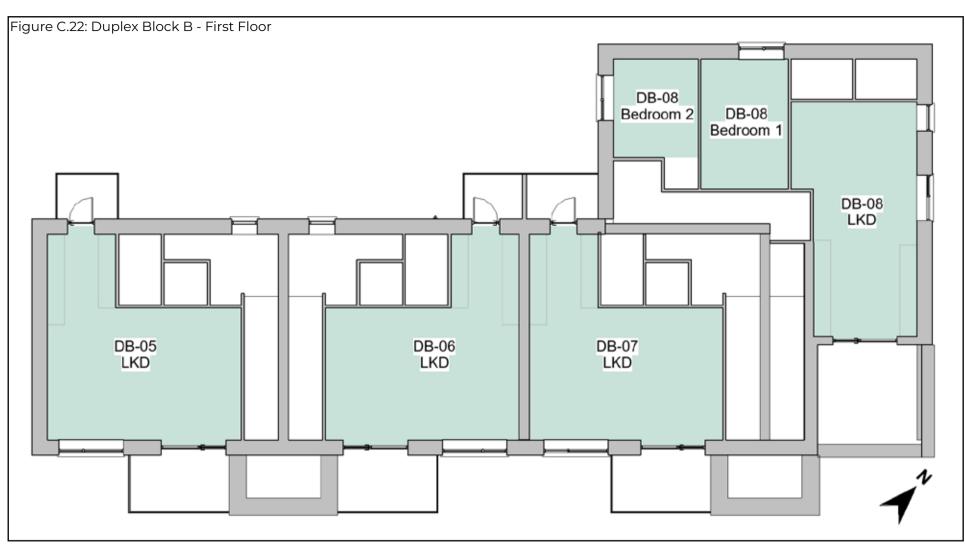


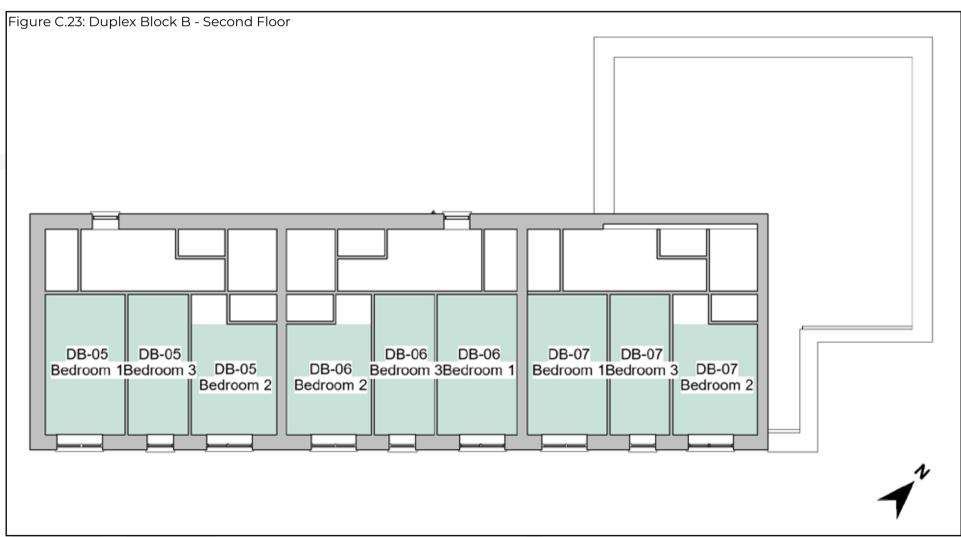
# C.2.2 Duplex Blocks Floor Plans - Duplex Block B





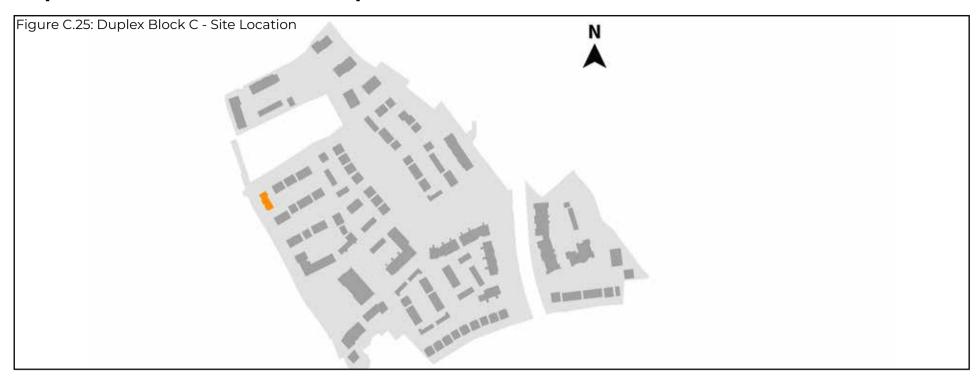


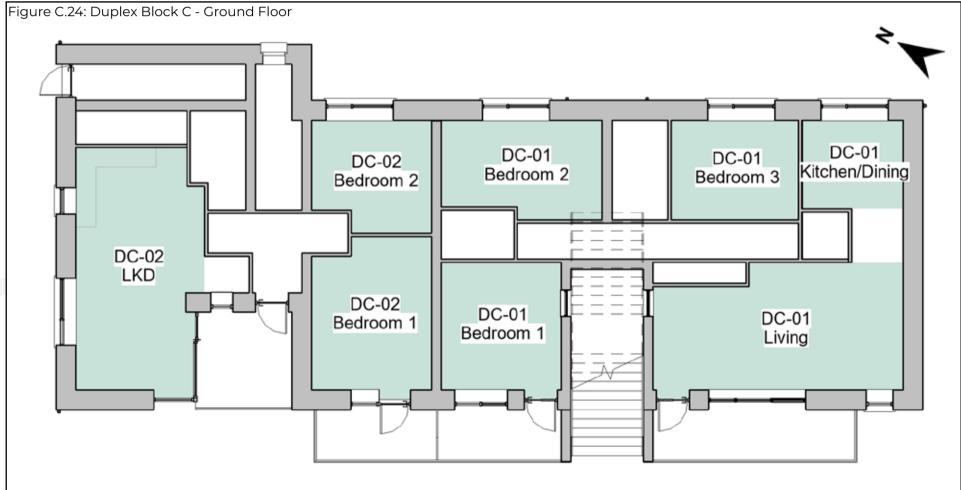




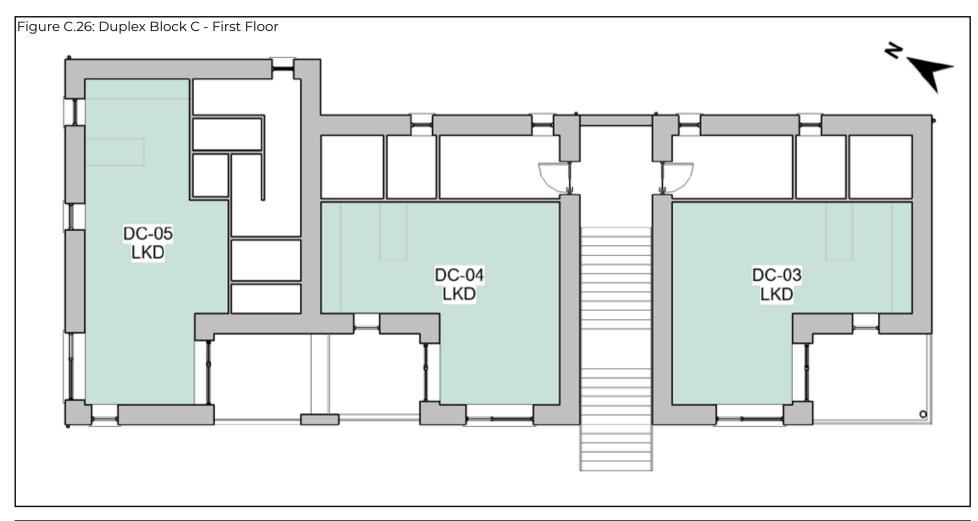


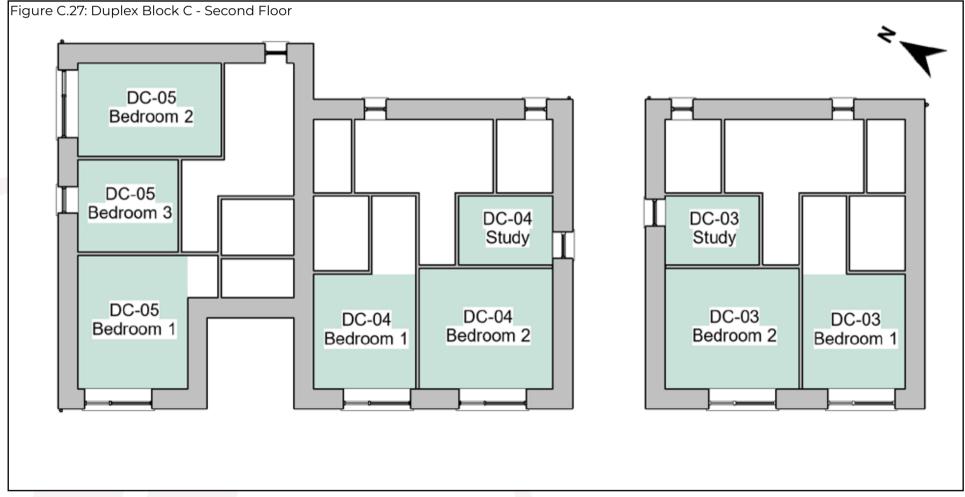
# C.2.3 Duplex Blocks Floor Plans - Duplex Block C







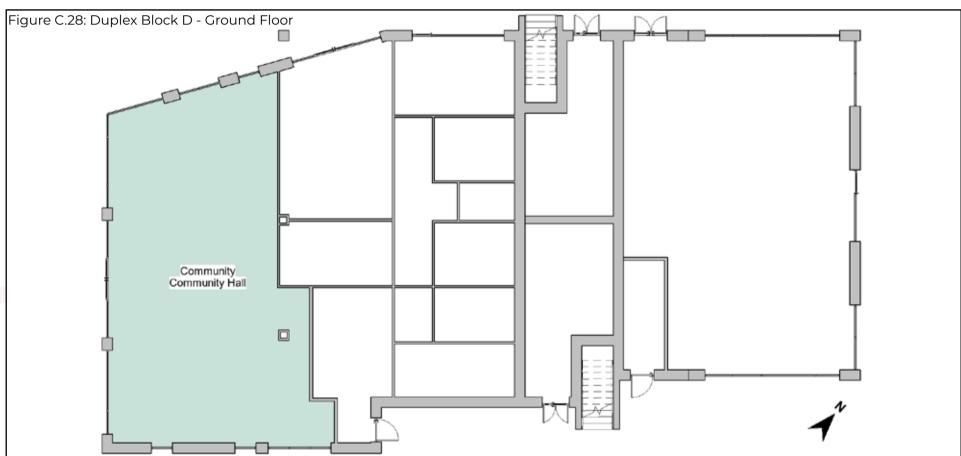






# C.2.4 Duplex Blocks Floor Plans - Duplex Block D











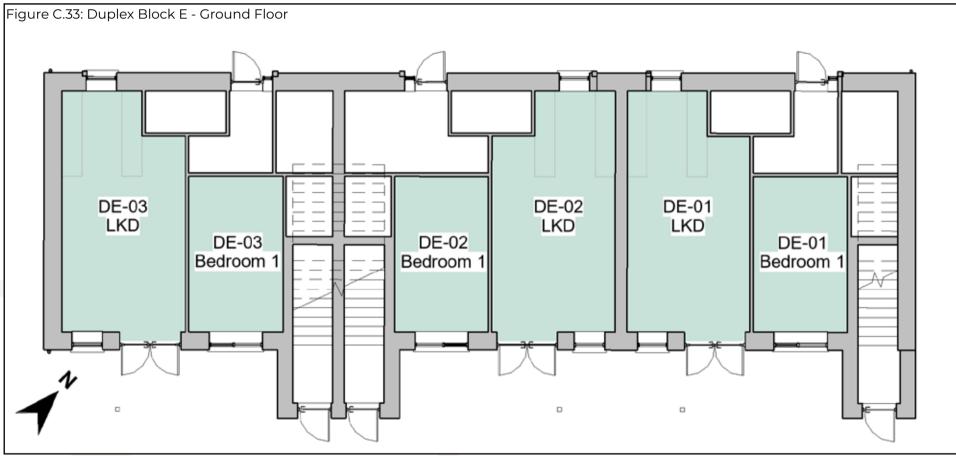


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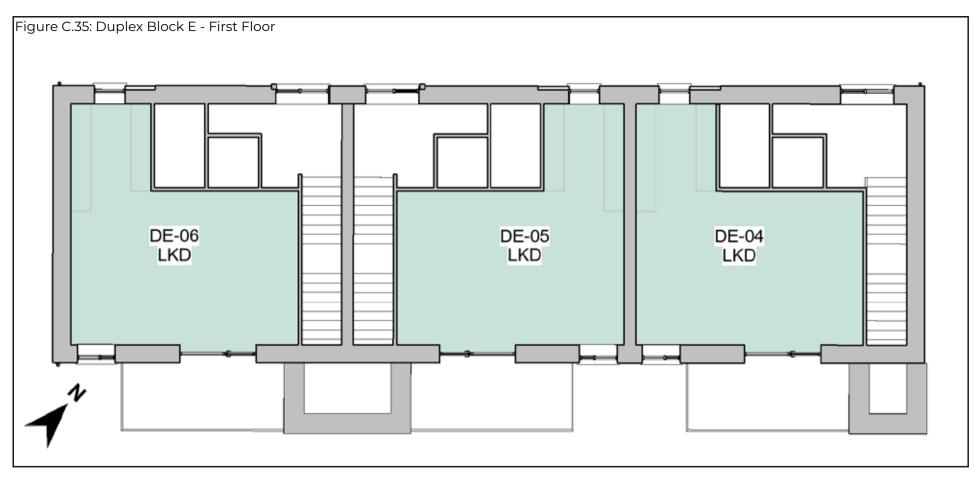


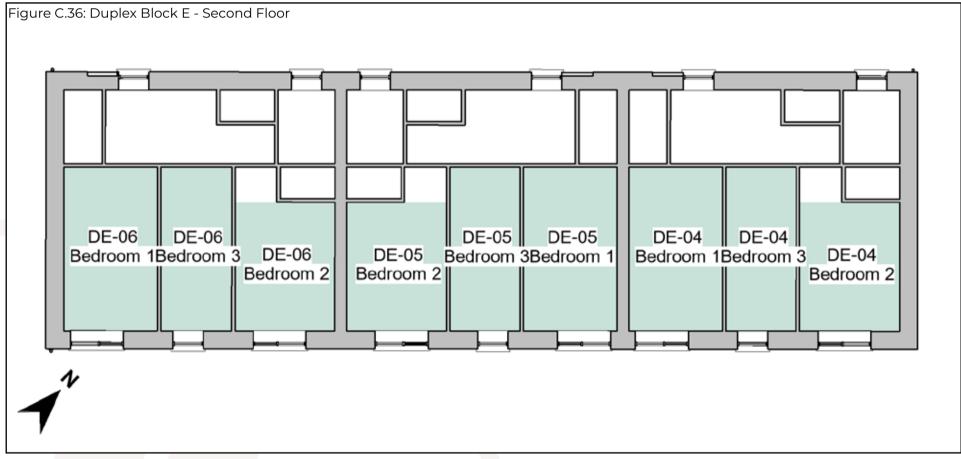
## C.2.5 Duplex Blocks Floor Plans - Duplex Block E













## C.2.6 Duplex Blocks Floor Plans - Duplex Block F



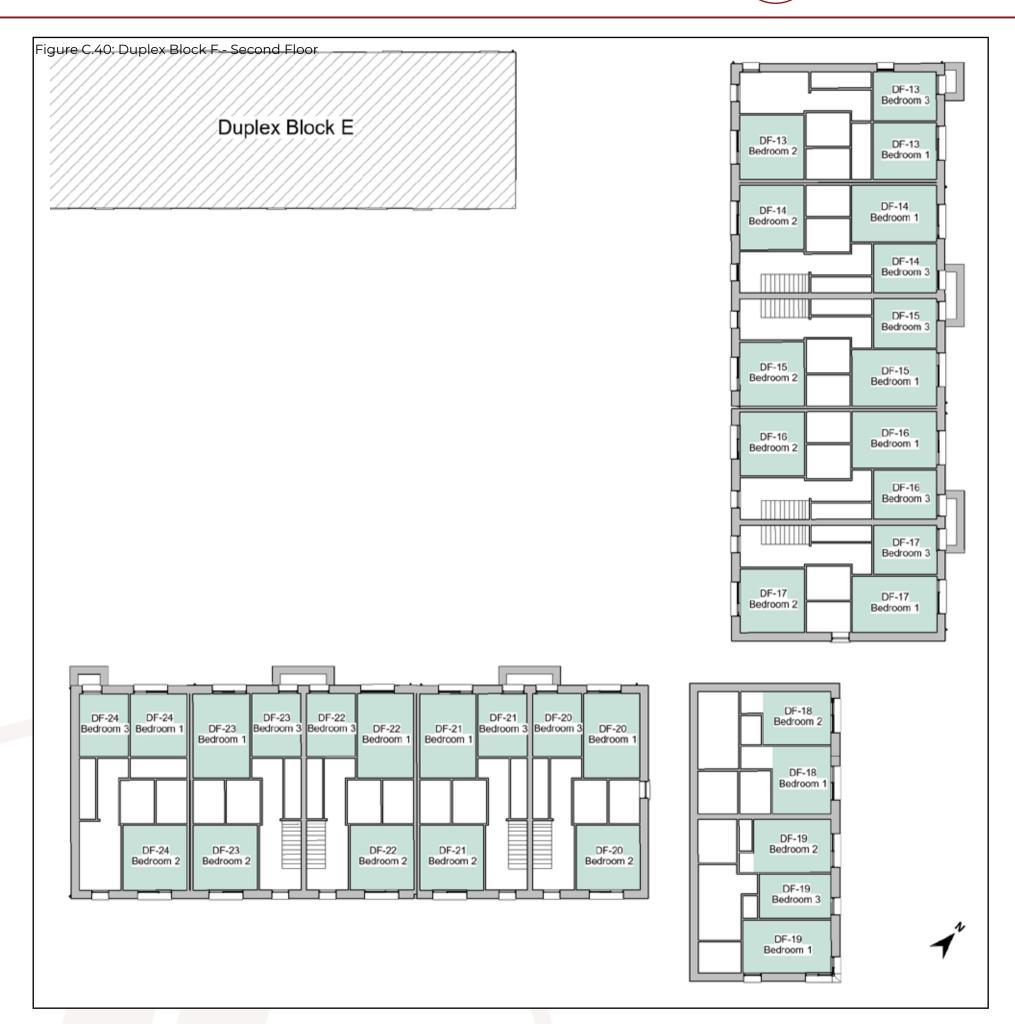






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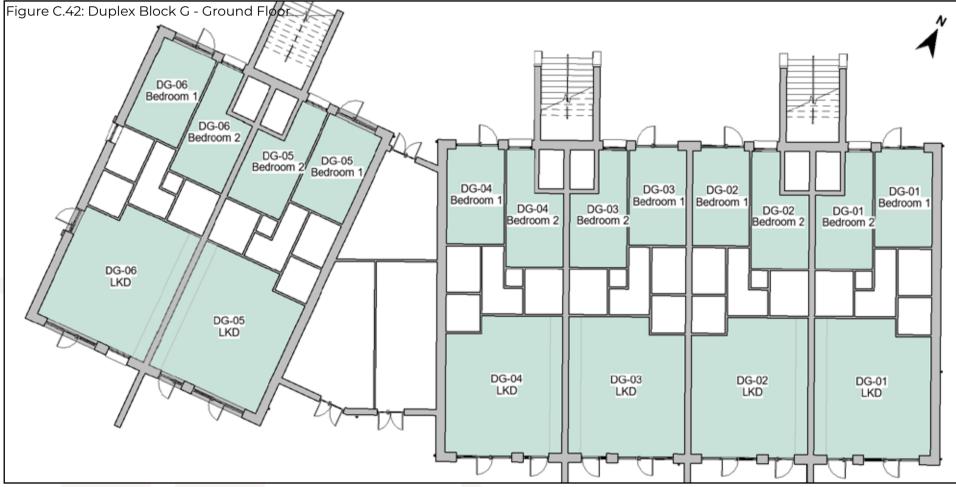




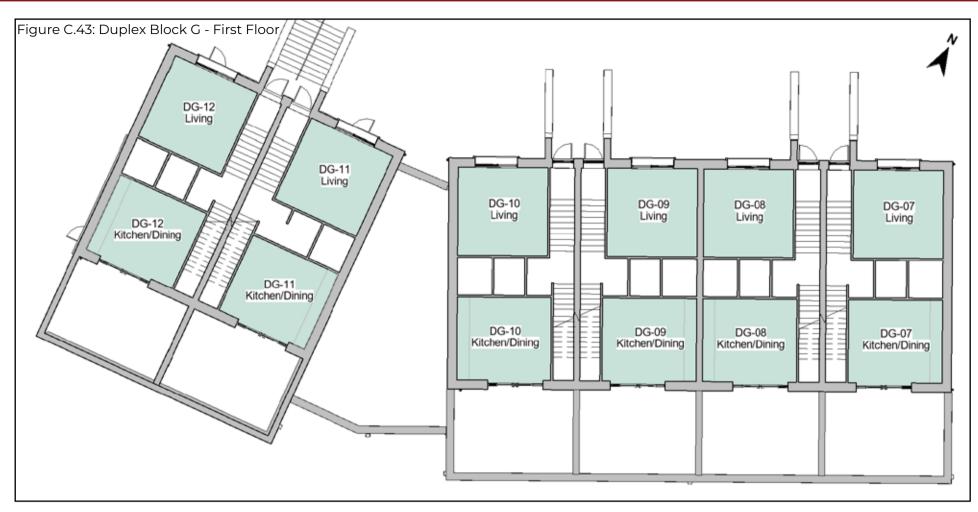


## C.2.7 Duplex Blocks Floor Plans - Duplex Block G







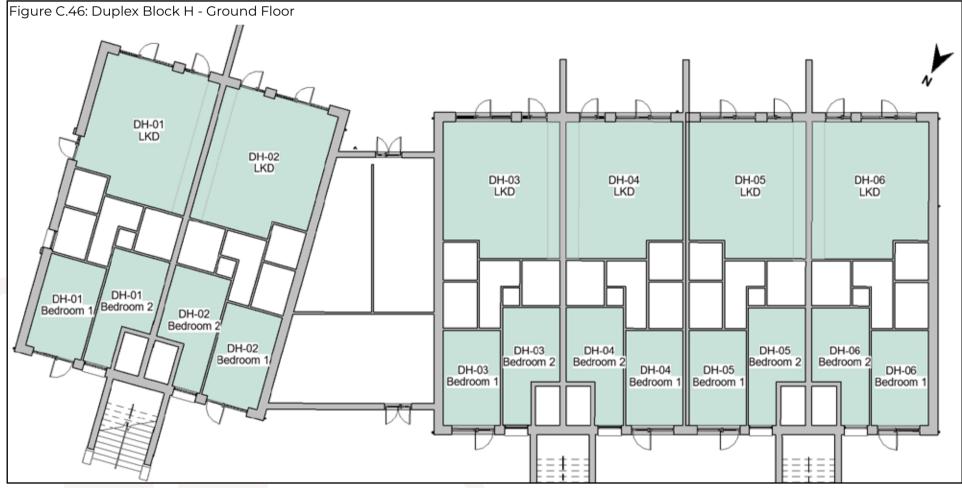




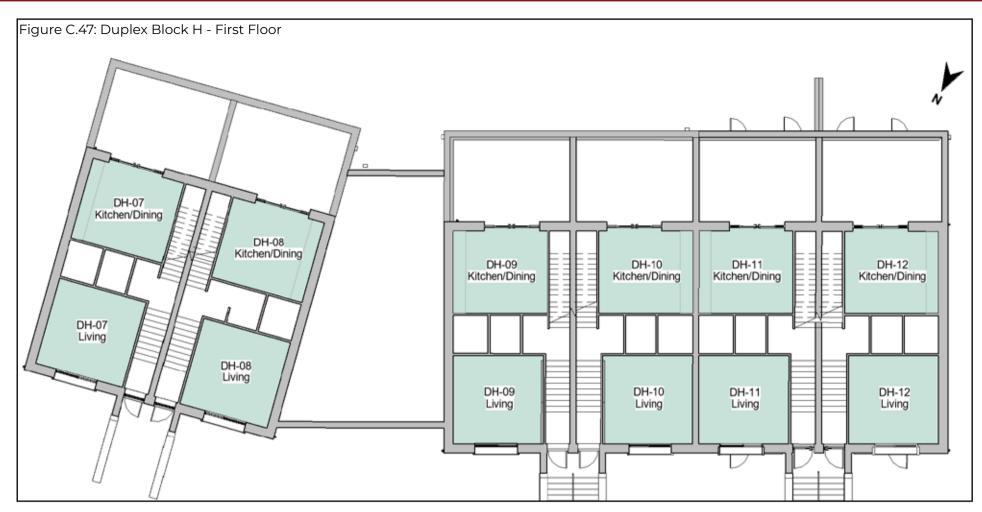


## C.2.8 Duplex Blocks Floor Plans - Duplex Block H





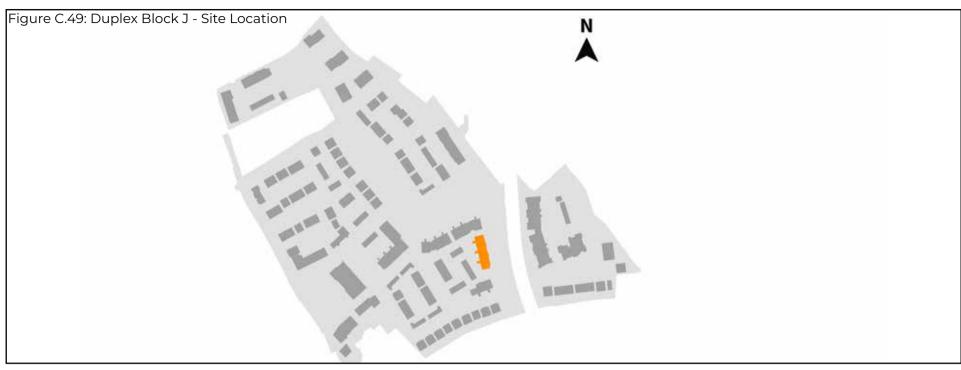


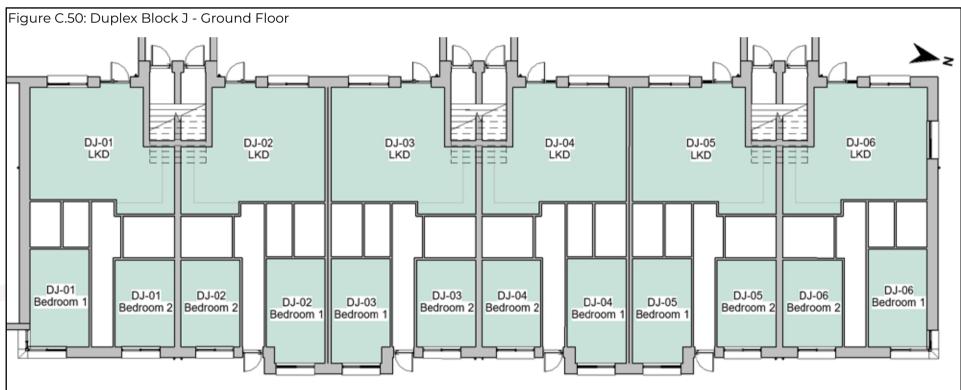


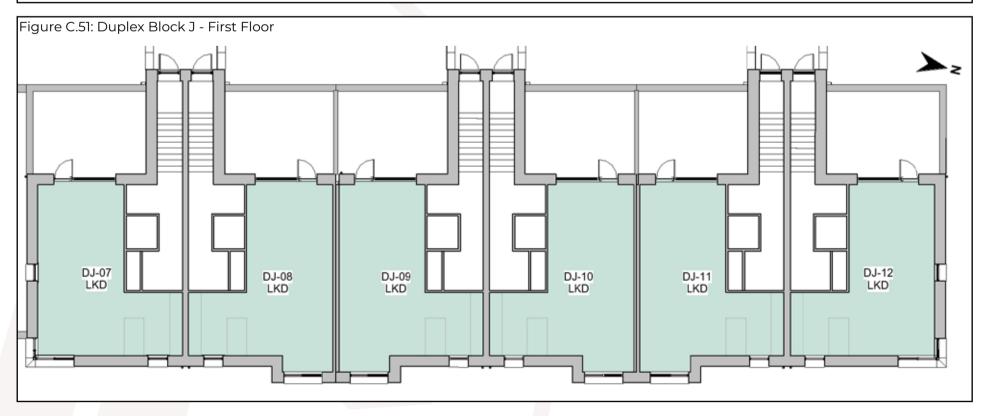




#### C.2.9 Duplex Blocks Floor Plans - Duplex Block J



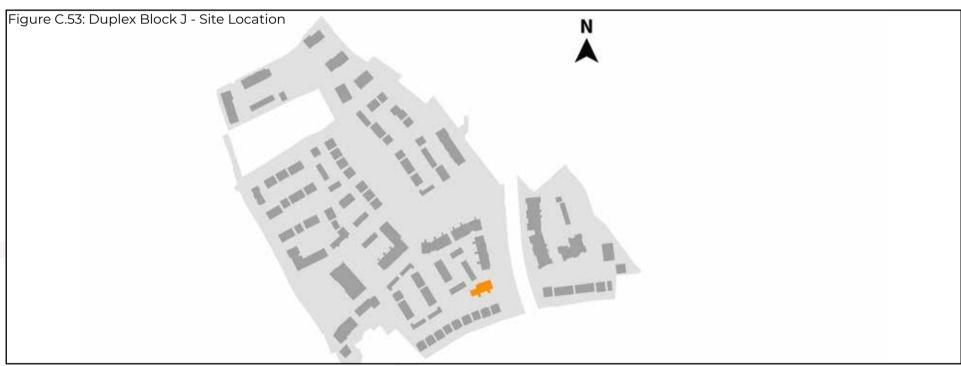


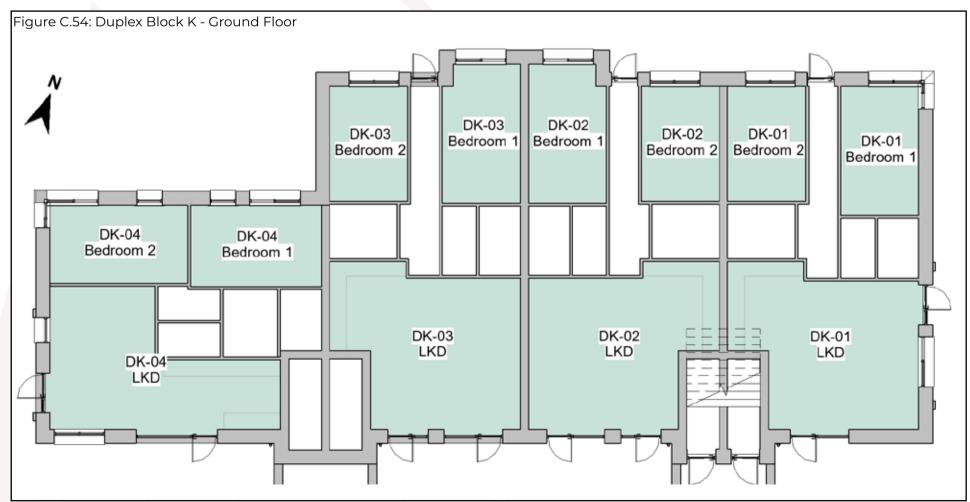




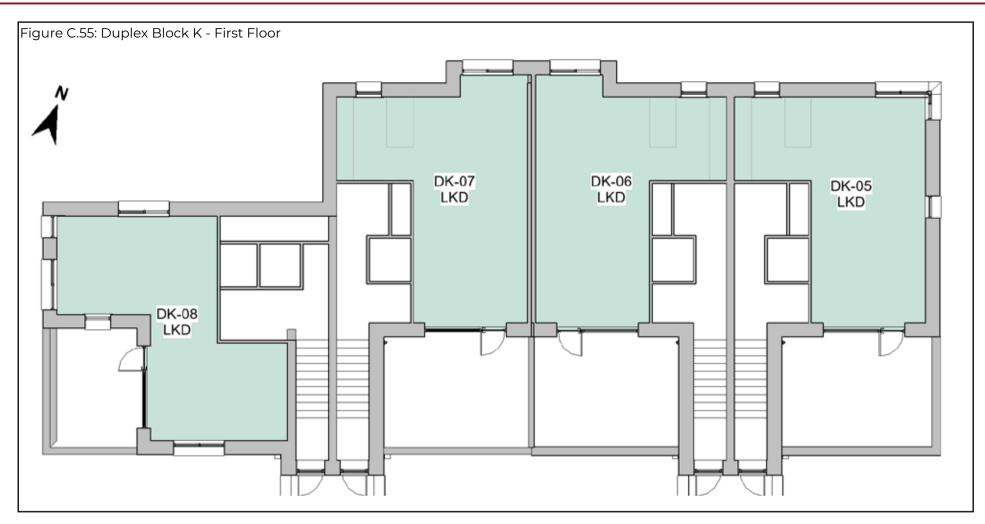


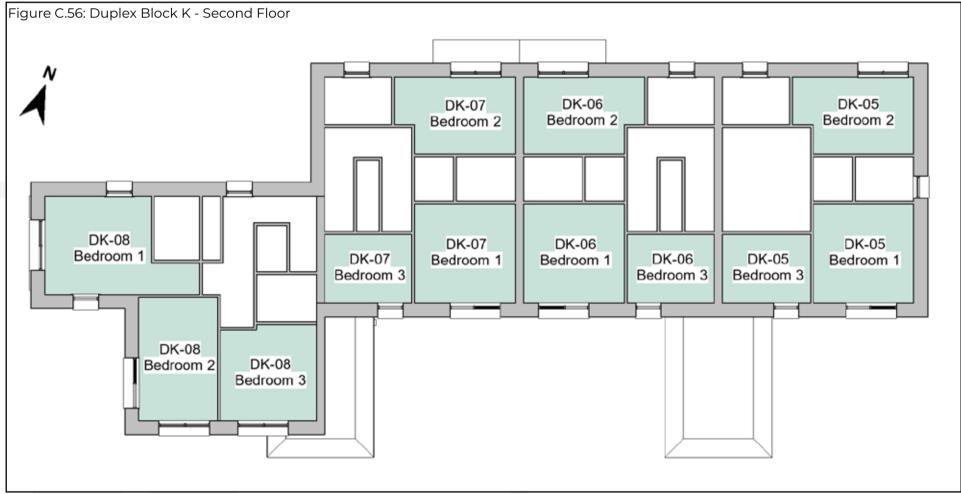
## C.2.10 Duplex Blocks Floor Plans - Duplex Block K









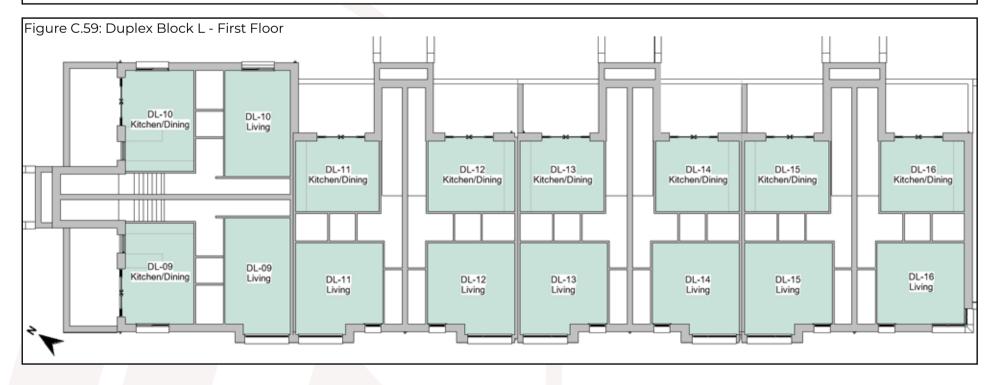




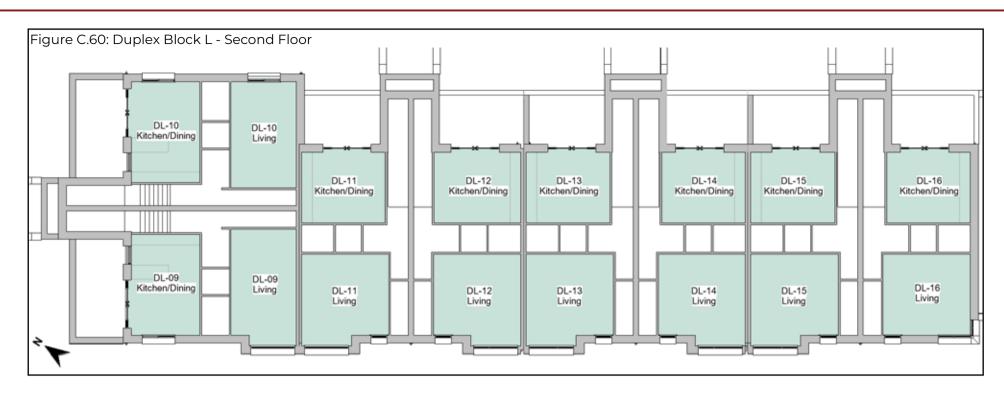
#### C.2.11 Duplex Blocks Floor Plans - Duplex Block L



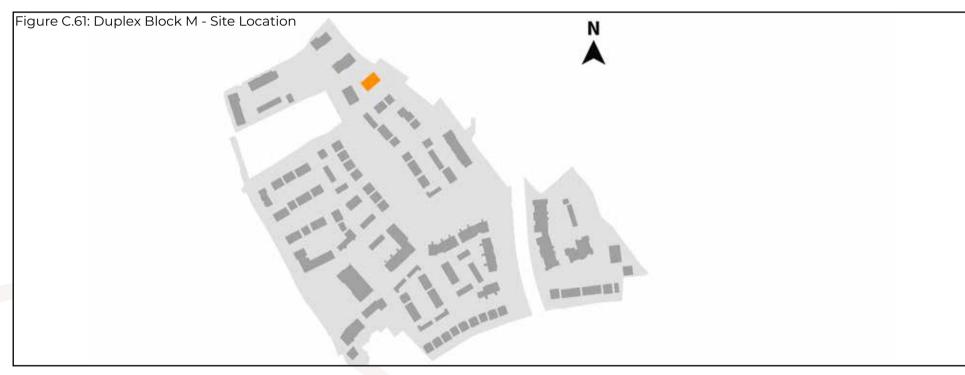


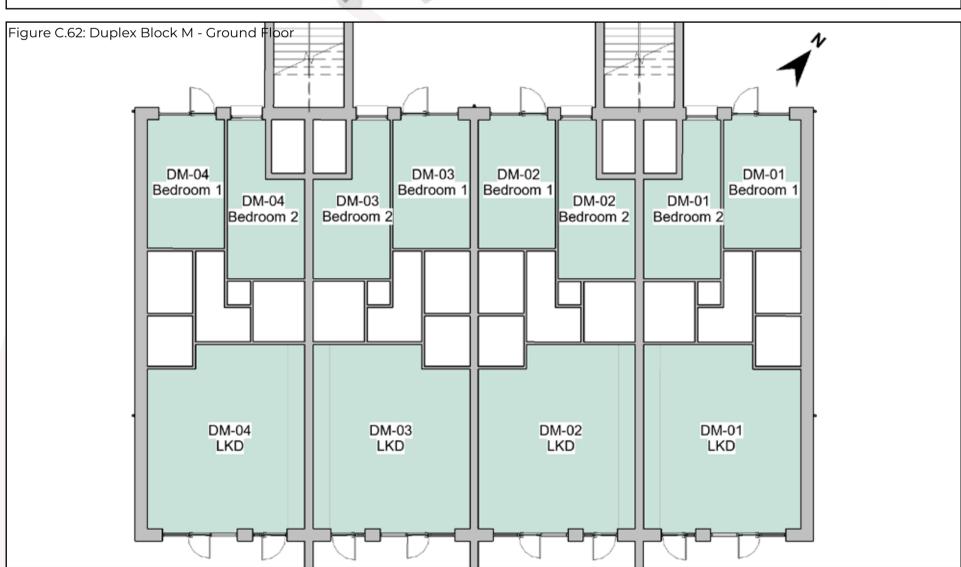






#### C.2.12 Duplex Blocks Floor Plans - Duplex Block M





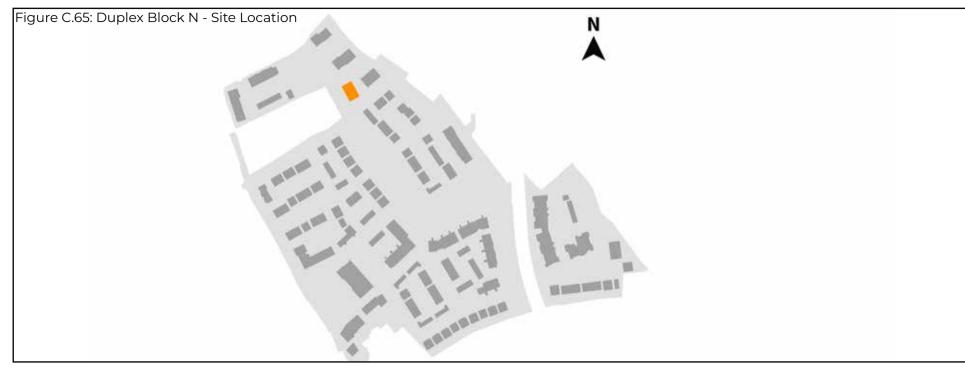








## C.2.13 Duplex Blocks Floor Plans - Duplex Block N





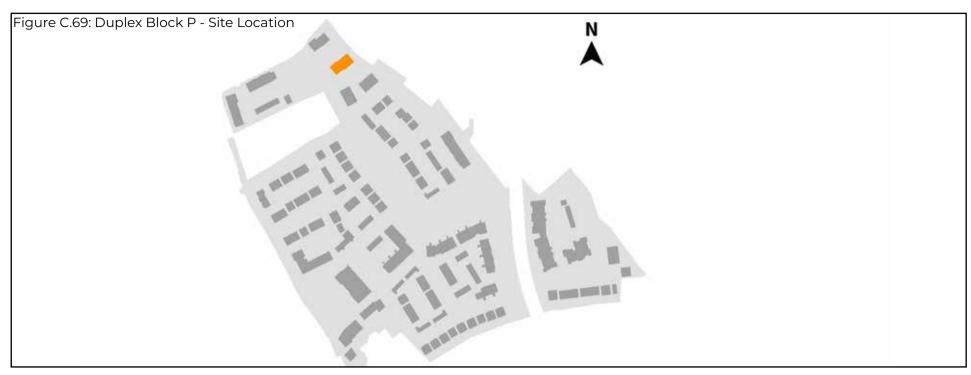


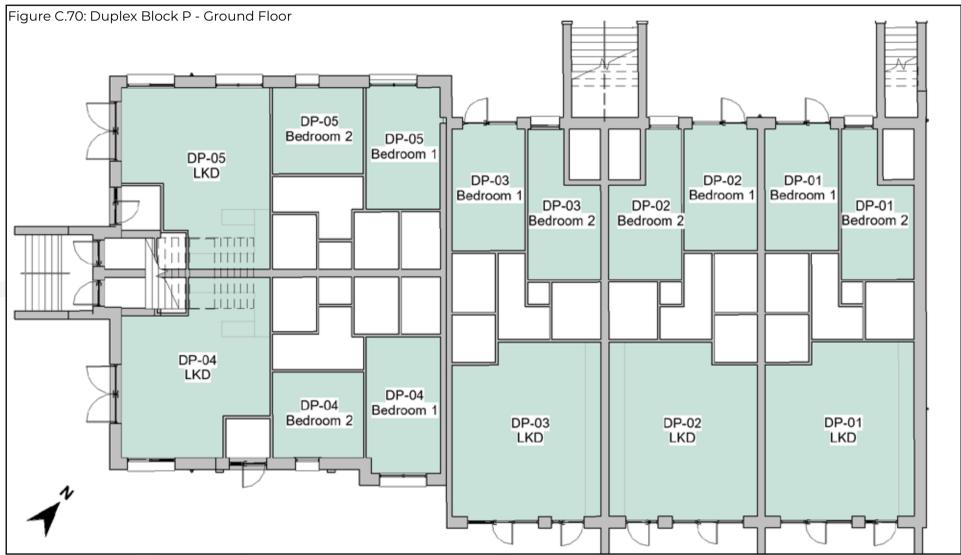






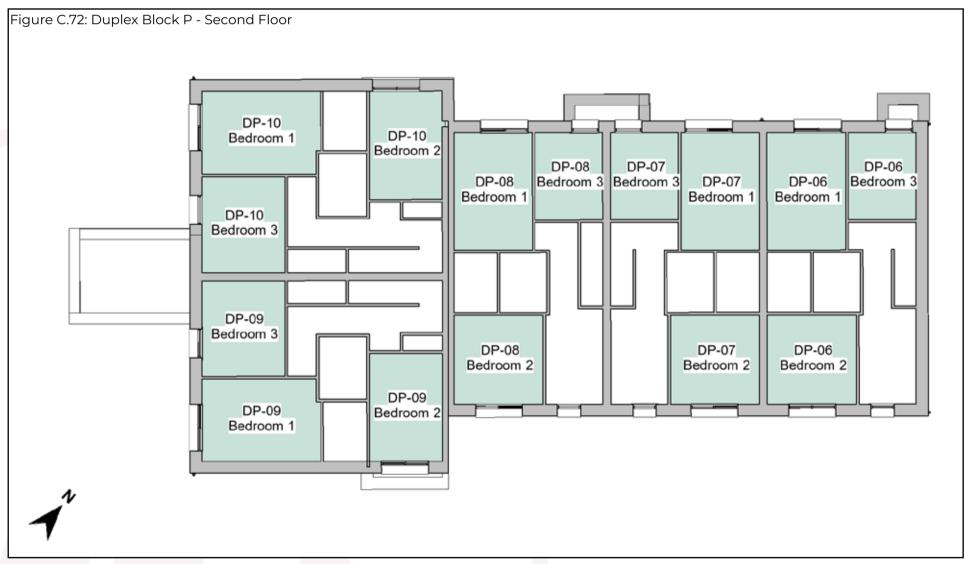
## C.2.14 Duplex Blocks Floor Plans - Duplex Block P





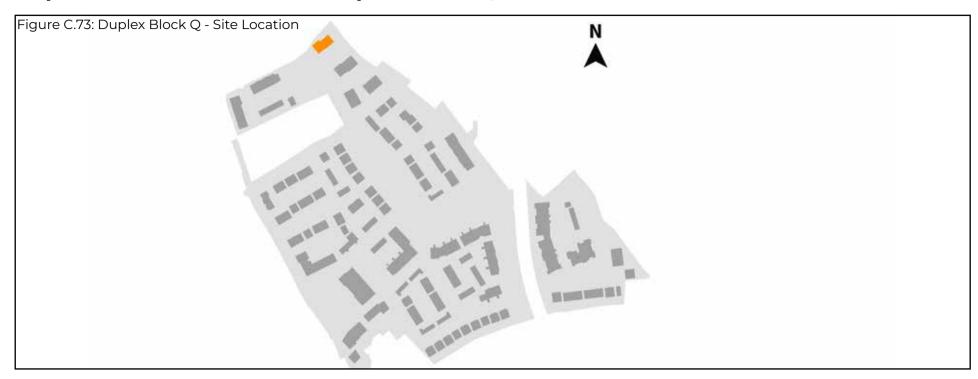


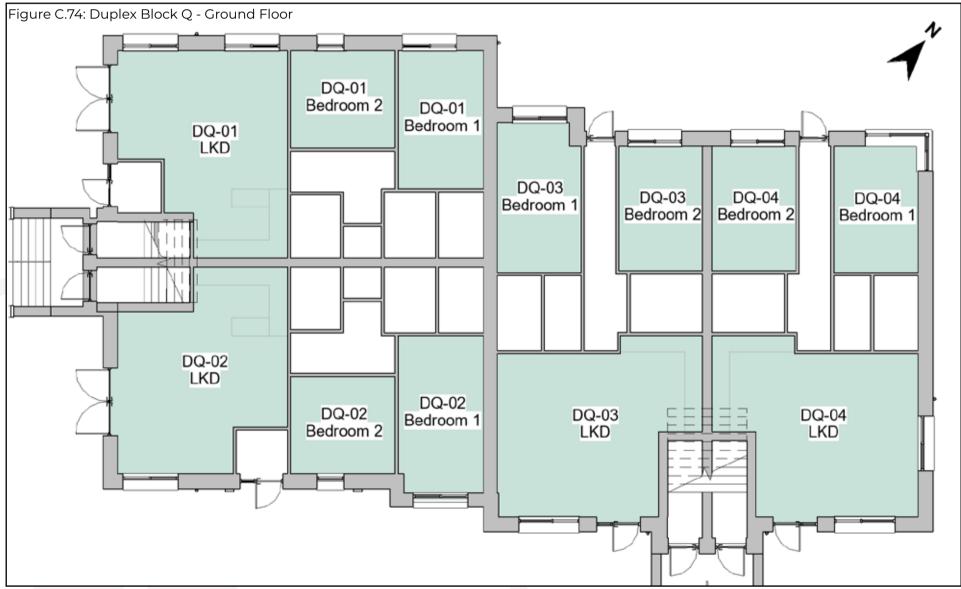




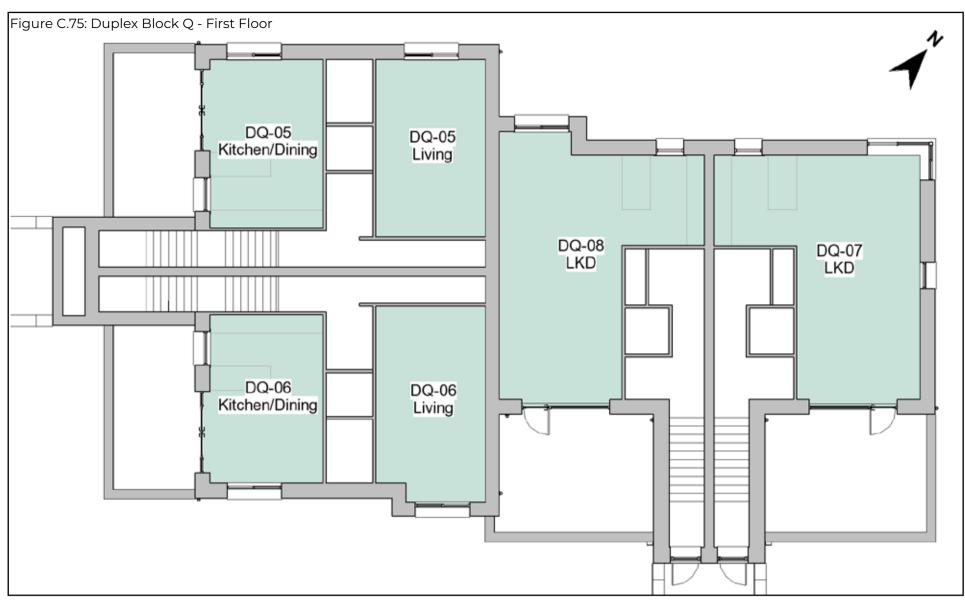


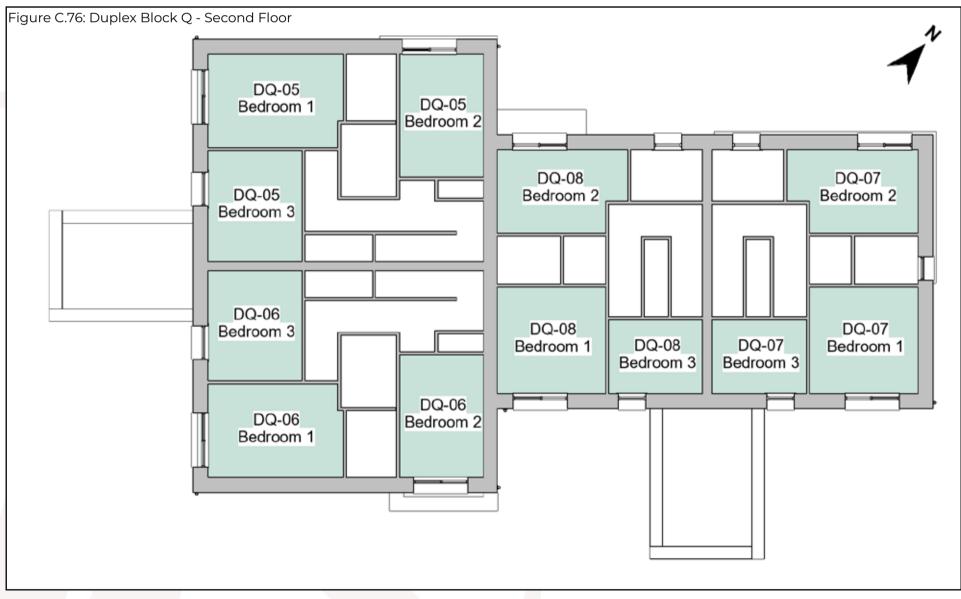
## C.2.15 Duplex Blocks Floor Plans - Duplex Block Q







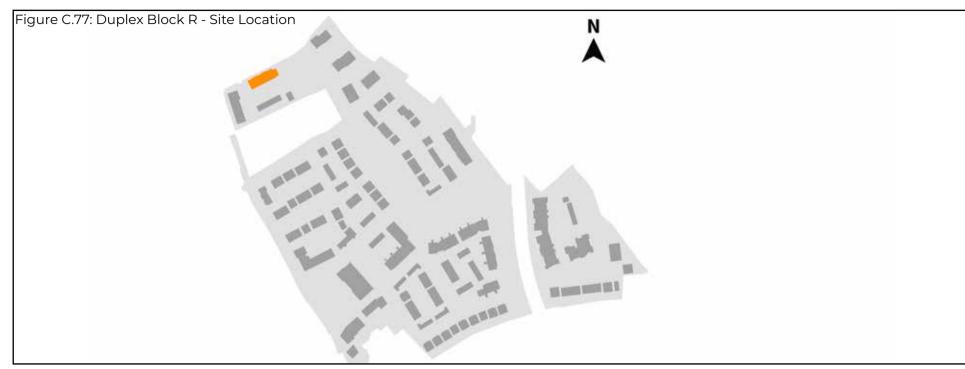


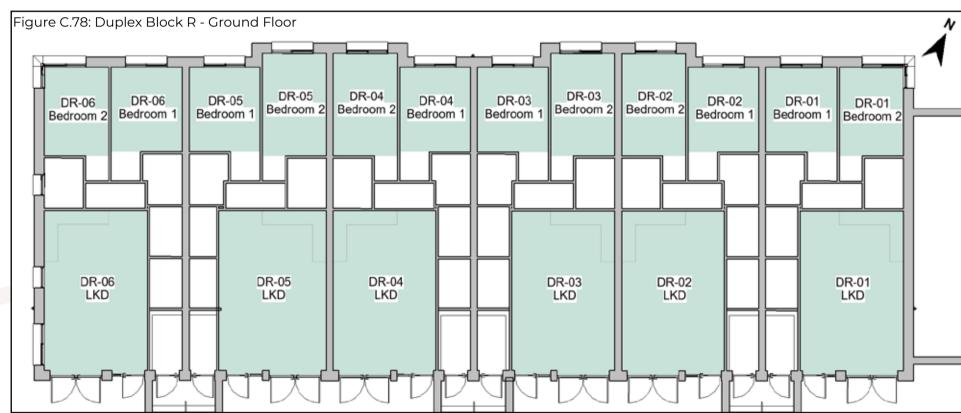


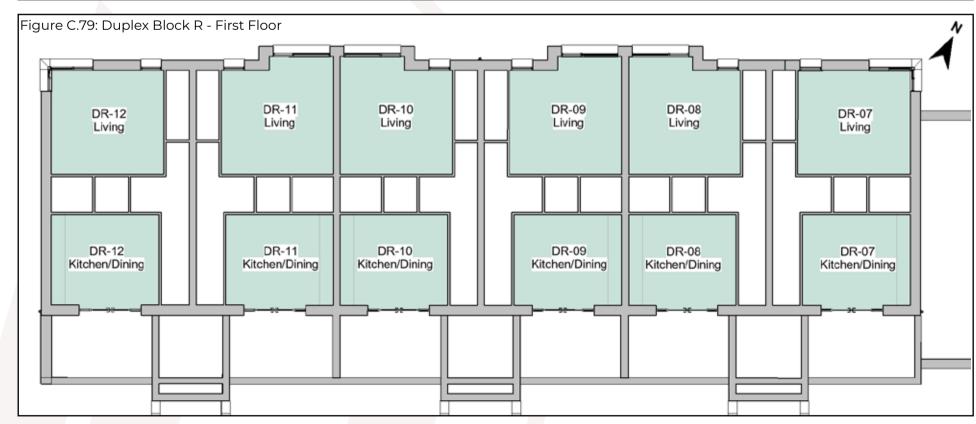
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## C.2.16 Duplex Blocks Floor Plans - Duplex Block R



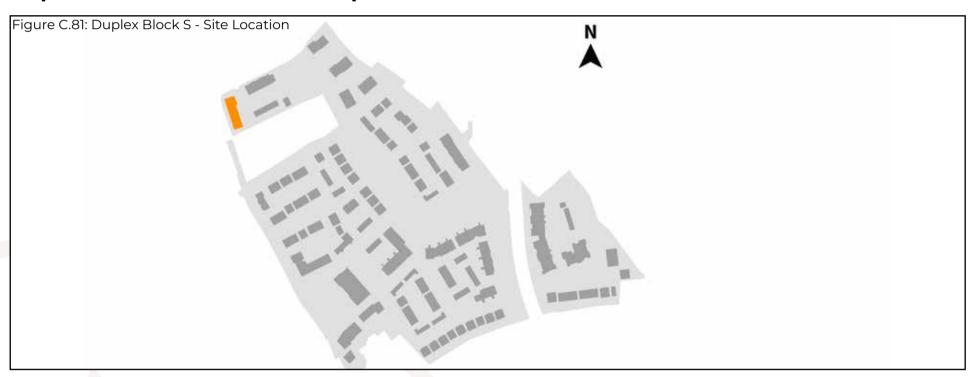






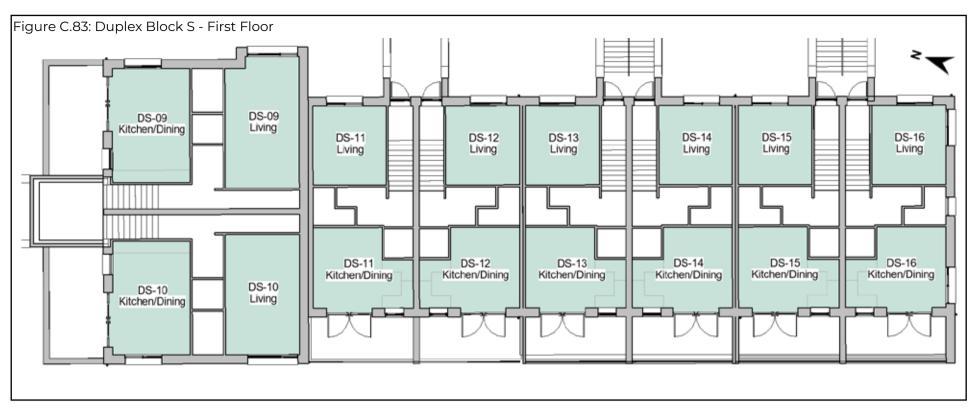


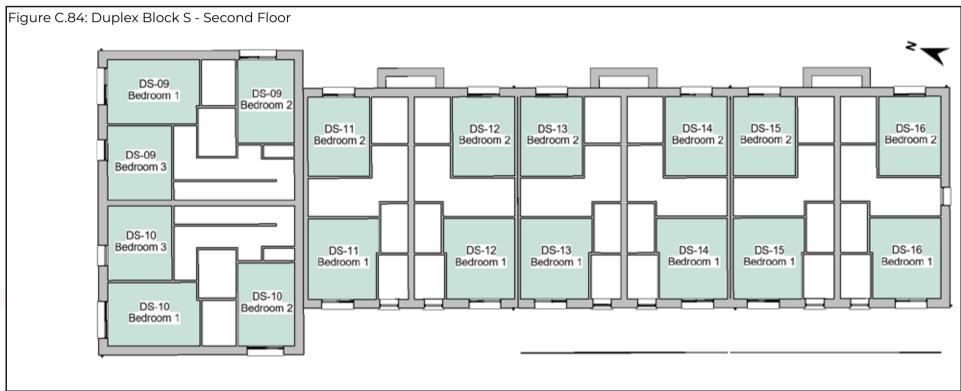
#### C.2.17 Duplex Blocks Floor Plans - Duplex Block S





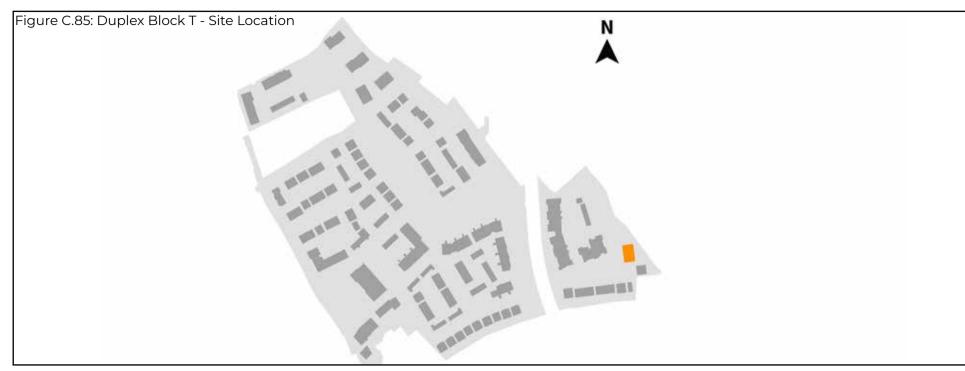


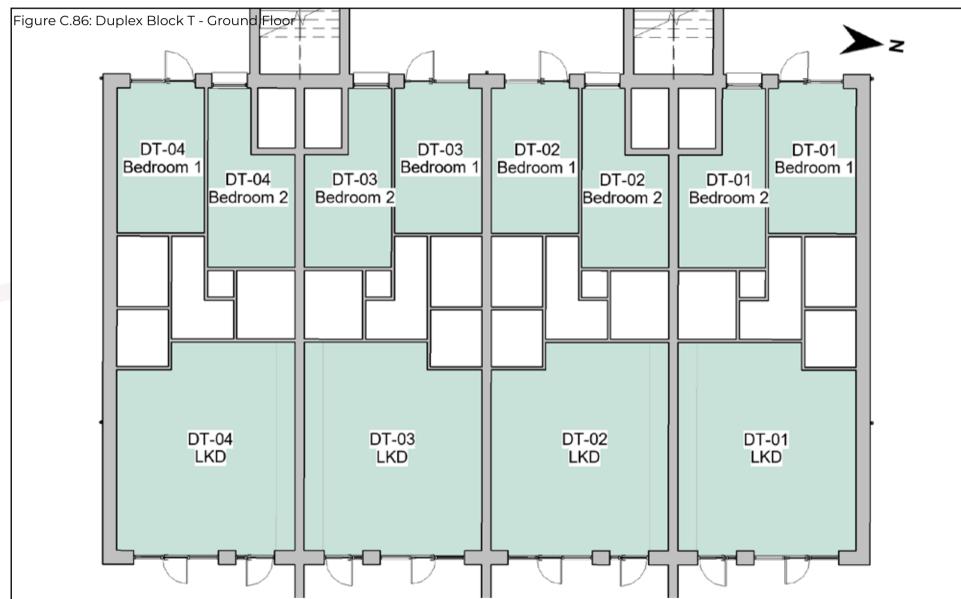






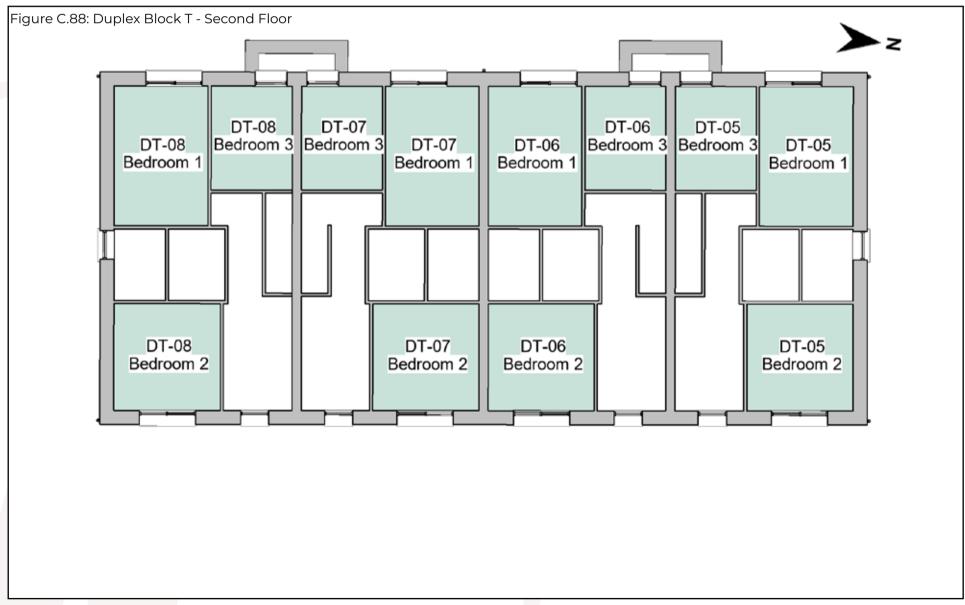
## C.2.18 Duplex Blocks Floor Plans - Duplex Block T









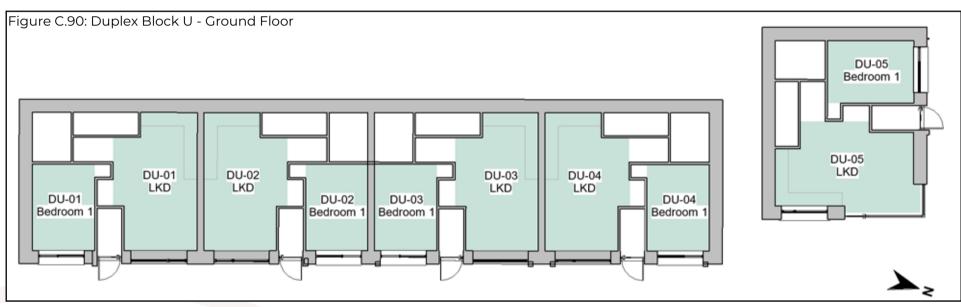


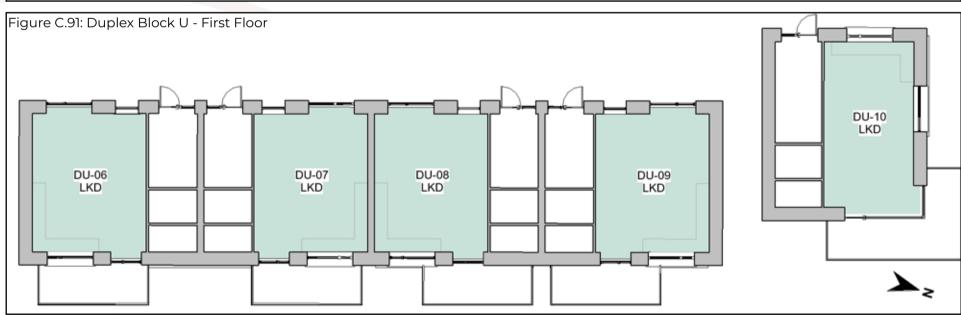
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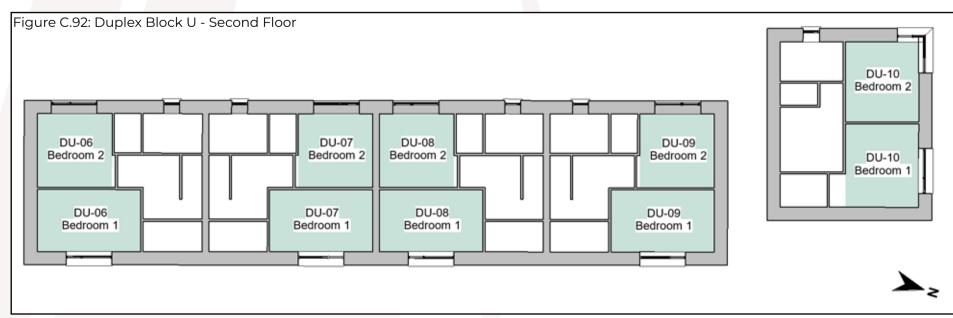


## C.2.19 Duplex Blocks Floor Plans - Duplex Block U











#### C.3 Spatial Daylight Autonomy (SDA) in Proposed Units

Below is an example of the table used to describe the spatial daylight autonomy results in proposed units.

	Table Example. C.3 - Scheme Performance SDA								
Unit	Room	Target	% of area above target Lux* (recommendation >50%)			Compliance with BR 209 Criteria			
Number	Description	Lux*	Without Trees	Winter	Summer				
Α	В	С	О	E	F	G			

#### A: Unit Number

This column identifies the assessed unit. All unit numbers are determined by the architect's drawings, unless otherwise stated.

#### **B:** Room Description

Room Description details which room in the unit has been assessed, e.g. bedroom, LKD, etc.

#### C: Target Lux

Under BR 209 the appropriate target lux levels to be achieved across 50% of the working plane of a room differ depending on the room type. Kitchens have a target lux of 200, living rooms have a target lux of 150 and bedrooms have a target lux of 100. In a room providing more than one function, such as an LKD, the higher target value should be taken i.e. 200 Lux.

#### D: % of area above target Lux (Without Trees)

BR 209 recommends target lux levels to be achieved across at least 50% of the working plane for at least half the daylight hours. The target values differ depending on the room function, 200 lux for Kitchens, 150 lux for Living Rooms or 100 lux for Bedrooms.

This column states percentage of the working plane of the assessed room that is capable of receiving more than the appropriate target lux for at least half the daylight hours with trees excluded from the analytical model. The figures shown in this column should be considered part of a supplementary study that helps identify if trees are having an effect on daylight within the proposed units.

#### E: % of area above target Lux (Winter)

BR 209 recommends target lux levels to be achieved across at least 50% of the working plane for at least half the daylight hours. The target values differ depending on the room function, 200 lux for Kitchens, 150 lux for Living Rooms or 100 lux for Bedrooms.

This column states percentage of the working plane of the assessed room that is capable of receiving more than the appropriate target lux for at least half the daylight hours with deciduous trees in the winter state, i.e. bare branch.

#### F: % of area above target Lux (Summer)

BR 209 recommends target lux levels to be achieved across at least 50% of the working plane for at least half the daylight hours. The target values differ depending on the room function, 200 lux for Kitchens, 150 lux for Living Rooms or 100 lux for Bedrooms.

This column states percentage of the working plane of the assessed room that is capable of receiving more than the appropriate target lux for at least half the daylight hours with deciduous trees in full foliage.

#### G: Compliance with BR 209 Criteria

This column states if the assessed room achieves the recommended level of daylight as per BR 209 with consideration to the various tree states.

If the target lux level is achieved across more than 50% of the working plane, for half the daylight hours, both with and without trees, this column will state: 'Compliant'.

If the target lux level is not achieved across more than 50% of the working plane, for half the daylight hours, both with and without trees, this column will state: 'Non-compliant'.

If the target lux level is achieved across more than 50% of the working plane, for half the daylight hours, without trees but is not achieved with trees, this column will state: 'Trees affecting compliance'.

If the target lux level is achieved across more than 50% of the working plane, for half the daylight hours, with the trees in the winter state but is not achieved with trees in the summer state, this column will state: 'Trees affecting compliance (summer only)'.

Compliance rates will be stated for SDA compliance with trees in all of the above states.

It should be noted that the figures displayed in the table of results have been rounded off. A manual calculation of these figures may yield a negligible difference and should not be considered an error.



#### C.3.1 SDA Results: Block 01

		_	% of area	a above target	Lux*	
Unit Number	Room Description	Target Lux*	(recor	winter**	Summer**	Compliance with BR 209 Criteria*
B1-01	LKD	200	100%	92%	84%	Compliant
B1-01	Bedroom 1	100	100%	100%	100%	Compliant
B1-01	Bedroom 2	100	100%	100%	100%	Compliant
B1-01	Bedroom 3	100	100%	100%	100%	Compliant
B1-01	LKD	200	61%	53%	48%	Trees affecting compliance (summer only
B1-02 B1-02	Bedroom 1	100	100%	97%	86%	Compliant
B1-02 B1-03	LKD	200	68%	57%	47%	Trees affecting compliance (summer only
B1-03	Bedroom 1	100	100%	100%	100%	
						Compliant
B1-04	LKD	200	82%	78%	66%	Compliant
B1-04	Bedroom 1	100	100%	100%	100%	Compliant
B1-04	Bedroom 2	100	100%	100%	100%	Compliant
B1-04	Bedroom 3	100	100%	100%	85%	Compliant
B1-05	LKD	200	59%	53%	45%	Trees affecting compliance (summer only
B1-05	Bedroom 1	100	100%	100%	100%	Compliant
B1-05	Bedroom 2	100	100%	100%	100%	Compliant
B1-05	Bedroom 3	100	100%	100%	100%	Compliant
B1-06	LKD	200	75%	67%	59%	Compliant
B1-06	Bedroom 1	100	100%	100%	100%	Compliant
B1-07	LKD	200	70%	63%	56%	Compliant
B1-07	Bedroom 1	100	100%	100%	100%	Compliant
B1-08	LKD	200	100%	91%	83%	Compliant
B1-08	Bedroom 1	100	100%	100%	100%	Compliant
B1-08	Bedroom 2	100	100%	100%	100%	Compliant
B1-08	Bedroom 3	100	100%	100%	100%	Compliant
B1-09	LKD	200	100%	98%	93%	Compliant
B1-09	Bedroom 1	100	100%	100%	100%	Compliant
B1-09	Bedroom 2	100	100%	100%	100%	Compliant
B1-09	Bedroom 3	100	100%	100%	100%	Compliant
B1-10	LKD	200	77%	72%	68%	Compliant
B1-10	Bedroom 1	100	100%	100%	100%	Compliant
B1-11	LKD	200	77%	71%	66%	Compliant
B1-11	Bedroom 1	100	100%	100%	100%	Compliant
B1-12	LKD	200	84%	83%	82%	Compliant
B1-12	Bedroom 1	100	100%	100%	100%	Compliant
B1-12	Bedroom 2	100	100%	100%	100%	Compliant
B1-12	Bedroom 3	100	100%	100%	100%	Compliant
B1-13	LKD	200	64%	59%	54%	Compliant
B1-13	Bedroom 1	100	100%	100%	100%	Compliant
B1-13	Bedroom 2	100	100%	100%	100%	Compliant
B1-13	Bedroom 3	100	100%	100%	100%	Compliant

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

<sup>\*\*\*</sup> The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.

For floor plans of the assessed units please refer to section C.1 on page 58.



1.1	D = = ==	T	% of area	a above target nmendation >50	Lux*	
Unit Number	Room Description	Target Lux*	(recon	nmendation >50 Winter**	%) Summer**	Compliance with BR 209 Criteria*
B1-14	LKD	200	86%	75%	68%	Compliant
B1-14	Bedroom 1	100	100%	100%	100%	Compliant
B1-14	Bedroom 2	100	100%	100%	100%	Compliant
B1-15	LKD	200	81%	74%	71%	Compliant
B1-15	Bedroom 1	100	100%	100%	100%	Compliant
B1-16	LKD	200	100%	98%	91%	Compliant
B1-16	Bedroom 1	100	100%	100%	100%	Compliant
B1-16	Bedroom 2	100	100%	100%	100%	Compliant
B1-16	Bedroom 3	100	100%	100%	100%	Compliant
B1-17	LKD	200	100%	100%	100%	Compliant
B1-17	Bedroom 1	100	100%	100%	100%	Compliant
B1-17	Bedroom 2	100	100%	100%	100%	Compliant
B1-17	Bedroom 3	100	100%	100%	100%	Compliant
B1-18	LKD	200	77%	76%	72%	Compliant
B1-18	Bedroom 1	100	100%	100%	100%	Compliant
B1-19	LKD	200	81%	77%	74%	Compliant
B1-19	Bedroom 1	100	100%	100%	100%	Compliant
B1-20	LKD	200	88%	87%	85%	Compliant
B1-20	Bedroom 1	100	100%	100%	100%	Compliant
B1-20	Bedroom 2	100	100%	100%	100%	Compliant
B1-20	Bedroom 3	100	100%	100%	100%	Compliant
B1-21	LKD	200	68%	66%	64%	Compliant
B1-21	Bedroom 1	100	100%	100%	100%	Compliant
B1-21	Bedroom 2	100	100%	100%	100%	Compliant
B1-21	Bedroom 3	100	100%	100%	100%	Compliant
B1-22	LKD	200	99%	94%	85%	Compliant
B1-22	Bedroom 1	100	100%	100%	100%	Compliant
B1-22	Bedroom 2	100	100%	100%	100%	Compliant
B1-23	LKD	200	86%	83%	80%	Compliant
B1-23	Bedroom 1	100	100%	100%	100%	Compliant
B1-24	LKD	200	100%	100%	95%	Compliant
B1-24	Bedroom 1	100	100%	100%	100%	Compliant
B1-24	Bedroom 2	100	100%	100%	100%	Compliant
B1-24	Bedroom 3	100	100%	100%	100%	Compliant
B1-25	LKD	200	100%	100%	100%	Compliant
B1-25	Bedroom 1	100	100%	100%	100%	Compliant
B1-25	Bedroom 2	100	100%	100%	100%	Compliant
B1-25	Bedroom 3	100	100%	100%	100%	Compliant
B1-26	LKD	200	86%	82%	79%	Compliant
B1-26	Bedroom 1	100	100%	100%	100%	Compliant
B1-27	LKD	200	94%	89%	85%	Compliant
B1-27	Bedroom 1	100	100%	100%	100%	Compliant

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

For floor plans of the assessed units please refer to section C.1 on page 58.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

<sup>\*\*\*</sup> The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.



			Table No. C.3	.2 - SDA Resu	lts: Block 01	
Unit		Target	% of area (recon	a above target nmendation >50%	Compliance with BR 209 Criteria*	
Number	Description	Lux*	Without Trees***	Winter**	Summer**	
B1-28	LKD	200	91%	91%	91%	Compliant
B1-28	Bedroom 1	100	100%	100%	100%	Compliant
B1-28	Bedroom 2	100	100%	100%	100%	Compliant
B1-28	Bedroom 3	100	100%	100%	100%	Compliant
B1-29	LKD	200	84%	83%	83%	Compliant
B1-29	Bedroom 1	100	100%	100%	100%	Compliant
B1-29	Bedroom 2	100	100%	100%	100%	Compliant
B1-29	Bedroom 3	100	100%	100%	100%	Compliant
B1-30	LKD	200	100%	100%	100%	Compliant
B1-30	Bedroom 1	100	100%	100%	100%	Compliant
B1-30	Bedroom 2	100	100%	100%	100%	Compliant
B1-31	LKD	200	100%	100%	98%	Compliant
B1-31	Bedroom 1	100	100%	100%	100%	Compliant
B1-32	LKD	200	100%	100%	100%	Compliant
B1-32	Bedroom 1	100	100%	100%	100%	Compliant
B1-32	Bedroom 2	100	100%	100%	100%	Compliant
B1-32	Bedroom 3	100	100%	100%	100%	Compliant

#### C.3.2 SDA Results: Block 02

			Table No. C.3	.2 - SDA Resu	lts: Block 02	
Unit		Target		a above target nmendation >50%		Compliance with BR 209 Criteria*
Number	Description	Lux*	Without Trees***	Winter**	Summer**	<u>'</u>
B2-01	LKD	200	100%	100%	97%	Compliant
B2-01	Bedroom 1	100	100%	100%	100%	Compliant
B2-01	Bedroom 2	100	100%	100%	100%	Compliant
B2-01	Bedroom 3	100	100%	100%	100%	Compliant
B2-02	LKD	200	58%	55%	53%	Compliant
B2-02	Bedroom 1	100	100%	100%	100%	Compliant
B2-03	LKD	200	67%	66%	63%	Compliant
B2-03	Bedroom 1	100	100%	100%	100%	Compliant
B2-04	LKD	200	81%	79%	72%	Compliant
B2-04	Bedroom 1	100	100%	100%	100%	Compliant
B2-04	Bedroom 2	100	100%	100%	100%	Compliant
B2-04	Bedroom 3	100	100%	100%	100%	Compliant
B2-05	LKD	200	56%	51%	38%	Trees affecting compliance (summer only)
B2-05	Bedroom 1	100	100%	100%	100%	Compliant
B2-05	Bedroom 2	100	100%	100%	100%	Compliant
B2-05	Bedroom 3	100	100%	100%	100%	Compliant
B2-06	LKD	200	69%	58%	47%	Trees affecting compliance (summer only)
B2-06	Bedroom 1	100	100%	100%	100%	Compliant

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

<sup>\*\*\*</sup> The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.

For floor plans of the assessed units please refer to section C.1 on page 58.



	T	Γ	Table No. C.3	.2 - SDA Resu	Its: Block 02	
Unit Number	Room Description	Target Lux*	% of area (recon	a above target nmendation >509	Lux*	Compliance with BR 209 Criteria*
	Description	Lux	Without Trees***	Winter**	Summer**	
B2-07	LKD	200	56%	48%	40%	Trees affecting compliance
B2-07	Bedroom 1	100	100%	100%	99%	Compliant
B2-08	LKD	200	100%	100%	98%	Compliant
B2-08	Bedroom 1	100	100%	100%	100%	Compliant
B2-08	Bedroom 2	100	100%	100%	100%	Compliant
B2-08	Bedroom 3	100	93%	87%	78%	Compliant
B2-09	LKD	200	100%	100%	100%	Compliant
B2-09	Bedroom 1	100	100%	100%	100%	Compliant
B2-09	Bedroom 2	100	100%	100%	100%	Compliant
B2-09	Bedroom 3	100	100%	100%	100%	Compliant
B2-10	LKD	200	75%	74%	72%	Compliant
B2-10	Bedroom 1	100	100%	100%	100%	Compliant
B2-11	LKD	200	75%	73%	72%	Compliant
B2-11	Bedroom 1	100	100%	100%	100%	Compliant
B2-12	LKD	200	83%	83%	82%	Compliant
B2-12	Bedroom 1	100	100%	100%	100%	Compliant
B2-12	Bedroom 2	100	100%	100%	100%	Compliant
B2-12	Bedroom 3	100	100%	100%	100%	Compliant
B2-13	LKD	200	63%	58%	54%	Compliant
B2-13	Bedroom 1	100	100%	100%	100%	Compliant
B2-13	Bedroom 2	100	100%	100%	100%	Compliant
B2-13	Bedroom 3	100	100%	100%	100%	Compliant
B2-14	LKD	200	68%	64%	60%	Compliant
B2-14	Bedroom 1	100	100%	100%	100%	Compliant
B2-14	Bedroom 2	100	100%	100%	100%	Compliant
B2-15	LKD	200	66%	62%	61%	Compliant
B2-15	Bedroom 1	100	100%	100%	100%	Compliant
B2-16	LKD	200	100%	100%	100%	Compliant
B2-16	Bedroom 1	100	100%	100%	100%	Compliant
B2-16	Bedroom 2	100	100%	100%	100%	Compliant
B2-16	Bedroom 3	100	100%	100%	100%	Compliant
B2-17	LKD	200	100%	100%	100%	Compliant
B2-17	Bedroom 1	100	100%	100%	100%	Compliant
B2-17	Bedroom 2	100	100%	100%	100%	Compliant
B2-17	Bedroom 3	100	100%	100%	100%	Compliant
B2-18	LKD	200	81%	80%	77%	Compliant
B2-18	Bedroom 1	100	100%	100%	100%	Compliant
B2-19	LKD	200	81%	80%	78%	Compliant
B2-19	Bedroom 1	100	100%	100%	100%	Compliant

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

<sup>\*\*\*</sup> The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.

For floor plans of the assessed units please refer to section C.1 on page 58.



Unit	Room					
Number	Description	Target Lux*	(recon	nmendation >50° Winter**	Summer**	Compliance with BR 209 Criteria*
B2-20	LKD	200	87%	87%	85%	Compliant
B2-20	Bedroom 1	100	100%	100%	100%	Compliant
B2-20	Bedroom 2	100	100%	100%	100%	Compliant
B2-20	Bedroom 3	100	100%	100%	100%	Compliant
B2-21	LKD	200	66%	65%	61%	Compliant
B2-21	Bedroom 1	100	100%	100%	100%	Compliant
B2-21	Bedroom 2	100	100%	100%	100%	Compliant
B2-21	Bedroom 3	100	100%	100%	100%	Compliant
B2-22	LKD	200	82%	78%	75%	Compliant
B2-22	Bedroom 1	100	100%	100%	100%	Compliant
B2-22	Bedroom 2	100	100%	100%	100%	Compliant
B2-23	LKD	200	78%	76%	75%	Compliant
B2-23	Bedroom 1	100	100%	100%	100%	Compliant
B2-24	LKD	200	100%	100%	100%	Compliant
B2-24	Bedroom 1	100	100%	100%	100%	Compliant
B2-24	Bedroom 2	100	100%	100%	100%	Compliant
B2-24	Bedroom 3	100	100%	100%	100%	Compliant
B2-25	LKD	200	100%	100%	100%	Compliant
B2-25	Bedroom 1	100	100%	100%	100%	Compliant
B2-25	Bedroom 2	100	100%	100%	100%	Compliant
B2-25	Bedroom 3	100	100%	100%	100%	Compliant
B2-26	LKD	200	97%	93%	86%	Compliant
B2-26	Bedroom 1	100	100%	100%	100%	Compliant
B2-27	LKD	200	94%	92%	87%	Compliant
B2-27	Bedroom 1	100	100%	100%	100%	Compliant
B2-28	LKD	200	90%	90%	89%	Compliant
B2-28	Bedroom 1	100	100%	100%	100%	Compliant
B2-28	Bedroom 2	100	100%	100%	100%	Compliant
B2-28	Bedroom 3	100	100%	100%	100%	Compliant
B2-29	LKD	200	83%	82%	82%	Compliant
B2-29	Bedroom 1	100	100%	100%	100%	Compliant
B2-29	Bedroom 2	100	100%	100%	100%	Compliant
B2-29	Bedroom 3	100	100%	100%	100%	Compliant
B2-30	LKD	200	100%	100%	100%	Compliant
B2-30	Bedroom 1	100	100%	100%	100%	Compliant
B2-30	Bedroom 2	100	100%	100%	100%	Compliant
B2-31	LKD	200	100%	100%	98%	Compliant
B2-31	Bedroom 1	100	100%	100%	100%	Compliant
B2-32	LKD	200	100%	100%	100%	Compliant
B2-32	Bedroom 1	100	100%	100%	100%	Compliant
B2-32	Bedroom 2	100	100%	100%	100%	Compliant

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

For floor plans of the assessed units please refer to section C.1 on page 58.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

<sup>\*\*\*</sup> The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.



#### C.3.3 SDA Results: Block 03

			Table No. C.3	.3 - SDA Resu	ilts: Block 03	
Unit Number	Room Description	Target Lux*	(recon	a above target nmendation >509	6)	Compliance with BR 209 Criteria*
	·		Without Trees***	Winter**	Summer**	
B3-01	LKD	200	64%	52%	40%	Trees affecting compliance (summer only
B3-01	Bedroom 1	100	100%	100%	100%	Compliant
B3-01	Bedroom 2	100	100%	100%	100%	Compliant
B3-02	LKD	200	73%	65%	54%	Compliant
B3-02	Bedroom 1	100	100%	100%	100%	Compliant
B3-03	LKD	200	75%	67%	58%	Compliant
B3-03	Bedroom 1	100	100%	100%	100%	Compliant
B3-04	LKD	200	100%	100%	100%	Compliant
B3-04	Bedroom 1	100	100%	100%	100%	Compliant
B3-05	LKD	200	96%	89%	81%	Compliant
B3-05	Bedroom 1	100	100%	100%	67%	Compliant
B3-05	Bedroom 2	100	100%	100%	77%	Compliant
B3-05	Bedroom 3	100	100%	100%	74%	Compliant
B3-06	LKD	200	100%	100%	100%	Compliant
B3-06	Bedroom 1	100	100%	100%	100%	Compliant
B3-06	Bedroom 2	100	100%	100%	100%	Compliant
B3-07	LKD	200	84%	78%	73%	Compliant
B3-07	Bedroom 1	100	100%	100%	100%	Compliant
B3-08	LKD	200	84%	81%	78%	Compliant
B3-08	Bedroom 1	100	100%	100%	100%	Compliant
B3-09	LKD	200	100%	100%	100%	Compliant
B3-09	Bedroom 1	100	100%	100%	100%	Compliant
B3-09	Bedroom 2	100	100%	100%	100%	Compliant
B3-10	LKD	200	100%	95%	92%	Compliant
B3-10	Bedroom 1	100	100%	100%	100%	Compliant
B3-10	Bedroom 2	100	100%	100%	100%	Compliant
B3-10	Bedroom 3	100	100%	100%	100%	Compliant
B3-11	LKD	200	100%	100%	100%	Compliant
B3-11	Bedroom 1	100	54%	50%	47%	Trees affecting compliance (summer only)
B3-11	Bedroom 2	100	100%	100%	100%	Compliant
B3-12	LKD	200	87%	84%	80%	Compliant
B3-12	Bedroom 1	100	100%	100%	100%	Compliant
B3-12	Bedroom 2	100	100%	100%	100%	Compliant
B3-12	Bedroom 3	100	100%	100%	100%	Compliant
B3-13	LKD	200	100%	100%	100%	Compliant
B3-13	Bedroom 1	100	100%	100%	100%	Compliant
B3-13	Bedroom 2	100	100%	100%	100%	Compliant
B3-14	LKD	200	97%	95%	90%	Compliant
B3-14	Bedroom 1	100	100%	100%	100%	Compliant

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

<sup>\*\*\*</sup> The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.

For floor plans of the assessed units please refer to section C.1 on page 58.



			1		ılts: Block 03	
Unit Number	Room Description	Target Lux*	(recon	a above target nmendation >509	%)	Compliance with BR 209 Criteria*
	'		Without Trees***	Winter**	Summer**	
B3-15	LKD	200	97%	95%	93%	Compliant
B3-15	Bedroom 1	100	100%	100%	100%	Compliant
B3-16	LKD	200	100%	100%	100%	Compliant
B3-16	Bedroom 1	100	100%	100%	100%	Compliant
B3-16	Bedroom 2	100	100%	100%	100%	Compliant
B3-17	LKD	200	100%	98%	95%	Compliant
B3-17	Bedroom 1	100	100%	100%	100%	Compliant
B3-17	Bedroom 2	100	100%	100%	100%	Compliant
B3-17	Bedroom 3	100	100%	100%	100%	Compliant
B3-18	LKD	200	100%	100%	100%	Compliant
B3-18	Bedroom 1	100	78%	78%	76%	Compliant
B3-18	Bedroom 2	100	100%	100%	100%	Compliant
B3-19	LKD	200	90%	89%	88%	Compliant
B3-19	Bedroom 1	100	100%	100%	100%	Compliant
B3-19	Bedroom 2	100	100%	100%	100%	Compliant
B3-19	Bedroom 3	100	100%	100%	100%	Compliant
B3-20	LKD	200	100%	100%	100%	Compliant
B3-20	Bedroom 1	100	100%	100%	100%	Compliant
B3-20	Bedroom 2	100	100%	100%	100%	Compliant
B3-21	LKD	200	100%	100%	100%	Compliant
B3-21	Bedroom 1	100	100%	100%	100%	Compliant
B3-22	LKD	200	100%	100%	100%	Compliant
B3-22	Bedroom 1	100	100%	100%	100%	Compliant
B3-23	LKD	200	100%	100%	100%	Compliant
B3-23	Bedroom 1	100	100%	100%	100%	Compliant
B3-23	Bedroom 2	100	100%	100%	100%	Compliant
B3-24	LKD	200	100%	100%	98%	Compliant
B3-24	Bedroom 1	100	100%	100%	100%	Compliant
B3-24	Bedroom 2	100	100%	100%	100%	Compliant
B3-24	Bedroom 3	100	100%	100%	100%	Compliant
B3-25	LKD	200	100%	100%	100%	Compliant
B3-25	Bedroom 1	100	100%	100%	100%	Compliant
B3-25	Bedroom 2	100	100%	100%	100%	Compliant
B3-26	LKD	200	92%	92%	91%	Compliant
B3-26	Bedroom 1	100	100%	100%	100%	Compliant
B3-26	Bedroom 2	100	100%	100%	100%	Compliant
B3-26	Bedroom 3	100	100%	100%	100%	Compliant

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

<sup>\*\*\*</sup> The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.

For floor plans of the assessed units please refer to section C.1 on page 58.



# C.3.4 SDA Results: Duplex Block A

			Table No. C.3.4 -	SDA Results:	Duplex Block	Α
Unit Number	Room Description	Target Lux*	% of area (recor	a above target mmendation >50%	Lux* 6)	Compliance with BR 209 Criteria*
Number	Description	Lux	Without Trees***	Winter**	Summer**	·
DA-01	LKD	200	94%	94%	94%	Compliant
DA-01	Bedroom 1	100	100%	100%	100%	Compliant
DA-01	Bedroom 2	100	100%	100%	100%	Compliant
DA-02	LKD	200	100%	100%	100%	Compliant
DA-02	Bedroom 1	100	100%	100%	100%	Compliant
DA-02	Bedroom 2	100	100%	100%	100%	Compliant
DA-03	Kitchen/Dining	200	100%	100%	100%	Compliant
DA-03	Living	150	100%	100%	100%	Compliant
DA-03	Bedroom 1	100	100%	100%	100%	Compliant
DA-03	Bedroom 2	100	100%	100%	100%	Compliant
DA-04	Kitchen/Dining	200	100%	100%	100%	Compliant
DA-04	Living	150	100%	100%	100%	Compliant
DA-04	Bedroom 1	100	100%	100%	100%	Compliant
DA-04	Bedroom 2	100	100%	100%	100%	Compliant
DA-05	Kitchen/Dining	200	100%	100%	100%	Compliant
DA-05	Living	150	100%	100%	100%	Compliant
DA-05	Bedroom 1	100	100%	100%	100%	Compliant
DA-05	Bedroom 2	100	100%	100%	100%	Compliant
DA-06	Kitchen/Dining	200	100%	100%	100%	Compliant
DA-06	Living	150	100%	100%	100%	Compliant
DA-06	Bedroom 1	100	100%	100%	100%	Compliant
DA-06	Bedroom 2	100	100%	100%	100%	Compliant
DA-07	Kitchen/Dining	200	100%	100%	100%	Compliant
DA-07	Living	150	100%	100%	100%	Compliant
DA-07	Bedroom 1	100	100%	100%	100%	Compliant
DA-07	Bedroom 2	100	100%	100%	100%	Compliant
DA-08	Kitchen/Dining	200	100%	100%	100%	Compliant
DA-08	Living	150	100%	100%	100%	Compliant
DA-08	Bedroom 1	100	100%	100%	100%	Compliant
DA-08	Bedroom 2	100	100%	100%	100%	Compliant
DA-09	Kitchen/Dining	200	100%	100%	100%	Compliant
DA-09	Living	150	100%	100%	100%	Compliant
DA-09	Bedroom 1	100	100%	100%	100%	Compliant
DA-09	Bedroom 2	100	100%	100%	100%	Compliant
DA-09	Bedroom 3	100	100%	100%	100%	Compliant
DA-10	LKD	200	100%	100%	100%	Compliant
DA-10	Bedroom 1	100	100%	100%	100%	Compliant
DA-10	Bedroom 2	100	100%	100%	100%	Compliant
DA-10	Bedroom 3	100	100%	100%	100%	Compliant

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

<sup>\*\*\*</sup> The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.

For floor plans of the assessed units please refer to section C.1 on page 58.



	Table No. C.3.4 - SDA Results: Duplex Block A										
Unit		% of area above target Lux* (recommendation >50%)				Compliance with BR 209 Criteria*					
Number	Description	Lux*	Without Trees***	Winter**	Summer**						
DA-11	Kitchen/Dining	200	26%	25%	22%	Non-compliant					
DA-11	Living	150	100%	100%	100%	Compliant					
DA-11	Bedroom 1	100	100%	100%	100%	Compliant					
DA-11	Bedroom 2	100	100%	100%	100%	Compliant					
DA-11	Bedroom 3	100	100%	100%	100%	Compliant					
DA-12	Kitchen/Dining	200	18%	18%	18%	Non-compliant					
DA-12	Living	150	100%	100%	100%	Compliant					
DA-12	Bedroom 1	100	100%	100%	100%	Compliant					
DA-12	Bedroom 2	100	100%	100%	100%	Compliant					
DA-12	Bedroom 3	100	100%	100%	100%	Compliant					

### C.3.5 SDA Results: Duplex Block B

Unit	Room	Target	% of area (recon	a above target nmendation >50%	Lux* 6)	Compliance with BR 209 Criteria*
Number	Description	Lux*	Without Trees***	Winter**	Summer**	compliance with Bix 200 enteria
DB-01	LKD	200	98%	93%	74%	Compliant
DB-01	Bedroom 1	100	100%	100%	100%	Compliant
DB-02	LKD	200	100%	98%	95%	Compliant
DB-02	Bedroom 1	100	100%	100%	100%	Compliant
DB-03	LKD	200	99%	96%	94%	Compliant
DB-03	Bedroom 1	100	100%	100%	100%	Compliant
DB-04	LKD	200	88%	87%	86%	Compliant
DB-04	Bedroom 1	100	100%	100%	100%	Compliant
DB-04	Bedroom 2	100	100%	100%	100%	Compliant
DB-04	Bedroom 3	100	100%	100%	100%	Compliant
DB-05	LKD	200	100%	100%	100%	Compliant
DB-05	Bedroom 1	100	100%	100%	100%	Compliant
DB-05	Bedroom 2	100	100%	100%	100%	Compliant
DB-05	Bedroom 3	100	100%	100%	100%	Compliant
DB-06	LKD	200	100%	100%	100%	Compliant
DB-06	Bedroom 1	100	100%	100%	100%	Compliant
DB-06	Bedroom 2	100	100%	100%	100%	Compliant
DB-06	Bedroom 3	100	100%	100%	100%	Compliant
DB-07	LKD	200	100%	100%	100%	Compliant
DB-07	Bedroom 1	100	100%	100%	100%	Compliant
DB-07	Bedroom 2	100	100%	100%	100%	Compliant
DB-07	Bedroom 3	100	100%	100%	100%	Compliant
DB-08	LKD	200	100%	100%	100%	Compliant
DB-08	Bedroom 1	100	89%	89%	85%	Compliant
DB-08	Bedroom 2	100	100%	100%	100%	Compliant

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

<sup>\*\*\*</sup> The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.

For floor plans of the assessed units please refer to section C.1 on page 58.



### C.3.6 SDA Results: Duplex Block C

Table No. C.3.6 - SDA Results: Duplex Block C									
Unit	Room	Target	% of area	a above target nmendation >50%	Lux*	Compliance with BR 209 Criteria*			
Number	Description	Lux*	Without Trees***	Winter**	Summer**				
DC-01	Kitchen/Dining	200	100%	100%	100%	Compliant			
DC-01	Living	150	100%	100%	100%	Compliant			
DC-01	Bedroom 1	100	100%	100%	100%	Compliant			
DC-01	Bedroom 2	100	100%	100%	100%	Compliant			
DC-01	Bedroom 3	100	100%	100%	100%	Compliant			
DC-02	LKD	200	100%	100%	100%	Compliant			
DC-02	Bedroom 1	100	100%	100%	94%	Compliant			
DC-02	Bedroom 2	100	100%	100%	100%	Compliant			
DC-03	LKD	200	87%	76%	70%	Compliant			
DC-03	Bedroom 1	100	100%	100%	100%	Compliant			
DC-03	Bedroom 2	100	100%	100%	100%	Compliant			
DC-03	Study	150	20%	20%	20%	Non-compliant			
DC-04	LKD	200	76%	66%	44%	Trees affecting compliance (summer only)			
DC-04	Bedroom 1	100	100%	100%	100%	Compliant			
DC-04	Bedroom 2	100	100%	100%	100%	Compliant			
DC-04	Study	150	20%	20%	15%	Non-compliant			
DC-05	LKD	200	100%	100%	98%	Compliant			
DC-05	Bedroom 1	100	100%	100%	100%	Compliant			
DC-05	Bedroom 2	100	100%	100%	100%	Compliant			
DC-05	Bedroom 3	100	100%	100%	100%	Compliant			

### C.3.7 SDA Results: Duplex Block D

			Table No. C.3.7 -	SDA Results:	Duplex Block	D
Unit	Room	Target	% of area (recon	a above target nmendation >50%	Lux* 6)	Compliance with BR 209 Criteria*
Number	Description	Lux*	Without Trees***	Winter**	Summer**	
DD-00	Community Hall	150	100%	100%	100%	Compliant
DD-01	LKD	200	100%	100%	100%	Compliant
DD-01	Bedroom 2	100	100%	100%	100%	Compliant
DD-01	Bedroom 2	100	100%	100%	100%	Compliant
DD-02	LKD	200	100%	100%	100%	Compliant
DD-02	Bedroom 1	100	100%	100%	100%	Compliant
DD-02	Bedroom 2	100	100%	100%	100%	Compliant
DD-03	Kitchen/Dining	200	100%	100%	100%	Compliant
DD-03	Living	150	100%	100%	100%	Compliant
DD-03	Bedroom 1	100	100%	100%	100%	Compliant
DD-03	Bedroom 2	100	100%	100%	100%	Compliant
DD-03	Bedroom 3	100	100%	100%	100%	Compliant

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

<sup>\*\*\*</sup> The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.

For floor plans of the assessed units please refer to section C.1 on page 58.



	Table No. C.3.7 - SDA Results: Duplex Block D									
Unit	Room	Target	% of area (recon	a above target nmendation >50%	Lux*	Compliance with BR 209 Criteria*				
Number	Description	Lux*	Without Trees***	Winter**	Summer**					
DD-04	LKD	200	100%	100%	100%	Compliant				
DD-04	Bedroom 1	100	100%	100%	100%	Compliant				
DD-04	Bedroom 2	100	100%	100%	100%	Compliant				
DD-04	Bedroom 3	100	100%	100%	100%	Compliant				
DD-05	Kitchen/Dining	200	71%	47%	28%	Trees affecting compliance				
DD-05	Living	150	100%	100%	45%	Trees affecting compliance (summer only)				
DD-05	Bedroom 1	100	100%	100%	100%	Compliant				
DD-05	Bedroom 2	100	100%	100%	100%	Compliant				
DD-05	Bedroom 3	100	100%	100%	100%	Compliant				
DD-06	Kitchen/Dining	200	100%	99%	99%	Compliant				
DD-06	Living	150	100%	100%	100%	Compliant				
DD-06	Bedroom 1	100	100%	100%	100%	Compliant				
DD-06	Bedroom 2	100	100%	100%	100%	Compliant				
DD-06	Bedroom 3	100	100%	100%	100%	Compliant				

### C.3.8 SDA Results: Duplex Block E

	Table No. C.3.8 - SDA Results: Duplex Block E									
Unit	Room	Target	% of area (recon	a above target nmendation >50%	Lux*	Compliance with BR 209 Criteria*				
Number	Description	Lux*	Without Trees***	Winter**	Summer**					
DE-01	LKD	200	99%	98%	96%	Compliant				
DE-01	Bedroom 1	100	100%	100%	91%	Compliant				
DE-02	LKD	200	98%	98%	96%	Compliant				
DE-02	Bedroom 1	100	100%	100%	99%	Compliant				
DE-03	LKD	200	100%	100%	99%	Compliant				
DE-03	Bedroom 1	100	100%	100%	100%	Compliant				
DE-04	LKD	200	100%	100%	100%	Compliant				
DE-04	Bedroom 1	100	100%	100%	100%	Compliant				
DE-04	Bedroom 2	100	100%	100%	100%	Compliant				
DE-04	Bedroom 3	100	100%	100%	100%	Compliant				
DE-05	LKD	200	100%	100%	100%	Compliant				
DE-05	Bedroom 1	100	100%	100%	100%	Compliant				
DE-05	Bedroom 2	100	100%	100%	100%	Compliant				
DE-05	Bedroom 3	100	100%	100%	100%	Compliant				
DE-06	LKD	200	100%	100%	100%	Compliant				
DE-06	Bedroom 1	100	100%	100%	100%	Compliant				
DE-06	Bedroom 2	100	100%	100%	100%	Compliant				
DE-06	Bedroom 3	100	100%	100%	100%	Compliant				

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

<sup>\*\*\*</sup> The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.

For floor plans of the assessed units please refer to section C.1 on page 58.



## C.3.9 SDA Results: Duplex Block F

	<u> </u>		Table No. C.3.9 -			'
Unit	Room	Target	% of area (recon	a above target nmendation >50	Lux* %)	Compliance with BR 209 Criteria*
Number	Description	Lux*	Without Trees***	Winter**	Summer**	
DF-01	LKD	200	53%	44%	36%	Trees affecting compliance
DF-01	Bedroom 1	100	100%	100%	100%	Compliant
DF-01	Bedroom 2	100	100%	100%	99%	Compliant
DF-02	LKD	200	100%	85%	51%	Compliant
DF-02	LKD	200	55%	49%	43%	Trees affecting compliance
DF-02	Bedroom 2	100	43%	27%	23%	Non-compliant
DF-03	LKD	200	80%	70%	64%	Compliant
DF-03	Bedroom 1	100	100%	100%	100%	Compliant
DF-03	Bedroom 2	100	52%	32%	19%	Trees affecting compliance
DF-04	LKD	200	79%	68%	60%	Compliant
DF-04	Bedroom 1	100	100%	100%	92%	Compliant
DF-04	Bedroom 2	100	47%	23%	11%	Non-compliant
DF-05	LKD	200	54%	50%	46%	Trees affecting compliance (summer only
DF-05	Bedroom 1	100	100%	100%	100%	Compliant
DF-05	Bedroom 2	100	56%	42%	34%	Trees affecting compliance
DF-06	LKD	200	44%	32%	22%	Non-compliant
DF-06	Bedroom 1	100	100%	100%	100%	Compliant
DF-07	LKD	200	100%	100%	100%	Compliant
DF-07	Bedroom 1	100	100%	100%	100%	Compliant
DF-07	Bedroom 2	100	100%	100%	100%	Compliant
DF-08	LKD	200	99%	77%	56%	Compliant
DF-08	Bedroom 1	100	100%	100%	100%	Compliant
DF-08	Bedroom 2	100	42%	42%	42%	Non-compliant
DF-09	LKD	200	84%	70%	55%	Compliant
DF-09	Bedroom 1	100	100%	100%	100%	Compliant
DF-09	Bedroom 2	100	34%	34%	31%	Non-compliant
DF-10	LKD	200	88%	74%	59%	Compliant
DF-10	Bedroom 1	100	100%	100%	100%	Compliant
DF-10	Bedroom 2	100	36%	34%	30%	Non-compliant
DF-11	LKD	200	99%	82%	63%	Compliant
DF-11	LKD	200	95%	76%	58%	Compliant
DF-11	Bedroom 2	100	33%	29%	24%	Non-compliant
DF-12	LKD	200	95%	77%	56%	Compliant
DF-12	Bedroom 1	100	100%	100%	100%	Compliant
DF-12	Bedroom 2	100	36%	31%	23%	Non-compliant
DF-13	Kitchen/Dining	200	100%	100%	100%	Compliant
DF-13	Living	150	100%	100%	100%	Compliant
DF-13	Bedroom 1	100	100%	100%	100%	Compliant
DF-13	Bedroom 2	100	100%	100%	100%	Compliant
DF-13	Bedroom 3	100	100%	100%	100%	Compliant

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

<sup>\*\*\*</sup> The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.



Unit	Room	   Target	% of area	a above target	Lux*	
Number	Description	Lux*	(recon	nmendation >50 Winter**	Summer**	Compliance with BR 209 Criteria*
DF-14	Kitchen/Dining	200	100%	100%	100%	Compliant
DF-14	Living	150	100%	100%	100%	Compliant
DF-14	Bedroom 1	100	100%	100%	100%	Compliant
DF-14	Bedroom 2	100	100%	100%	100%	Compliant
DF-14	Bedroom 3	100	100%	100%	100%	Compliant
DF-15	Kitchen/Dining	200	100%	100%	100%	Compliant
DF-15	Living	150	100%	100%	100%	Compliant
DF-15	Bedroom 1	100	100%	100%	100%	Compliant
DF-15	Bedroom 2	100	100%	100%	100%	Compliant
DF-15	Bedroom 3	100	100%	100%	100%	Compliant
DF-16	Kitchen/Dining	200	100%	100%	100%	Compliant
DF-16	Living	150	100%	100%	100%	Compliant
DF-16	Bedroom 1	100	100%	100%	100%	Compliant
DF-16	Bedroom 2	100	100%	100%	100%	Compliant
DF-16	Bedroom 3	100	100%	100%	100%	Compliant
DF-17	Kitchen/Dining	200	100%	100%	100%	Compliant
DF-17	Living	150	100%	100%	100%	Compliant
DF-17	Bedroom 1	100	100%	100%	100%	Compliant
DF-17	Bedroom 2	100	100%	100%	100%	Compliant
DF-17	Bedroom 3	100	100%	100%	100%	Compliant
DF-18	LKD	200	100%	96%	93%	Compliant
DF-18	Bedroom 1	100	100%	100%	100%	Compliant
DF-18	Bedroom 2	100	100%	100%	100%	Compliant
DF-19	LKD	200	100%	100%	100%	Compliant
DF-19	Bedroom 1	100	100%	100%	100%	Compliant
DF-19	Bedroom 2	100	100%	100%	100%	Compliant
DF-19	Bedroom 3	100	100%	100%	100%	Compliant
DF-20	Kitchen/Dining	200	100%	100%	100%	Compliant
DF-20	Living	150	100%	100%	100%	Compliant
DF-20	Bedroom 1	100	100%	100%	100%	Compliant
DF-20	Bedroom 2	100	100%	100%	100%	Compliant
DF-20	Bedroom 3	100	100%	100%	100%	Compliant
DF-21	Kitchen/Dining	200	100%	100%	100%	Compliant
DF-21	Living	150	100%	100%	100%	Compliant
DF-21	Bedroom 1	100	100%	100%	100%	Compliant
DF-21	Bedroom 2	100	100%	100%	100%	Compliant
DF-21	Bedroom 3	100	100%	100%	100%	Compliant
DF-22	Kitchen/Dining	200	100%	100%	100%	Compliant
DF-22	Living	150	100%	100%	100%	Compliant
DF-22	Bedroom 1	100	100%	100%	100%	Compliant
DF-22	Bedroom 2	100	100%	100%	100%	Compliant
DF-22	Bedroom 3	100	100%	100%	100%	Compliant

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

<sup>\*\*\*</sup> The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.



	Table No. C.3.9 - SDA Results: Duplex Block F									
Unit	Room	Target	% of area (recon	a above target nmendation >50%	Lux* 6)	Compliance with BR 209 Criteria*				
Number	Description	Lux*	Without Trees***	Winter**	Summer**					
DF-23	Kitchen/Dining	200	100%	100%	100%	Compliant				
DF-23	Living	150	100%	100%	100%	Compliant				
DF-23	Bedroom 1	100	100%	100%	100%	Compliant				
DF-23	Bedroom 2	100	100%	100%	100%	Compliant				
DF-23	Bedroom 3	100	100%	100%	100%	Compliant				
DF-24	Kitchen/Dining	200	100%	100%	100%	Compliant				
DF-24	Living	150	100%	100%	100%	Compliant				
DF-24	Bedroom 1	100	100%	100%	100%	Compliant				
DF-24	Bedroom 2	100	100%	100%	100%	Compliant				
DF-24	Bedroom 3	100	100%	100%	100%	Compliant				

# C.3.10 SDA Results: Duplex Block G

Table No. C.3.10 - SDA Results: Duplex Block G									
Unit	Room	Target	% of area (recon	a above target nmendation >50%	Lux* 6)	Compliance with BR 209 Criteria*			
Number	Description	Lux*	Without Trees***	Winter**	Summer**				
DG-01	LKD	200	68%	62%	56%	Compliant			
DG-01	Bedroom 1	100	100%	100%	95%	Compliant			
DG-01	Bedroom 2	100	52%	38%	27%	Trees affecting compliance			
DG-02	LKD	200	86%	84%	80%	Compliant			
DG-02	Bedroom 1	100	100%	100%	84%	Compliant			
DG-02	Bedroom 2	100	47%	23%	14%	Non-compliant			
DG-03	LKD	200	92%	87%	79%	Compliant			
DG-03	Bedroom 1	100	100%	100%	85%	Compliant			
DG-03	Bedroom 2	100	52%	32%	26%	Trees affecting compliance			
DG-04	LKD	200	85%	77%	61%	Compliant			
DG-04	Bedroom 1	100	100%	100%	98%	Compliant			
DG-04	Bedroom 2	100	46%	24%	17%	Non-compliant			
DG-05	LKD	200	100%	99%	99%	Compliant			
DG-05	Bedroom 1	100	100%	100%	86%	Compliant			
DG-05	Bedroom 2	100	52%	34%	26%	Trees affecting compliance			
DG-06	LKD	200	100%	100%	100%	Compliant			
DG-06	Bedroom 1	100	100%	100%	100%	Compliant			
DG-06	Bedroom 2	100	47%	29%	20%	Non-compliant			
DG-07	Kitchen/Dining	200	100%	100%	100%	Compliant			
DG-07	Living	150	100%	100%	100%	Compliant			
DG-07	Bedroom 1	100	100%	100%	100%	Compliant			
DG-07	Bedroom 2	100	100%	100%	100%	Compliant			
DG-07	Bedroom 3	100	100%	100%	100%	Compliant			
DG-08	Kitchen/Dining	200	100%	100%	100%	Compliant			
DG-08	Living	150	100%	100%	100%	Compliant			
DG-08	Bedroom 1	100	100%	100%	100%	Compliant			

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

<sup>\*\*\*</sup> The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.



			Table No. C.3.10 -	SDA Results:	Duplex Block	G
Unit		Target	% of area (recom	above target nmendation >50%	Lux*	Compliance with BR 209 Criteria*
Number	Description	Lux*	Without Trees***	Winter**	Summer**	
DG-08	Bedroom 2	100	100%	100%	100%	Compliant
DG-08	Bedroom 3	100	100%	100%	100%	Compliant
DG-09	Kitchen/Dining	200	100%	100%	100%	Compliant
DG-09	Living	150	100%	100%	100%	Compliant
DG-09	Bedroom 1	100	100%	100%	100%	Compliant
DG-09	Bedroom 2	100	100%	100%	100%	Compliant
DG-09	Bedroom 3	100	100%	100%	100%	Compliant
DG-10	Kitchen/Dining	200	100%	100%	100%	Compliant
DG-10	Living	150	100%	100%	100%	Compliant
DG-10	Bedroom 1	100	100%	100%	100%	Compliant
DG-10	Bedroom 2	100	100%	100%	100%	Compliant
DG-10	Bedroom 3	100	100%	100%	100%	Compliant
DG-11	Kitchen/Dining	200	100%	100%	100%	Compliant
DG-11	Living	150	100%	100%	100%	Compliant
DG-11	Bedroom 1	100	100%	100%	100%	Compliant
DG-11	Bedroom 2	100	100%	100%	100%	Compliant
DG-11	Bedroom 3	100	100%	100%	100%	Compliant
DG-12	Kitchen/Dining	200	100%	100%	100%	Compliant
DG-12	Living	150	100%	100%	100%	Compliant
DG-12	Bedroom 1	100	100%	100%	100%	Compliant
DG-12	Bedroom 2	100	100%	100%	100%	Compliant
DG-12	Bedroom 3	100	100%	100%	100%	Compliant

## C.3.11 SDA Results: Duplex Block H

	Table No. C.3.11 - SDA Results: Duplex Block H										
Unit	Room	Target	% of area (recon	a above target nmendation >50%	Lux*	Compliance with BR 209 Criteria*					
Number	Description	Lux*	Without Trees***	Winter**	Summer**						
DH-01	LKD	200	100%	86%	75%	Compliant					
DH-01	Bedroom 1	100	100%	100%	100%	Compliant					
DH-01	Bedroom 2	100	55%	39%	27%	Trees affecting compliance					
DH-02	LKD	200	61%	57%	50%	Compliant					
DH-02	Bedroom 1	100	100%	100%	100%	Compliant					
DH-02	Bedroom 2	100	49%	34%	27%	Non-compliant					
DH-03	LKD	200	88%	80%	71%	Compliant					
DH-03	Bedroom 1	100	100%	100%	99%	Compliant					
DH-03	Bedroom 2	100	55%	32%	23%	Trees affecting compliance					
DH-04	LKD	200	96%	91%	84%	Compliant					
DH-04	Bedroom 1	100	100%	100%	85%	Compliant					
DH-04	Bedroom 2	100	47%	24%	14%	Non-compliant					
DH-05	LKD	200	98%	97%	94%	Compliant					
DH-05	Bedroom 1	100	100%	100%	91%	Compliant					
DH-05	Bedroom 2	100	55%	31%	25%	Trees affecting compliance					

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

<sup>\*\*\*</sup> The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.

For floor plans of the assessed units please refer to section C.1 on page 58.



			Table No. C.3.11 -	SDA Results:	Duplex Block I	4
Unit	Room	Target	% of area (recon	a above target nmendation >509	Lux*	Compliance with BR 209 Criteria*
Number	Description	Lux*	Without Trees***	Winter**	Summer**	osmphanos wien bix 200 entena
DH-06	LKD	200	84%	77%	66%	Compliant
DH-06	Bedroom 1	100	100%	100%	88%	Compliant
DH-06	Bedroom 2	100	47%	30%	20%	Non-compliant
DH-07	Kitchen/Dining	200	100%	100%	100%	Compliant
DH-07	Living	150	100%	100%	100%	Compliant
DH-07	Bedroom 1	100	100%	100%	100%	Compliant
DH-07	Bedroom 2	100	100%	100%	100%	Compliant
DH-07	Bedroom 3	100	100%	100%	100%	Compliant
DH-08	Kitchen/Dining	200	100%	100%	100%	Compliant
DH-08	Living	150	100%	100%	100%	Compliant
DH-08	Bedroom 1	100	100%	100%	100%	Compliant
DH-08	Bedroom 2	100	100%	100%	100%	Compliant
DH-08	Bedroom 3	100	100%	100%	100%	Compliant
DH-09	Kitchen/Dining	200	100%	100%	100%	Compliant
DH-09	Living	150	100%	100%	100%	Compliant
DH-09	Bedroom 1	100	100%	100%	100%	Compliant
DH-09	Bedroom 2	100	100%	100%	100%	Compliant
DH-09	Bedroom 3	100	100%	100%	100%	Compliant
DH-10	Kitchen/Dining	200	100%	100%	100%	Compliant
DH-10	Living	150	100%	100%	100%	Compliant
DH-10	Bedroom 1	100	100%	100%	100%	Compliant
DH-10	Bedroom 2	100	100%	100%	100%	Compliant
DH-10	Bedroom 3	100	100%	100%	100%	Compliant
DH-11	Kitchen/Dining	200	100%	100%	100%	Compliant
DH-11	Living	150	100%	100%	100%	Compliant
DH-11	Bedroom 1	100	100%	100%	100%	Compliant
DH-11	Bedroom 2	100	100%	100%	100%	Compliant
DH-11	Bedroom 3	100	100%	100%	100%	Compliant
DH-12	Kitchen/Dining	200	100%	100%	100%	Compliant
DH-12	Living	150	100%	100%	100%	Compliant
DH-12	Bedroom 1	100	100%	100%	100%	Compliant
DH-12	Bedroom 2	100	100%	100%	100%	Compliant
DH-12	Bedroom 3	100	100%	100%	100%	Compliant

### C.3.12 SDA Results: Duplex Block J

	Table No. C.3.12 - SDA Results: Duplex Block J								
Unit Room	Target	% of area (recon	a above target nmendation >50%	Lux* %)	Compliance with BR 209 Criteria*				
Number	Number Description	Lux*	Without Trees***	Winter**	Summer**	'			
DJ-01	LKD	200	57%	47%	37%	Trees affecting compliance			
DJ-01	Bedroom 1	100	100%	100%	100%	Compliant			
DJ-01	Bedroom 2	100	100%	100%	100%	Compliant			

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

<sup>\*\*\*</sup> The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.



Unit	Room	Target	% of area (recon	a above target nmendation >50%	Lux*	Compliance with BR 209 Criteria*
Number	Description	Lux*	Without Trees***	Winter**	Summer**	Compliance with BR 209 Chteria
DJ-02	LKD	200	64%	55%	45%	Trees affecting compliance (summer only
DJ-02	Bedroom 1	100	100%	100%	100%	Compliant
DJ-02	Bedroom 2	100	100%	100%	100%	Compliant
DJ-03	LKD	200	74%	62%	50%	Compliant
DJ-03	Bedroom 1	100	100%	100%	100%	Compliant
DJ-03	Bedroom 2	100	100%	100%	100%	Compliant
DJ-04	LKD	200	71%	60%	48%	Trees affecting compliance (summer only
DJ-04	Bedroom 1	100	100%	100%	100%	Compliant
DJ-04	Bedroom 2	100	100%	100%	100%	Compliant
DJ-05	LKD	200	77%	66%	53%	Compliant
DJ-05	Bedroom 1	100	100%	100%	100%	Compliant
DJ-05	Bedroom 2	100	100%	100%	100%	Compliant
DJ-06	LKD	200	83%	80%	74%	Compliant
DJ-06	Bedroom 1	100	100%	100%	100%	Compliant
DJ-06	Bedroom 2	100	100%	100%	100%	Compliant
DJ-07	LKD	200	100%	100%	100%	Compliant
DJ-07	Bedroom 1	100	100%	100%	100%	Compliant
DJ-07	Bedroom 2	100	100%	100%	100%	Compliant
DJ-07	Bedroom 3	100	100%	100%	100%	Compliant
DJ-08	LKD	200	100%	100%	100%	Compliant
DJ-08	Bedroom 1	100	100%	100%	100%	Compliant
DJ-08	Bedroom 2	100	100%	100%	100%	Compliant
DJ-08	Bedroom 3	100	100%	100%	100%	Compliant
DJ-09	LKD	200	100%	100%	100%	Compliant
DJ-09	Bedroom 1	100	100%	100%	100%	Compliant
DJ-09	Bedroom 2	100	100%	100%	100%	Compliant
DJ-09	Bedroom 3	100	100%	100%	100%	Compliant
DJ-10	LKD	200	100%	100%	100%	Compliant
DJ-10	Bedroom 1	100	100%	100%	100%	Compliant
DJ-10	Bedroom 2	100	100%	100%	100%	Compliant
DJ-10	Bedroom 3	100	100%	100%	100%	Compliant
DJ-11	LKD	200	100%	100%	100%	Compliant
DJ-11	Bedroom 1	100	100%	100%	100%	Compliant
DJ-11	Bedroom 2	100	100%	100%	100%	Compliant
DJ-11	Bedroom 3	100	100%	100%	100%	Compliant
DJ-12	LKD	200	100%	100%	100%	Compliant
DJ-12	Bedroom 1	100	100%	100%	100%	Compliant
DJ-12	Bedroom 2	100	100%	100%	100%	Compliant

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

<sup>\*\*\*</sup> The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.

For floor plans of the assessed units please refer to section C.1 on page 58.



### C.3.13 SDA Results: Duplex Block K

			Table No. C.3.13 -	SDA Results:	Duplex Block	K
Unit	Room	Target	% of area (recon	a above target nmendation >50%	Lux*	Compliance with BR 209 Criteria*
Number	Description	Lux*	Without Trees***	Winter**	Summer**	
DK-01	LKD	200	100%	100%	100%	Compliant
DK-01	Bedroom 1	100	100%	100%	100%	Compliant
DK-01	Bedroom 2	100	100%	100%	100%	Compliant
DK-02	LKD	200	75%	74%	72%	Compliant
DK-02	Bedroom 1	100	100%	100%	70%	Compliant
DK-02	Bedroom 2	100	100%	100%	100%	Compliant
DK-03	LKD	200	78%	76%	73%	Compliant
DK-03	Bedroom 1	100	100%	100%	83%	Compliant
DK-03	Bedroom 2	100	100%	100%	100%	Compliant
DK-04	LKD	200	100%	100%	100%	Compliant
DK-04	Bedroom 1	100	100%	100%	100%	Compliant
DK-04	Bedroom 2	100	100%	100%	100%	Compliant
DK-05	LKD	200	100%	100%	100%	Compliant
DK-05	Bedroom 1	100	100%	100%	100%	Compliant
DK-05	Bedroom 2	100	100%	100%	100%	Compliant
DK-05	Bedroom 3	100	100%	100%	100%	Compliant
DK-06	LKD	200	100%	100%	100%	Compliant
DK-06	Bedroom 1	100	100%	100%	100%	Compliant
DK-06	Bedroom 2	100	100%	100%	100%	Compliant
DK-06	Bedroom 3	100	100%	100%	100%	Compliant
DK-07	LKD	200	100%	100%	100%	Compliant
DK-07	Bedroom 1	100	100%	100%	100%	Compliant
DK-07	Bedroom 2	100	100%	100%	100%	Compliant
DK-07	Bedroom 3	100	100%	100%	100%	Compliant
DK-08	LKD	200	100%	100%	100%	Compliant
DK-08	Bedroom 1	100	100%	100%	100%	Compliant
DK-08	Bedroom 2	100	100%	100%	100%	Compliant
DK-08	Bedroom 3	100	100%	100%	100%	Compliant

## C.3.14 SDA Results: Duplex Block L

	Table No. C.3.14 - SDA Results: Duplex Block L									
Unit	Room	Target	% of area (recon	a above target nmendation >50%	Lux* 6)	Compliance with BR 209 Criteria*				
Number	Number Description	Lux*	Without Trees***	Winter**	Summer**					
DL-01	LKD	200	60%	58%	56%	Compliant				
DL-01	Bedroom 1	100	66%	64%	63%	Compliant				
DL-01	Bedroom 2	100	100%	99%	99%	Compliant				
DL-02	LKD	200	100%	92%	86%	Compliant				
DL-02	Bedroom 1	100	100%	100%	100%	Compliant				
DL-02	Bedroom 2	100	100%	100%	94%	Compliant				

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

<sup>\*\*\*</sup> The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.



Unit Room		Target	% of area (recor	Compliance with BR 209 Criteria*		
Number	Description	Lux*	Without Trees***	Winter**	Summer**	Compliance with BR 209 Criteria.
DL-03	LKD	200	100%	79%	60%	Compliant
DL-03	Bedroom 1	100	100%	100%	100%	Compliant
DL-03	Bedroom 2	100	87%	87%	87%	Compliant
DL-04	LKD	200	100%	100%	93%	Compliant
DL-04	Bedroom 1	100	100%	100%	100%	Compliant
DL-04	Bedroom 2	100	92%	90%	90%	Compliant
DL-05	LKD	200	100%	100%	84%	Compliant
DL-05	Bedroom 1	100	100%	100%	100%	Compliant
DL-05	Bedroom 2	100	100%	100%	100%	Compliant
DL-06	LKD	200	100%	100%	100%	Compliant
DL-06	Bedroom 1	100	100%	100%	100%	Compliant
DL-06	Bedroom 2	100	97%	97%	97%	Compliant
DL-07	LKD	200	100%	100%	100%	Compliant
DL-07	Bedroom 1	100	100%	100%	100%	Compliant
DL-07	Bedroom 2	100	100%	100%	100%	Compliant
DL-08	LKD	200	100%	100%	100%	Compliant
DL-08	Bedroom 1	100	100%	100%	100%	Compliant
DL-08	Bedroom 2	100	100%	100%	100%	Compliant
DL-09	Kitchen/Dining	200	100%	100%	100%	Compliant
DL-09	Living	150	99%	98%	96%	Compliant
DL-09	Bedroom 1	100	100%	100%	100%	Compliant
DL-09	Bedroom 2	100	100%	100%	100%	Compliant
DL-09	Bedroom 3	100	100%	100%	100%	Compliant
DL-10	Kitchen/Dining	200	100%	100%	100%	Compliant
DL-10	Living	150	100%	100%	66%	Compliant
DL-10	Bedroom 1	100	100%	100%	100%	Compliant
DL-10	Bedroom 2	100	100%	100%	100%	Compliant
DL-10	Bedroom 3	100	100%	100%	100%	Compliant
DL-11	Kitchen/Dining	200	100%	100%	99%	Compliant
DL-11	Living	150	100%	100%	100%	Compliant
DL-11	Bedroom 1	100	100%	100%	100%	Compliant
DL-11	Bedroom 2	100	100%	100%	100%	Compliant
DL-11	Bedroom 3	100	100%	100%	100%	Compliant
DL-12	Kitchen/Dining	200	100%	100%	100%	Compliant
DL-12	Living	150	100%	100%	100%	Compliant
DL-12	Bedroom 1	100	100%	100%	100%	Compliant
DL-12	Bedroom 2	100	100%	100%	100%	Compliant
DL-12	Bedroom 3	100	100%	100%	100%	Compliant
DL-13	Kitchen/Dining	200	100%	100%	100%	Compliant
DL-13	Living	150	100%	100%	100%	Compliant
DL-13	Bedroom 1	100	100%	100%	100%	Compliant

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

<sup>\*\*\*</sup> The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.



			Table No. C.3.14 -	SDA Results:	Duplex Block	L
Unit	Room	Target	% of area (recon	a above target nmendation >50%	Lux*	Compliance with BR 209 Criteria*
Number	Description	Lux*	Without Trees***	Winter**	Summer**	
DL-13	Bedroom 3	100	100%	100%	100%	Compliant
DL-14	Kitchen/Dining	200	100%	100%	100%	Compliant
DL-14	Living	150	100%	100%	100%	Compliant
DL-14	Bedroom 1	100	100%	100%	100%	Compliant
DL-14	Bedroom 2	100	100%	100%	100%	Compliant
DL-14	Bedroom 3	100	100%	100%	100%	Compliant
DL-15	Kitchen/Dining	200	100%	100%	100%	Compliant
DL-15	Living	150	100%	100%	100%	Compliant
DL-15	Bedroom 1	100	100%	100%	100%	Compliant
DL-15	Bedroom 2	100	100%	100%	100%	Compliant
DL-15	Bedroom 3	100	100%	100%	100%	Compliant
DL-16	Kitchen/Dining	200	100%	100%	100%	Compliant
DL-16	Living	150	100%	100%	100%	Compliant
DL-16	Bedroom 1	100	100%	100%	100%	Compliant
DL-16	Bedroom 2	100	100%	100%	100%	Compliant
DL-16	Bedroom 3	100	100%	100%	100%	Compliant

### C.3.15 SDA Results: Duplex Block M

			Table No. C.3.15 -	SDA Results:	Duplex Block	M
Unit	Room	Target	% of area above target Lux* (recommendation >50%)			Compliance with BR 209 Criteria*
Number	Description	Lux*	Without Trees***	Winter**	Summer**	· ·
DM-01	LKD	200	100%	100%	94%	Compliant
DM-01	Bedroom 1	100	100%	100%	100%	Compliant
DM-01	Bedroom 2	100	49%	39%	34%	Non-compliant
DM-02	LKD	200	86%	84%	81%	Compliant
DM-02	Bedroom 1	100	100%	100%	100%	Compliant
DM-02	Bedroom 2	100	41%	40%	39%	Non-compliant
DM-03	LKD	200	89%	87%	85%	Compliant
DM-03	Bedroom 1	100	100%	100%	100%	Compliant
DM-03	Bedroom 2	100	44%	36%	29%	Non-compliant
DM-04	LKD	200	88%	86%	84%	Compliant
DM-04	Bedroom 1	100	100%	100%	100%	Compliant
DM-04	Bedroom 2	100	40%	30%	26%	Non-compliant
DM-05	Kitchen/Dining	200	100%	100%	100%	Compliant
DM-05	Living	150	100%	100%	100%	Compliant
DM-05	Bedroom 1	100	100%	100%	100%	Compliant
DM-05	Bedroom 2	100	100%	100%	100%	Compliant
DM-05	Bedroom 3	100	100%	100%	100%	Compliant
DM-06	Kitchen/Dining	200	100%	100%	100%	Compliant
DM-06	Living	150	100%	100%	100%	Compliant
DM-06	Bedroom 1	100	100%	100%	100%	Compliant

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

<sup>\*\*\*</sup> The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.



	Table No. C.3.15 - SDA Results: Duplex Block M									
Unit	Unit Room	Target	% of area (recon	a above target nmendation >50%	Lux*	Compliance with BR 209 Criteria*				
Number	Description	Lux*	Without Trees***	Winter**	Summer**					
DM-06	Bedroom 2	100	100%	100%	100%	Compliant				
DM-06	Bedroom 3	100	100%	100%	100%	Compliant				
DM-07	Kitchen/Dining	200	100%	100%	100%	Compliant				
DM-07	Living	150	100%	100%	100%	Compliant				
DM-07	Bedroom 1	100	100%	100%	100%	Compliant				
DM-07	Bedroom 2	100	100%	100%	100%	Compliant				
DM-07	Bedroom 3	100	100%	100%	100%	Compliant				
DM-08	Kitchen/Dining	200	100%	100%	100%	Compliant				
DM-08	Living	150	100%	100%	100%	Compliant				
DM-08	Bedroom 1	100	100%	100%	100%	Compliant				
DM-08	Bedroom 2	100	100%	100%	100%	Compliant				
DM-08	Bedroom 3	100	100%	100%	100%	Compliant				

### C.3.16 SDA Results: Duplex Block N

			Table No. C.3.16 -	SDA Results:	Duplex Block	N
Unit	Room	Target	% of area (recon	a above target nmendation >50%	Compliance with BR 209 Criteria*	
Number	Description	Lux*	Without Trees***	Winter**	Summer**	
DN-01	LKD	200	94%	68%	63%	Compliant
DN-01	Bedroom 1	100	100%	100%	100%	Compliant
DN-01	Bedroom 2	100	74%	53%	44%	Trees affecting compliance (summer only)
DN-02	LKD	200	68%	55%	52%	Compliant
DN-02	Bedroom 1	100	100%	100%	100%	Compliant
DN-02	Bedroom 2	100	64%	48%	34%	Trees affecting compliance
DN-03	LKD	200	57%	52%	49%	Trees affecting compliance (summer only)
DN-03	Bedroom 1	100	100%	100%	100%	Compliant
DN-03	Bedroom 2	100	71%	49%	30%	Trees affecting compliance
DN-04	LKD	200	67%	62%	56%	Compliant
DN-04	Bedroom 1	100	100%	100%	100%	Compliant
DN-04	Bedroom 2	100	66%	47%	31%	Trees affecting compliance
DN-05	Kitchen/Dining	200	100%	100%	100%	Compliant
DN-05	Living	150	100%	100%	100%	Compliant
DN-05	Bedroom 1	100	100%	100%	100%	Compliant
DN-05	Bedroom 2	100	100%	100%	100%	Compliant
DN-05	Bedroom 3	100	100%	100%	100%	Compliant
DN-06	Kitchen/Dining	200	100%	100%	100%	Compliant
DN-06	Living	150	100%	100%	100%	Compliant
DN-06	Bedroom 1	100	100%	100%	100%	Compliant
DN-06	Bedroom 2	100	100%	100%	100%	Compliant
DN-06	Bedroom 3	100	100%	100%	100%	Compliant
DN-07	Kitchen/Dining	200	100%	100%	100%	Compliant
DN-07	Living	150	100%	100%	100%	Compliant

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

<sup>\*\*\*</sup> The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.

For floor plans of the assessed units please refer to section C.1 on page 58.



	Table No. C.3.16 - SDA Results: Duplex Block N									
Unit	Room	Target	% of area (recon	a above target nmendation >50%	Lux*	Compliance with BR 209 Criteria*				
Number	Description	Lux*	Without Trees***	Winter**	Summer**	2000,000				
DN-07	Bedroom 1	100	100%	100%	100%	Compliant				
DN-07	Bedroom 2	100	100%	100%	100%	Compliant				
DN-07	Bedroom 3	100	100%	100%	100%	Compliant				
DN-08	Kitchen/Dining	200	100%	100%	100%	Compliant				
DN-08	Living	150	100%	100%	100%	Compliant				
DN-08	Bedroom 1	100	100%	100%	100%	Compliant				
DN-08	Bedroom 2	100	100%	100%	100%	Compliant				
DN-08	Bedroom 3	100	100%	100%	100%	Compliant				

### C.3.17 SDA Results: Duplex Block P

			Table No. C.3.17 -	SDA Results:	Duplex Block	Р
Unit	Room	Target	% of area (recon	a above target nmendation >509	Lux* %)	Compliance with BR 209 Criteria*
Number	Description	Lux*	Without Trees***	Winter**	Summer**	·
DP-01	LKD	200	72%	67%	66%	Compliant
DP-01	Bedroom 1	100	100%	100%	100%	Compliant
DP-01	Bedroom 2	100	40%	24%	17%	Non-compliant
DP-02	LKD	200	80%	70%	64%	Compliant
DP-02	Bedroom 1	100	100%	100%	100%	Compliant
DP-02	Bedroom 2	100	43%	31%	22%	Non-compliant
DP-03	LKD	200	89%	81%	71%	Compliant
DP-03	Bedroom 1	100	100%	100%	100%	Compliant
DP-03	Bedroom 2	100	39%	33%	33%	Non-compliant
DP-04	LKD	200	99%	92%	82%	Compliant
DP-04	Bedroom 1	100	100%	100%	100%	Compliant
DP-04	Bedroom 2	100	100%	100%	100%	Compliant
DP-05	LKD	200	100%	98%	85%	Compliant
DP-05	Bedroom 1	100	100%	100%	100%	Compliant
DP-05	Bedroom 2	100	100%	100%	35%	Trees affecting compliance (summer only)
DP-06	Kitchen/Dining	200	100%	100%	100%	Compliant
DP-06	Living	150	100%	100%	100%	Compliant
DP-06	Bedroom 1	100	100%	100%	100%	Compliant
DP-06	Bedroom 2	100	100%	100%	100%	Compliant
DP-06	Bedroom 3	100	100%	100%	100%	Compliant
DP-07	Kitchen/Dining	200	100%	100%	100%	Compliant
DP-07	Living	150	100%	100%	100%	Compliant
DP-07	Bedroom 1	100	100%	100%	100%	Compliant
DP-07	Bedroom 2	100	100%	100%	100%	Compliant
DP-07	Bedroom 3	100	100%	100%	100%	Compliant
DP-08	Kitchen/Dining	200	100%	100%	100%	Compliant
DP-08	Living	150	100%	100%	100%	Compliant
DP-08	Bedroom 1	100	100%	100%	100%	Compliant

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

<sup>\*\*\*</sup> The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.

For floor plans of the assessed units please refer to section C.1 on page 58.



			Table No. C.3.17 -	SDA Results:	Duplex Block	P
Unit	Room	Target	% of area (recon	a above target nmendation >50%	Lux* 6)	Compliance with BR 209 Criteria*
Number	Description	Lux*	Without Trees***	Winter**	Summer**	
DP-08	Bedroom 2	100	100%	100%	100%	Compliant
DP-08	Bedroom 3	100	100% 100% 100%		Compliant	
DP-09	Kitchen/Dining	200	100% 100% 100%		Compliant	
DP-09	Living	150	100%	100%	99%	Compliant
DP-09	Bedroom 1	100	100%	100%	100%	Compliant
DP-09	Bedroom 2	100	100%	100%	100%	Compliant
DP-09	Bedroom 3	100	100%	100%	100%	Compliant
DP-10	Kitchen/Dining	200	100%	100%	100%	Compliant
DP-10	Living	150	100%	100%	98%	Compliant
DP-10	Bedroom 1	100	100%	100%	100%	Compliant
DP-10	Bedroom 2	100	100% 100% 100%		100%	Compliant
DP-10	Bedroom 3	100	100%	100%	100%	Compliant

# C.3.18 SDA Results: Duplex Block Q

			Table No. C.3.18 -	SDA Results:	Duplex Block	Q
Unit	Room	Target	% of area (recon	a above target nmendation >50%	Lux* 6)	Compliance with BR 209 Criteria*
Number	Description	Lux*	Without Trees***	Winter**	Summer**	,
DQ-01	LKD	200	100%	100%	98%	Compliant
DQ-01	Bedroom 1	100	100%	100%	100%	Compliant
DQ-01	Bedroom 2	100	100%	100%	100%	Compliant
DQ-02	LKD	200	100%	93%	78%	Compliant
DQ-02	Bedroom 1	100	100%	100%	100%	Compliant
DQ-02	Bedroom 2	100	100%	100%	99%	Compliant
DQ-03	LKD	200	82%	76%	64%	Compliant
DQ-03	Bedroom 1	100	100%	100%	100%	Compliant
DQ-03	Bedroom 2	100	100%	100%	100%	Compliant
DQ-04	LKD	200	82%	80%	77%	Compliant
DQ-04	Bedroom 1	100	100%	100%	100%	Compliant
DQ-04	Bedroom 2	100	100%	100%	100%	Compliant
DQ-05	Kitchen/Dining	200	100%	100%	100%	Compliant
DQ-05	Living	150	100%	100%	100%	Compliant
DQ-05	Bedroom 1	100	100%	100%	100%	Compliant
DQ-05	Bedroom 2	100	100%	100%	100%	Compliant
DQ-05	Bedroom 3	100	100%	100%	100%	Compliant
DQ-06	Kitchen/Dining	200	100%	100%	100%	Compliant
DQ-06	Living	150	100%	96%	80%	Compliant
DQ-06	Bedroom 1	100	100%	100%	100%	Compliant
DQ-06	Bedroom 2	100	100%	100%	100%	Compliant
DQ-06	Bedroom 3	100	100%	100%	100%	Compliant
DQ-07	LKD	200	100%	100%	100%	Compliant
DQ-07	Bedroom 1	100	100%	100%	100%	Compliant

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

<sup>\*\*\*</sup> The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.



			Table No. C.3.18 -	SDA Results:	Duplex Block	Q
Unit		Target	% of area (recon	a above target nmendation >50%	Lux* %)	Compliance with BR 209 Criteria*
Number	Description	Lux*	Without Trees***	Winter**	Summer**	
DQ-07	Bedroom 2	100	100% 100% 100%		Compliant	
DQ-07	Bedroom 3	100	100% 100% 10		100%	Compliant
DQ-08	LKD	200	100%	100%	100%	Compliant
DQ-08	Bedroom 1	100	100% 100% 100%		100%	Compliant
DQ-08	Bedroom 2	100	100% 100% 100%		100%	Compliant
DQ-08	Bedroom 3	100	100%	100%	100%	Compliant

### C.3.19 SDA Results: Duplex Block R

			Table No. C.3.19 -	SDA Results:	Duplex Block	R
Unit	Room	Target	% of area (recon	a above target nmendation >50%	Lux* 6)	Compliance with BR 209 Criteria*
Number	Description	Lux*	Without Trees***	Winter**	Summer**	
DR-01	LKD	200	99%	86%	76%	Compliant
DR-01	Bedroom 1	100	100%	100%	100%	Compliant
DR-01	Bedroom 2	100	100%	100%	100%	Compliant
DR-02	LKD	200	99%	93%	85%	Compliant
DR-02	Bedroom 1	100	100%	100%	100%	Compliant
DR-02	Bedroom 2	100	100%	100%	100%	Compliant
DR-03	LKD	200	97%	89%	80%	Compliant
DR-03	Bedroom 1	100	100%	100%	100%	Compliant
DR-03	Bedroom 2	100	100%	100%	100%	Compliant
DR-04	LKD	200	95%	86%	82%	Compliant
DR-04	Bedroom 1	100	100%	100%	100%	Compliant
DR-04	Bedroom 2	100	100%	100%	100%	Compliant
DR-05	LKD	200	89%	83%	77%	Compliant
DR-05	Bedroom 1	100	100%	100%	100%	Compliant
DR-05	Bedroom 2	100	100%	100%	100%	Compliant
DR-06	LKD	200	100%	100%	100%	Compliant
DR-06	Bedroom 1	100	100%	100%	100%	Compliant
DR-06	Bedroom 2	100	100%	100%	100%	Compliant
DR-07	Kitchen/Dining	200	100%	100%	100%	Compliant
DR-07	Living	150	100%	100%	100%	Compliant
DR-07	Bedroom 1	100	100%	100%	100%	Compliant
DR-07	Bedroom 2	100	100%	100%	100%	Compliant
DR-07	Bedroom 3	100	100%	100%	100%	Compliant
DR-08	Kitchen/Dining	200	100%	100%	100%	Compliant
DR-08	Living	150	100%	100%	100%	Compliant
DR-08	Bedroom 1	100	100%	100%	100%	Compliant
DR-08	Bedroom 2	100	100%	100%	100%	Compliant
DR-08	Bedroom 3	100	100%	100%	100%	Compliant
DR-09	Kitchen/Dining	200	100%	100%	100%	Compliant
DR-09	Living	150	100%	100%	100%	Compliant

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

<sup>\*\*\*</sup> The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.

For floor plans of the assessed units please refer to section C.1 on page 58.



			Table No. C.3.19 -	SDA Results:	Duplex Block	R
Unit	Room	Target	% of area (recon	a above target nmendation >50%	Lux* 6)	Compliance with BR 209 Criteria*
Number	Description	Lux*	Without Trees***	Winter**	Summer**	
DR-09	Bedroom 1	100	100%	100%	100%	Compliant
DR-09	Bedroom 2	100	100%	100%	100%	Compliant
DR-09	Bedroom 3	100	100%	100%	100%	Compliant
DR-10	Kitchen/Dining	200	100%	100%	100%	Compliant
DR-10	Living	150	100%	100%	100%	Compliant
DR-10	Bedroom 1	100	100%	100%	100%	Compliant
DR-10	Bedroom 2	100	100%	100%	100%	Compliant
DR-10	Bedroom 3	100	100%	100%	100%	Compliant
DR-11	Kitchen/Dining	200	100%	100%	100%	Compliant
DR-11	Living	150	100%	100%	100%	Compliant
DR-11	Bedroom 1	100	100%	100%	100%	Compliant
DR-11	Bedroom 2	100	100%	100%	100%	Compliant
DR-11	Bedroom 3	100	100%	100%	100%	Compliant
DR-12	Kitchen/Dining	200	100%	100%	100%	Compliant
DR-12	Living	150	100%	100%	100%	Compliant
DR-12	Bedroom 1	100	100%	100%	100%	Compliant
DR-12	Bedroom 2	100	100%	100%	100%	Compliant
DR-12	Bedroom 3	100	100%	100%	100%	Compliant

### **C.3.20SDA Results: Duplex Block S**

			Table No. C.3.20 -	SDA Results	: Duplex Block	S
Unit	Room	Target	% of area (recon	a above target nmendation >509	Lux* %)	Compliance with BR 209 Criteria*
Number	Description	Lux*	Without Trees***	Winter**	Summer**	
DS-01	LKD	200	93%	90%	88%	Compliant
DS-01	Bedroom 1	100	100%	100%	100%	Compliant
DS-01	Bedroom 2	100	100%	100%	100%	Compliant
DS-02	LKD	200	99%	99%	98%	Compliant
DS-02	Bedroom 1	100	100%	100%	100%	Compliant
DS-02	Bedroom 2	100	100%	100%	100%	Compliant
DS-03	LKD	200	100%	100%	100%	Compliant
DS-03	Bedroom 1	100	100%	100%	93%	Compliant
DS-04	LKD	200	100%	100%	99%	Compliant
DS-04	Bedroom 1	100	100%	100%	100%	Compliant
DS-05	LKD	200	100%	100%	100%	Compliant
DS-05	Bedroom 1	100	100%	100%	100%	Compliant
DS-06	LKD	200	100%	100%	97%	Compliant
DS-06	Bedroom 1	100	100%	100%	100%	Compliant
DS-07	LKD	200	100%	100%	99%	Compliant
DS-07	Bedroom 1	100	100%	100%	100%	Compliant
DS-08	LKD	200	100%	100%	99%	Compliant
DS-08	Bedroom 1	100	100%	100%	83%	Compliant

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

<sup>\*\*\*</sup> The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.



Unit	Room	Target	% of area	above target	Lux*	
Number	Description	Lux*	Without Trees***	Winter**	Summer**	Compliance with BR 209 Criteria*
DS-09	Kitchen/Dining	200	100%	100%	100%	Compliant
DS-09	Living	150	100%	100%	100%	Compliant
DS-09	Bedroom 1	100	100%	100%	100%	Compliant
DS-09	Bedroom 2	100	100%	100%	100%	Compliant
DS-09	Bedroom 3	100	100%	100%	100%	Compliant
DS-10	Kitchen/Dining	200	100%	100%	100%	Compliant
DS-10	Living	150	100%	100%	100%	Compliant
DS-10	Bedroom 1	100	100%	100%	100%	Compliant
DS-10	Bedroom 2	100	100%	100%	100%	Compliant
DS-10	Bedroom 3	100	100%	100%	100%	Compliant
DS-11	Kitchen/Dining	200	100%	100%	100%	Compliant
DS-11	Living	150	100%	100%	100%	Compliant
DS-11	Bedroom 1	100	100%	100%	100%	Compliant
DS-11	Bedroom 2	100	100%	100%	100%	Compliant
DS-12	Kitchen/Dining	200	100%	100%	100%	Compliant
DS-12	Living	150	100%	100%	100%	Compliant
DS-12	Bedroom 1	100	100%	100%	100%	Compliant
DS-12	Bedroom 2	100	100%	100%	100%	Compliant
DS-13	Kitchen/Dining	200	100%	100%	100%	Compliant
DS-13	Living	150	100%	100%	100%	Compliant
DS-13	Bedroom 1	100	100%	100%	100%	Compliant
DS-13	Bedroom 2	100	100%	100%	100%	Compliant
DS-14	Kitchen/Dining	200	100%	100%	100%	Compliant
DS-14	Living	150	100%	100%	100%	Compliant
DS-14	Bedroom 1	100	100%	100%	100%	Compliant
DS-14	Bedroom 2	100	100%	100%	100%	Compliant
DS-15	Kitchen/Dining	200	100%	100%	100%	Compliant
DS-15	Living	150	100%	100%	100%	Compliant
DS-15	Bedroom 1	100	100%	100%	100%	Compliant
DS-15	Bedroom 2	100	100%	100%	100%	Compliant
DS-16	Kitchen/Dining	200	100%	100%	100%	Compliant
DS-16	Living	150	100%	100%	100%	Compliant
DS-16	Bedroom 1	100	100%	100%	100%	Compliant
DS-16	Bedroom 2	100	100%	100%	100%	Compliant

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

\*\*\* The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.

For floor plans of the assessed units please refer to section C.1 on page 58.



### **C.3.21 SDA Results: Duplex Block T**

			Table No. C.3.21 -		<u>.</u>	. 1
Unit	Room	Target	% of area (recon	a above target nmendation >509	Lux* 6)	Compliance with BR 209 Criteria*
Number	Description	Lux*	Without Trees***	Winter**	Summer**	
DT-01	LKD	200	100%	53%	29%	Trees affecting compliance (summer only
DT-01	Bedroom 1	100	100%	100%	100%	Compliant
DT-01	Bedroom 2	100	31%	29%	25%	Non-compliant
DT-02	LKD	200	98%	56%	36%	Trees affecting compliance (summer only
DT-02	Bedroom 1	100	100%	100%	100%	Compliant
DT-02	Bedroom 2	100	40%	33%	23%	Non-compliant
DT-03	LKD	200	96%	61%	41%	Trees affecting compliance (summer only
DT-03	Bedroom 1	100	100%	100%	100%	Compliant
DT-03	Bedroom 2	100	43%	39%	34%	Non-compliant
DT-04	LKD	200	92%	66%	56%	Compliant
DT-04	Bedroom 1	100	100%	100%	100%	Compliant
DT-04	Bedroom 2	100	54%	47%	40%	Trees affecting compliance
DT-05	Kitchen/Dining	200	100%	100%	100%	Compliant
DT-05	Living	150	100%	100%	100%	Compliant
DT-05	Bedroom 1	100	100%	100%	100%	Compliant
DT-05	Bedroom 2	100	100%	100%	100%	Compliant
DT-05	Bedroom 3	100	100%	100%	100%	Compliant
DT-06	Kitchen/Dining	200	100%	100%	100%	Compliant
DT-06	Living	150	100%	100%	100%	Compliant
DT-06	Bedroom 1	100	100%	100%	100%	Compliant
DT-06	Bedroom 2	100	100%	100%	100%	Compliant
DT-06	Bedroom 3	100	100%	100%	100%	Compliant
DT-07	Kitchen/Dining	200	100%	100%	100%	Compliant
DT-07	Living	150	100%	100%	100%	Compliant
DT-07	Bedroom 1	100	100%	100%	100%	Compliant
DT-07	Bedroom 2	100	100%	100%	100%	Compliant
DT-07	Bedroom 3	100	100%	100%	100%	Compliant
DT-08	Kitchen/Dining	200	100%	100%	100%	Compliant
DT-08	Living	150	100%	100%	100%	Compliant
DT-08	Bedroom 1	100	100%	100%	100%	Compliant
DT-08	Bedroom 2	100	100%	100%	100%	Compliant
DT-08	Bedroom 3	100	100%	100%	100%	Compliant

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

<sup>\*\*\*</sup> The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.

For floor plans of the assessed units please refer to section C.1 on page 58.



### C.3.22 SDA Results: Duplex Block U

			Table No. C.3.22 -	SDA Results	Duplex Block	. U
Unit	Room	Target	% of area (recon	a above target nmendation >50%	Lux* %)	Compliance with BR 209 Criteria*
Number	Description	Lux*	Without Trees***	Winter**	Summer**	'
DU-01	LKD	200	100%	69%	53%	Compliant
DU-01	Bedroom 1	100	100%	100%	100%	Compliant
DU-02	LKD	200	100%	71%	54%	Compliant
DU-02	Bedroom 1	100	100%	100%	100%	Compliant
DU-03	LKD	200	100%	60%	46%	Trees affecting compliance (summer only)
DU-03	Bedroom 1	100	100%	100%	100%	Compliant
DU-04	LKD	200	100%	62%	48%	Trees affecting compliance (summer only)
DU-04	Bedroom 1	100	100%	100%	100%	Compliant
DU-05	LKD	200	100%	100%	100%	Compliant
DU-05	Bedroom 1	100	100%	100%	100%	Compliant
DU-06	LKD	200	100%	100%	100%	Compliant
DU-06	Bedroom 1	100	100%	100%	100%	Compliant
DU-06	Bedroom 2	100	100%	100%	100%	Compliant
DU-07	LKD	200	100%	100%	100%	Compliant
DU-07	Bedroom 1	100	100%	100%	100%	Compliant
DU-07	Bedroom 2	100	100%	100%	100%	Compliant
DU-08	LKD	200	100%	100%	100%	Compliant
DU-08	Bedroom 1	100	100%	100%	100%	Compliant
DU-08	Bedroom 2	100	100%	100%	100%	Compliant
DU-09	LKD	200	100%	100%	100%	Compliant
DU-09	Bedroom 1	100	100%	100%	100%	Compliant
DU-09	Bedroom 2	100	100%	100%	100%	Compliant
DU-10	LKD	200	100%	100%	100%	Compliant
DU-10	Bedroom 1	100	100%	100%	100%	Compliant
DU-10	Bedroom 2	100	100%	100%	100%	Compliant

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Under the BR 209 study the SDA has been calculated with trees represented with both winter and summer foliage.

<sup>\*\*\*</sup> The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 23.

For floor plans of the assessed units please refer to section C.1 on page 58.



### C.4 Sunlight Exposure (SE) in Proposed Units

Below is an example of the table used to describe the SE performance of proposed habitable rooms.

	Table Example. C.4 - Scheme Performance Sunlight Exposure										
		Deciduo	us Trees as Opa	que Objects	Without Deciduous Trees						
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st	Unit compliance based on highest performing room	SE Hours on March 21st	Level of SE on March 21st	Unit compliance based on highest performing room				
Α	В	С	D	E	F	G	Н				

#### A: Unit Number

This column identifies the assessed unit. All unit numbers are determined by the architect's drawings, unless otherwise stated.

#### **B:** Room Description

Room Description details which room of the unit has been assessed, e.g. bedroom, living room, etc.

#### C: SE Hours on March 21st (Deciduous Trees as Opaque Objects)

This column will state the number of hours the assessed room can expect to receive on March 21st with the assessment carried out with deciduous trees as opaque objects.

#### D: Level of SE on March 21st (Deciduous Trees as Opaque Objects)

BR 209 recommends a minimum sunlight exposure of 1.5 hours for a proposed unit with preference given to main living rooms. BR 209 categorise sunlight exposure as minimum, medium and high, this column will categorise the level of sunlight exposure with deciduous trees as opaque objects based on the following:

- · Less than 1.5 hours: Below minimum,
- Between 1.5 hours and 3 hours: Minimum
- · Between 3 hours and 4 hours: Medium
- More than 4 hours: High

#### E: Unit compliance based on highest performing room (Deciduous Trees as Opaque Objects)

A proposed unit is considered to be compliant provided any habitable room within the unit is capable of receiving at least 1.5 hours of sunlight on the assessment date. This column will identify the highest performing room within a unit and state compliance for the associated unit based on that room with the assessment carried out with deciduous trees as opaque objects.

Typically unit compliance will be stated for the best performing room per unit only, with lesser performing rooms indicated with a dash (-).

#### F: SE Hours on March 21st (Without Deciduous Trees)

This column will state the number of hours the assessed room can expect to receive on March 21st with the assessment carried out without deciduous trees.

#### G: Level of SE on March 21st (Without Deciduous Trees)

BR 209 recommends a minimum sunlight exposure of 1.5 hours for a proposed unit with preference given to main living rooms. BR 209 categorise sunlight exposure as minimum, medium and high, this column will categorise the level of sunlight exposure without deciduous trees using the same criteria as the study with deciduous trees as opaque objects.

#### H: Unit compliance based on highest performing room (Without Deciduous Trees)

A proposed unit is considered to be compliant provided any habitable room within the unit is capable of receiving at least 1.5 hours of sunlight on March 21st. This column will identify the highest performing room within a unit and state compliance for the associated unit based on that room with the assessment carried out without deciduous trees. Typically only one room per unit will be populated in this column, with lesser performing rooms indicated with a dash (-).

It should be noted that the figures displayed in the table of results have been rounded off. A manual calculation of these figures may yield a negligible difference and should not be considered an error.



### C.4.1 SE Results: Block 01

		Decid	ious Trees as Op	paque Objects*	Without Deciduous Trees*			
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	
B1-01	LKD	1.90	Minimum	Compliant	2.50	Minimum	-	
B1-01	Bedroom 1	0.90	Below Minimum	-	2.60	Minimum	-	
B1-01	Bedroom 2	1.30	Below Minimum	-	3.50	Medium	Compliant	
B1-01	Bedroom 3	0.40	Below Minimum	-	3.50	Medium	-	
B1-02	LKD	1.70	Minimum	-	1.70	Minimum	-	
B1-02	Bedroom 1	2.00	Minimum	Compliant	2.00	Minimum	Compliant	
B1-03	LKD	2.20	Minimum	Compliant	4.00	High	Compliant	
B1-03	Bedroom 1	0.40	Below Minimum	-	3.50	Medium	-	
B1-04	LKD	2.60	Minimum	Compliant	4.70	High	Compliant	
B1-04	Bedroom 1	2.50	Minimum	-	2.50	Minimum	-	
B1-04	Bedroom 2	1.10	Below Minimum	-	1.10	Below Minimum	-	
B1-04	Bedroom 3	1.30	Below Minimum	-	2.50	Minimum	-	
B1-05	LKD	0.70	Below Minimum	-	2.90	Minimum	-	
B1-05	Bedroom 1	1.70	Minimum	-	3.00	Medium	Compliant	
B1-05	Bedroom 2	3.00	Medium	Compliant	3.00	Medium	-	
B1-05	Bedroom 3	2.30	Minimum	-	3.00	Medium	_	
B1-06	LKD	4.10	High	Compliant	4.10	High	Compliant	
B1-06	Bedroom 1	1.50	Minimum	-	3.00	Medium	-	
B1-07	LKD	0.40	Below Minimum	-	2.30	Minimum	Compliant	
B1-07	Bedroom 1	2.30	Minimum	Compliant	2.30	Minimum	-	
B1-07	LKD	2.20	Minimum	Compliant	2.20	Minimum	_	
B1-08	Bedroom 1	1.90	Minimum	-	3.00	Medium	Compliant	
B1-08	Bedroom 2	1.70	Minimum	-	3.00	Medium	- Compilant	
B1-08	Bedroom 3	0.30	Below Minimum	-	2.40	Minimum	-	
	LKD			-				
B1-09		2.30	Minimum	Committee	2.30	Minimum	- Committeet	
B1-09	Bedroom 1	3.50	Medium	Compliant	3.50	Medium	Compliant	
B1-09	Bedroom 2	3.50	Medium	-	3.50	Medium	-	
B1-09	Bedroom 3	2.10	Minimum	-	3.50	Medium	-	
B1-10	LKD	1.70	Minimum	-	1.70	Minimum	-	
B1-10	Bedroom 1	2.30	Minimum	Compliant	2.30	Minimum	Compliant	
B1-11	LKD	4.00	High	Compliant	4.00	High	Compliant	
B1-11	Bedroom 1	3.50	Medium	-	3.50	Medium	-	
B1-12	LKD	4.70	High	Compliant	4.70	High	Compliant	
B1-12	Bedroom 1	2.20	Minimum	-	2.20	Minimum	-	
B1-12	Bedroom 2	1.10	Below Minimum	-	1.10	Below Minimum	-	
B1-12	Bedroom 3	2.20	Minimum	-	2.20	Minimum	-	
B1-13	LKD	2.80	Minimum	-	2.90	Minimum	-	
B1-13	Bedroom 1	2.80	Minimum	-	3.00	Medium	Compliant	
B1-13	Bedroom 2	3.00	Medium	Compliant	3.00	Medium	-	
B1-13	Bedroom 3	3.00	Medium	-	3.00	Medium	-	

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

<sup>\*\*</sup> The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

<sup>\*\*\*</sup> For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13. For floor plans of the assessed units please refer to section C.1 on page 58.



		Decidu	ous Trees as Op	aque Objects*	\ \	/ithout Deciduc	ous Trees*
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit complianc based on highest performing room**
B1-14	LKD	2.20	Minimum	-	2.30	Minimum	-
B1-14	Bedroom 1	3.00	Medium	Compliant	3.00	Medium	Compliant
B1-14	Bedroom 2	3.00	Medium	-	3.00	Medium	-
B1-15	LKD	2.10	Minimum	Compliant	2.10	Minimum	Compliant
B1-15	Bedroom 1	2.10	Minimum	-	2.10	Minimum	-
B1-16	LKD	1.70	Minimum	-	2.00	Minimum	-
B1-16	Bedroom 1	2.70	Minimum	-	3.00	Medium	Compliant
B1-16	Bedroom 2	3.00	Medium	Compliant	3.00	Medium	-
B1-16	Bedroom 3	2.40	Minimum	-	2.40	Minimum	-
B1-17	LKD	2.30	Minimum	-	2.30	Minimum	-
B1-17	Bedroom 1	3.50	Medium	Compliant	3.50	Medium	Compliant
B1-17	Bedroom 2	3.50	Medium	-	3.50	Medium	-
B1-17	Bedroom 3	3.50	Medium	-	3.50	Medium	-
B1-18	LKD	1.70	Minimum	-	1.70	Minimum	-
B1-18	Bedroom 1	2.30	Minimum	Compliant	2.30	Minimum	Compliant
B1-19	LKD	4.00	High	Compliant	4.00	High	Compliant
B1-19	Bedroom 1	3.50	Medium	-	3.50	Medium	-
B1-20	LKD	4.70	High	Compliant	4.70	High	Compliant
B1-20	Bedroom 1	2.20	Minimum	-	2.20	Minimum	-
B1-20	Bedroom 2	1.10	Below Minimum	-	1.10	Below Minimum	-
B1-20	Bedroom 3	2.20	Minimum	-	2.20	Minimum	-
B1-21	LKD	2.90	Minimum	-	2.90	Minimum	_
B1-21	Bedroom 1	3.00	Medium	Compliant	3.00	Medium	Compliant
B1-21	Bedroom 2	3.00	Medium	-	3.00	Medium	-
B1-21	Bedroom 3	3.00	Medium	_	3.00	Medium	_
B1-22	LKD	2.30	Minimum	_	2.30	Minimum	_
B1-22	Bedroom 1	3.00	Medium	Compliant	3.00	Medium	Compliant
B1-22	Bedroom 2	3.00	Medium	-	3.00	Medium	-
B1-23	LKD	2.10	Minimum	Compliant	2.10	Minimum	Compliant
B1-23	Bedroom 1	2.10	Minimum	-	2.10	Minimum	-
B1-24	LKD	2.00	Minimum	_	2.00	Minimum	_
B1-24	Bedroom 1	3.00	Medium	Compliant	3.00	Medium	Compliant
B1-24	Bedroom 2	3.00	Medium	Compliant	3.00	Medium	- Compilant
B1-24	Bedroom 3	2.40	Minimum	-	2.40	Minimum	
B1-24 B1-25	LKD	4.00		Compliant	4.00		
			High	Compliant		High	Compliant
B1-25	Bedroom 1	3.50	Medium	-	3.50	Medium	-
B1-25	Bedroom 2	3.50	Medium	-	3.50	Medium	-
B1-25	Bedroom 3	3.50	Medium	-	3.50	Medium	-
B1-26	LKD	1.70	Minimum	-	1.70	Minimum	-
B1-26	Bedroom 1	3.50	Medium	Compliant	3.50	Medium	Compliant
B1-27	LKD	4.00	High	Compliant	4.00	High	Compliant

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

<sup>\*\*</sup> The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

<sup>\*\*\*</sup> For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13. For floor plans of the assessed units please refer to section C.1 on page 58.



		Table	 No. C.4.1 - Sunlig	ght Exposure Resul	ts: Block 01			
		Decidu	ious Trees as Op	paque Objects*	Without Deciduous Trees*			
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	
B1-28	LKD	8.80	High	Compliant	8.80	High	Compliant	
B1-28	Bedroom 1	3.50	Medium	-	3.50	Medium	-	
B1-28	Bedroom 2	1.10	Below Minimum	-	1.10	Below Minimum	-	
B1-28	Bedroom 3	2.80	Minimum	-	2.80	Minimum	-	
B1-29	LKD	4.70	High	Compliant	4.70	High	Compliant	
B1-29	Bedroom 1	3.00	Medium	-	3.00	Medium	-	
B1-29	Bedroom 2	3.00	Medium	-	3.00	Medium	-	
B1-29	Bedroom 3	3.00	Medium	-	3.00	Medium	-	
B1-30	LKD	4.10	High	Compliant	4.10	High	Compliant	
B1-30	Bedroom 1	3.00	Medium	-	3.00	Medium	-	
B1-30	Bedroom 2	3.00	Medium	-	3.00	Medium	-	
B1-31	LKD	3.60	Medium	Compliant	3.60	Medium	Compliant	
B1-31	Bedroom 1	3.00	Medium	-	3.00	Medium	-	
B1-32	LKD	3.60	Medium	Compliant	3.60	Medium	Compliant	
B1-32	Bedroom 1	3.00	Medium	-	3.00	Medium	-	
B1-32	Bedroom 2	3.00	Medium	-	3.00	Medium	-	
B1-32	Bedroom 3	2.40	Minimum	-	2.40	Minimum	-	

### C.4.2 SE Results: Block 02

		Table 1	No. C.4.2 - Sunlig	ght Exposure Resu	lts: Block 02	2		
			ious Trees as Op		Without Deciduous Trees*			
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	
B2-01	LKD	8.20	High	Compliant	9.40	High	Compliant	
B2-01	Bedroom 1	1.10	Below Minimum	-	4.20	High	-	
B2-01	Bedroom 2	3.00	Medium	-	3.00	Medium	-	
B2-01	Bedroom 3	3.00	Medium	-	3.00	Medium	-	
B2-02	LKD	2.40	Minimum	Compliant	2.40	Minimum	Compliant	
B2-02	Bedroom 1	1.70	Minimum	-	1.70	Minimum	-	
B2-03	LKD	2.60	Minimum	-	2.60	Minimum	-	
B2-03	Bedroom 1	3.00	Medium	Compliant	3.00	Medium	Compliant	
B2-04	LKD	4.70	High	Compliant	4.70	High	Compliant	
B2-04	Bedroom 1	1.00	Below Minimum	-	4.20	High	-	
B2-04	Bedroom 2	3.00	Medium	-	3.00	Medium	-	
B2-04	Bedroom 3	3.00	Medium	-	3.00	Medium	-	
B2-05	LKD	1.30	Below Minimum	-	1.50	Minimum	-	
B2-05	Bedroom 1	1.40	Below Minimum	Non-Compliant	1.60	Minimum	-	
B2-05	Bedroom 2	1.10	Below Minimum	-	2.20	Minimum	Compliant	
B2-05	Bedroom 3	0.90	Below Minimum	-	2.20	Minimum	-	
B2-06	LKD	0.90	Below Minimum	-	0.90	Below Minimum	-	
B2-06	Bedroom 1	1.10	Below Minimum	Non-Compliant	1.20	Below Minimum	Non-Compliant	

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

<sup>\*\*</sup> The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

<sup>\*\*\*</sup> For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13. For floor plans of the assessed units please refer to section C.1 on page 58.



	T			ght Exposure Resu			
		Deciduous Trees as Opaque Objects*				/ithout Deciduo	us Trees*
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
B2-07	LKD	1.70	Minimum	Compliant	2.10	Minimum	Compliant
B2-07	Bedroom 1	1.10	Below Minimum	-	1.50	Minimum	-
B2-08	LKD	7.30	High	Compliant	8.00	High	Compliant
B2-08	Bedroom 1	2.00	Minimum	-	2.00	Minimum	-
B2-08	Bedroom 2	1.70	Minimum	-	1.70	Minimum	1
B2-08	Bedroom 3	1.40	Below Minimum	-	1.40	Below Minimum	-
B2-09	LKD	9.10	High	Compliant	9.40	High	Compliant
B2-09	Bedroom 1	4.20	High	-	4.20	High	-
B2-09	Bedroom 2	2.70	Minimum	-	2.70	Minimum	-
B2-09	Bedroom 3	2.70	Minimum	-	2.70	Minimum	-
B2-10	LKD	3.80	Medium	-	3.80	Medium	-
B2-10	Bedroom 1	4.20	High	Compliant	4.20	High	Compliant
B2-11	LKD	2.60	Minimum	-	2.60	Minimum	-
B2-11	Bedroom 1	2.70	Minimum	Compliant	2.70	Minimum	Compliant
B2-12	LKD	4.70	High	Compliant	4.70	High	Compliant
B2-12	Bedroom 1	4.20	High	-	4.20	High	-
B2-12	Bedroom 2	2.70	Minimum	-	2.70	Minimum	-
B2-12	Bedroom 3	2.70	Minimum	-	2.70	Minimum	-
B2-13	LKD	1.50	Minimum	-	1.50	Minimum	-
B2-13	Bedroom 1	2.20	Minimum	Compliant	2.20	Minimum	Compliant
B2-13	Bedroom 2	2.20	Minimum	-	2.20	Minimum	-
B2-13	Bedroom 3	2.20	Minimum	-	2.20	Minimum	-
B2-14	LKD	1.50	Minimum	-	1.50	Minimum	-
B2-14	Bedroom 1	2.20	Minimum	Compliant	2.20	Minimum	Compliant
B2-14	Bedroom 2	1.40	Below Minimum	-	1.40	Below Minimum	<u> </u>
B2-15	LKD	2.70	Minimum	Compliant	2.70	Minimum	Compliant
B2-15	Bedroom 1	2.20	Minimum	-	2.20	Minimum	-
B2-16	LKD	7.40	High	Compliant	8.00	High	Compliant
B2-16	Bedroom 1	2.20	Minimum	-	2.20	Minimum	-
B2-16	Bedroom 2	1.50	Minimum	-	1.50	Minimum	-
B2-16	Bedroom 3	1.50	Minimum	-	1.50	Minimum	-
B2-17	LKD	9.20	High	Compliant	9.40	High	Compliant
B2-17	Bedroom 1	4.20	High	-	4.20	High	<u> </u>
B2-17	Bedroom 2	3.20	Medium	-	3.20	Medium	-
B2-17	Bedroom 3	2.70	Minimum	-	2.70	Minimum	-
B2-18	LKD	3.80	Medium	-	3.80	Medium	_
B2-18	Bedroom 1	4.20	High	Compliant	4.20	High	Compliant
B2-19	LKD	2.60	Minimum	-	2.60	Minimum	-
B2-19	Bedroom 1	2.70	Minimum	Compliant	2.70	Minimum	Compliant

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

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<sup>\*\*</sup> The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

<sup>\*\*\*</sup> For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13. For floor plans of the assessed units please refer to section C.1 on page 58.



				ght Exposure Resul	1		
	Room		ous Trees as Op			/ithout Deciduo	Ī
Unit Number	Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
B2-20	LKD	4.70	High	Compliant	4.70	High	Compliant
B2-20	Bedroom 1	4.20	High	-	4.20	High	-
B2-20	Bedroom 2	2.70	Minimum	-	2.70	Minimum	-
B2-20	Bedroom 3	2.70	Minimum	-	2.70	Minimum	-
B2-21	LKD	1.50	Minimum	-	1.50	Minimum	-
B2-21	Bedroom 1	2.20	Minimum	Compliant	2.20	Minimum	Compliant
B2-21	Bedroom 2	2.20	Minimum	-	2.20	Minimum	-
B2-21	Bedroom 3	2.20	Minimum	-	2.20	Minimum	-
B2-22	LKD	1.80	Minimum	-	1.80	Minimum	-
B2-22	Bedroom 1	2.20	Minimum	Compliant	2.20	Minimum	Compliant
B2-22	Bedroom 2	1.60	Minimum	-	1.60	Minimum	-
B2-23	LKD	2.90	Minimum	Compliant	2.90	Minimum	Compliant
B2-23	Bedroom 1	2.20	Minimum	-	2.20	Minimum	-
B2-24	LKD	7.60	High	Compliant	8.00	High	Compliant
B2-24	Bedroom 1	2.20	Minimum	-	2.20	Minimum	-
B2-24	Bedroom 2	1.50	Minimum	-	1.50	Minimum	-
B2-24	Bedroom 3	1.50	Minimum	-	1.50	Minimum	-
B2-25	LKD	9.40	High	Compliant	9.40	High	Compliant
B2-25	Bedroom 1	4.20	High	-	4.20	High	-
B2-25	Bedroom 2	4.20	High	-	4.20	High	-
B2-25	Bedroom 3	4.20	High	-	4.20	High	-
B2-26	LKD	4.80	High	Compliant	4.80	High	Compliant
B2-26	Bedroom 1	4.20	High	-	4.20	High	-
B2-27	LKD	2.60	Minimum	-	2.60	Minimum	-
B2-27	Bedroom 1	4.20	High	Compliant	4.20	High	Compliant
B2-28	LKD	6.10	High	Compliant	6.10	High	Compliant
B2-28	Bedroom 1	4.20	High	-	4.20	High	-
B2-28	Bedroom 2	4.20	High	-	4.20	High	-
B2-28	Bedroom 3	3.60	Medium	-	3.60	Medium	-
B2-29	LKD	1.50	Minimum	-	1.50	Minimum	-
B2-29	Bedroom 1	2.20	Minimum	Compliant	2.20	Minimum	Compliant
B2-29	Bedroom 2	2.20	Minimum	-	2.20	Minimum	-
B2-29	Bedroom 3	2.20	Minimum	-	2.20	Minimum	-
B2-30	LKD	3.40	Medium	Compliant	3.40	Medium	Compliant
B2-30	Bedroom 1	2.20	Minimum	-	2.20	Minimum	-
B2-30	Bedroom 2	2.20	Minimum	_	2.20	Minimum	_
B2-31	LKD	2.90	Minimum	Compliant	2.90	Minimum	Compliant
B2-31	Bedroom 1	2.20	Minimum	-	2.20	Minimum	-
B2-32	LKD	8.00	High	Compliant	8.00	High	Compliant
B2-32	Bedroom 1	2.20	Minimum	-	2.20	Minimum	-
B2-32	Bedroom 2	2.20	Minimum	_	2.20	Minimum	_
B2-32	Bedroom 3	1.50	Minimum		1.50	Minimum	

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

<sup>\*\*</sup> The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

<sup>\*\*\*</sup> For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13. For floor plans of the assessed units please refer to section C.1 on page 58.



### C.4.3 SE Results: Block 03

	Ī	I		ght Exposure Resu	I		
	_	Deciduous Trees as Opaque Objects*				Vithout Deciduo	us Trees*
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit complianc based on highest performing room**
B3-01	LKD	5.30	High	-	7.60	High	Compliant
B3-01	Bedroom 1	5.80	High	Compliant	7.30	High	-
B3-01	Bedroom 2	5.10	High	-	6.60	High	-
B3-02	LKD	7.60	High	Compliant	7.80	High	Compliant
B3-02	Bedroom 1	6.20	High	-	7.40	High	-
B3-03	LKD	5.90	High	Compliant	6.90	High	Compliant
B3-03	Bedroom 1	3.00	Medium	-	6.90	High	-
B3-04	LKD	4.40	High	Compliant	7.00	High	Compliant
B3-04	Bedroom 1	1.40	Below Minimum	-	1.40	Below Minimum	-
B3-05	LKD	0.10	Below Minimum	-	1.40	Below Minimum	-
B3-05	Bedroom 1	0.10	Below Minimum	-	0.10	Below Minimum	-
B3-05	Bedroom 2	0.40	Below Minimum	Non-Compliant	1.60	Minimum	Compliant
B3-05	Bedroom 3	0.00	Below Minimum	-	0.90	Below Minimum	- -
B3-06	LKD	7.70	High	Compliant	8.20	High	Compliant
B3-06	Bedroom 1	7.30	High	-	7.30	High	-
B3-06	Bedroom 2	6.00	High	-	6.00	High	-
B3-07	LKD	6.20	High	-	6.20	High	-
B3-07	Bedroom 1	7.40	High	Compliant	7.40	High	Compliant
B3-08	LKD	4.70	High	-	4.70	High	-
B3-08	Bedroom 1	5.50	High	Compliant	5.90	High	Compliant
B3-09	LKD	6.80	High	Compliant	6.80	High	Compliant
B3-09	Bedroom 1	2.00	Minimum	-	2.00	Minimum	-
B3-09	Bedroom 2	2.00	Minimum	-	2.00	Minimum	_
B3-10	LKD	1.50	Minimum	-	1.50	Minimum	-
B3-10	Bedroom 1	0.70	Below Minimum	_	0.70	Below Minimum	_
B3-10	Bedroom 2	2.20	Minimum	Compliant	2.20	Minimum	Compliant
B3-10	Bedroom 3	1.40	Below Minimum	-	1.40	Below Minimum	-
B3-11	LKD	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
B3-11	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
B3-11	Bedroom 2	0.00	Below Minimum		0.00	Below Minimum	
B3-11	LKD	0.60	Below Minimum	Non-Compliant	1.80	Minimum	Compliant
B3-12	Bedroom 1	0.00	Below Minimum	Non-compliant	0.00	Below Minimum	Compliant
				-			-
B3-12	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
B3-12	Bedroom 3	0.00	Below Minimum	- C!''	0.00	Below Minimum	Committee t
B3-13	LKD	8.10	High	Compliant	8.20	High	Compliant
B3-13	Bedroom 1	7.30	High	-	7.30	High	-
B3-13	Bedroom 2	6.00	High	-	6.00	High	-
B3-14	LKD	6.20	High	-	6.20	High	-

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

<sup>\*\*</sup> The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

<sup>\*\*\*</sup> For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13. For floor plans of the assessed units please refer to section C.1 on page 58.



		Decid	ious Trees as Op	paque Obiects*	Without Deciduous Trees*			
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	
B3-15	LKD	4.70	High	-	4.70	High	-	
B3-15	Bedroom 1	5.90	High	Compliant	5.90	High	Compliant	
B3-16	LKD	6.90	High	Compliant	6.90	High	Compliant	
B3-16	Bedroom 1	2.20	Minimum	-	2.20	Minimum	-	
B3-16	Bedroom 2	2.20	Minimum	-	2.20	Minimum	-	
B3-17	LKD	1.50	Minimum	-	1.50	Minimum	-	
B3-17	Bedroom 1	0.80	Below Minimum	-	0.80	Below Minimum	-	
B3-17	Bedroom 2	2.20	Minimum	Compliant	2.20	Minimum	Compliant	
B3-17	Bedroom 3	1.50	Minimum	-	1.50	Minimum	-	
B3-18	LKD	2.00	Minimum	Compliant	2.00	Minimum	Compliant	
B3-18	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-	
B3-18	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-	
B3-19	LKD	2.20	Minimum	Compliant	2.20	Minimum	Compliant	
B3-19	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-	
B3-19	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-	
B3-19	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-	
B3-20	LKD	8.60	High	Compliant	8.60	High	Compliant	
B3-20	Bedroom 1	7.30	High	-	7.30	High	-	
B3-20	Bedroom 2	7.40	High	-	7.40	High	-	
B3-21	LKD	7.80	High	Compliant	7.80	High	Compliant	
B3-21	Bedroom 1	7.40	High	-	7.40	High	-	
B3-22	LKD	7.70	High	Compliant	7.70	High	Compliant	
B3-22	Bedroom 1	7.30	High	-	7.30	High	-	
B3-23	LKD	8.00	High	Compliant	8.00	High	Compliant	
B3-23	Bedroom 1	2.20	Minimum	-	2.20	Minimum	-	
B3-23	Bedroom 2	2.20	Minimum	-	2.20	Minimum	-	
B3-24	LKD	2.90	Minimum	Compliant	2.90	Minimum	Compliant	
B3-24	Bedroom 1	0.80	Below Minimum	-	0.80	Below Minimum	-	
B3-24	Bedroom 2	2.20	Minimum	-	2.20	Minimum	-	
B3-24	Bedroom 3	1.50	Minimum	-	1.50	Minimum	-	
B3-25	LKD	4.70	High	Compliant	4.70	High	Compliant	
B3-25	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-	
B3-25	Bedroom 2	2.20	Minimum	-	2.20	Minimum	-	
B3-26	LKD	3.10	Medium	Compliant	3.10	Medium	Compliant	
B3-26	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-	
B3-26	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-	
B3-26	Bedroom 3	0.00	Below Minimum	_	0.00	Below Minimum	_	

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

<sup>\*\*</sup> The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

<sup>\*\*\*</sup> For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13.

For floor plans of the assessed units please refer to section C.1 on page 58.



## C.4.4 SE Results: Duplex Block A

	T	Table No.	C.4.4 - Sunlight	Exposure Results:	Dublex Blo	LK A	
		Decidu	ious Trees as Op	paque Objects*	V	Vithout Deciduc	us Trees*
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
DA-01	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
DA-01	Bedroom 1	5.50	High	Compliant	5.50	High	Compliant
DA-01	Bedroom 2	4.70	High	-	4.70	High	-
DA-02	LKD	7.10	High	Compliant	7.10	High	Compliant
DA-02	Bedroom 1	5.30	High	-	5.30	High	-
DA-02	Bedroom 2	5.30	High	-	5.30	High	-
DA-03	Kitchen/Dining	2.20	Minimum	-	2.20	Minimum	-
DA-03	Living	0.00	Below Minimum	-	0.00	Below Minimum	-
DA-03	Bedroom 1	6.40	High	Compliant	6.40	High	Compliant
DA-03	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DA-04	Kitchen/Dining	2.90	Minimum	-	2.90	Minimum	-
DA-04	Living	0.00	Below Minimum	-	0.00	Below Minimum	-
DA-04	Bedroom 1	6.80	High	Compliant	6.80	High	Compliant
DA-04	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DA-05	Kitchen/Dining	2.60	Minimum	-	2.60	Minimum	-
DA-05	Living	0.00	Below Minimum	-	0.00	Below Minimum	-
DA-05	Bedroom 1	6.90	High	Compliant	6.90	High	Compliant
DA-05	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DA-06	Kitchen/Dining	2.60	Minimum	-	2.60	Minimum	-
DA-06	Living	0.00	Below Minimum	-	0.00	Below Minimum	-
DA-06	Bedroom 1	6.80	High	Compliant	6.80	High	Compliant
DA-06	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DA-07	Kitchen/Dining	5.80	High	-	5.80	High	-
DA-07	Living	0.00	Below Minimum	-	0.00	Below Minimum	-
DA-07	Bedroom 1	6.70	High	Compliant	6.70	High	Compliant
DA-07	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DA-08	Kitchen/Dining	7.00	High	Compliant	7.00	High	Compliant
DA-08	Living	0.00	Below Minimum	-	0.00	Below Minimum	-
DA-08	Bedroom 1	6.80	High	-	6.80	High	-
DA-08	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DA-09	Kitchen/Dining	9.40	High	Compliant	9.40	High	Compliant
DA-09	Living	9.30	High	-	9.30	High	-
DA-09	Bedroom 1	6.00	High	-	6.00	High	-
DA-09	Bedroom 2	7.50	High	-	7.50	High	-
DA-09	Bedroom 3	7.60	High	-	7.60	High	-
DA-10	LKD	5.30	High	-	5.30	High	-
DA-10	Bedroom 1	2.30	Minimum	-	2.30	Minimum	-
DA-10	Bedroom 2	5.60	High	Compliant	5.60	High	Compliant
DA-10	Bedroom 3	3.90	Medium	-	3.90	Medium	-

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

<sup>\*\*</sup> The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

<sup>\*\*\*</sup> For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13. For floor plans of the assessed units please refer to section C.1 on page 58.



		Table No.	C.4.4 - Sunlight	Exposure Results:	Duplex Blo	ck A		
		Deciduous Trees as Opaque Objects*			Without Deciduous Trees*			
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	
DA-11	Kitchen/Dining	0.00	Below Minimum	-	0.00	Below Minimum	-	
DA-11	Living	1.90	Minimum	-	1.90	Minimum	-	
DA-11	Bedroom 1	5.30	High	Compliant	5.30	High	Compliant	
DA-11	Bedroom 2	5.30	High	-	5.30	High	-	
DA-11	Bedroom 3	4.70	High	-	4.70	High	-	
DA-12	Kitchen/Dining	0.00	Below Minimum	-	0.00	Below Minimum	-	
DA-12	Living	0.00	Below Minimum	-	0.00	Below Minimum	-	
DA-12	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-	
DA-12	Bedroom 2	2.10	Minimum	Compliant	2.10	Minimum	Compliant	
DA-12	Bedroom 3	1.60	Minimum	-	1.60	Minimum	-	

### C.4.5 SE Results: Duplex Block B

	Τ			Exposure Results: I	· ·			
		Decidu	ious Trees as Op	paque Objects*	Without Deciduous Trees*			
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	
DB-01	LKD	5.30	High	Compliant	6.30	High	Compliant	
DB-01	Bedroom 1	4.00	High	-	4.00	High	-	
DB-02	LKD	5.50	High	Compliant	5.50	High	Compliant	
DB-02	Bedroom 1	3.70	Medium	-	3.70	Medium	-	
DB-03	LKD	6.30	High	Compliant	6.30	High	Compliant	
DB-03	Bedroom 1	3.30	Medium	-	3.30	Medium	-	
DB-04	LKD	3.20	Medium	-	3.20	Medium	-	
DB-04	Bedroom 1	3.90	Medium	Compliant	4.10	High	Compliant	
DB-04	Bedroom 2	1.10	Below Minimum	-	1.10	Below Minimum	-	
DB-04	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-	
DB-05	LKD	7.20	High	Compliant	7.20	High	Compliant	
DB-05	Bedroom 1	6.50	High	-	6.50	High	-	
DB-05	Bedroom 2	6.50	High	-	6.50	High	-	
DB-05	Bedroom 3	6.00	High	-	6.00	High	-	
DB-06	LKD	7.20	High	Compliant	7.20	High	Compliant	
DB-06	Bedroom 1	6.50	High	-	6.50	High	-	
DB-06	Bedroom 2	6.50	High	-	6.50	High	-	
DB-06	Bedroom 3	6.00	High	-	6.00	High	-	
DB-07	LKD	6.60	High	Compliant	6.60	High	Compliant	
DB-07	Bedroom 1	6.50	High	-	6.50	High	-	
DB-07	Bedroom 2	6.50	High	-	6.50	High	-	
DB-07	Bedroom 3	6.00	High	-	6.00	High	-	
DB-08	LKD	4.30	High	-	4.30	High	-	
DB-08	Bedroom 1	1.10	Below Minimum	-	1.10	Below Minimum	-	
DB-08	Bedroom 2	4.40	High	Compliant	4.40	High	Compliant	

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

<sup>\*\*</sup> The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

<sup>\*\*\*</sup> For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13. For floor plans of the assessed units please refer to section C.1 on page 58.



# C.4.6 SE Results: Duplex Block C

		Table No	C / 6 Supliabt	Exposure Results:	Duploy Play		
					·		
	_	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
Unit Number	Room	SE Hours	Level of SE	Unit compliance	SE Hours	Level of SE	Unit compliance
	Description	on March	on March	based on highest	on March	on March	based on highest
		21st	21st***	performing room**	21st	21st***	performing room**
DC-01	Kitchen/Dining	1.20	Below Minimum	-	1.20	Below Minimum	-
DC-01	Living	5.70	High	Compliant	5.70	High	Compliant
DC-01	Bedroom 1	2.70	Minimum	-	5.50	High	-
DC-01	Bedroom 2	1.70	Minimum	-	2.10	Minimum	-
DC-01	Bedroom 3	0.00	Below Minimum	-	1.80	Minimum	-
DC-02	LKD	3.70	Medium	Compliant	5.80	High	-
DC-02	Bedroom 1	2.70	Minimum	-	5.90	High	Compliant
DC-02	Bedroom 2	0.00	Below Minimum	-	2.30	Minimum	-
DC-03	LKD	5.60	High	Compliant	5.70	High	Compliant
DC-03	Bedroom 1	5.40	High	-	5.40	High	-
DC-03	Bedroom 2	5.20	High	-	5.40	High	-
DC-04	LKD	4.20	High	-	5.70	High	Compliant
DC-04	Bedroom 1	5.40	High	Compliant	5.40	High	-
DC-04	Bedroom 2	4.50	High	-	5.40	High	-
DC-05	LKD	3.90	Medium	-	4.80	High	-
DC-05	Bedroom 1	5.40	High	Compliant	5.70	High	Compliant
DC-05	Bedroom 2	0.20	Below Minimum	-	0.20	Below Minimum	-
DC-05	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-

### C.4.7 SE Results: Duplex Block D

		Table No.	C.4.7 - Sunlight	Exposure Results: I	Duplex Bloc	ck D		
		Decidu	ious Trees as Op	aque Objects*	Without Deciduous Trees*			
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	
DD-01	LKD	6.10	High	Compliant	6.10	High	Compliant	
DD-01	Bedroom 2	0.00	Below Minimum	-	0.80	Below Minimum	-	
DD-01	Bedroom 2	0.00	Below Minimum	-	0.80	Below Minimum	-	
DD-02	LKD	9.40	High	Compliant	9.40	High	Compliant	
DD-02	Bedroom 1	6.50	High	-	6.50	High	-	
DD-02	Bedroom 2	6.50	High	-	6.50	High	-	
DD-03	Kitchen/Dining	2.10	Minimum	-	2.60	Minimum	-	
DD-03	Living	6.10	High	Compliant	6.10	High	Compliant	
DD-03	Bedroom 1	6.10	High	-	6.10	High	-	
DD-03	Bedroom 2	0.50	Below Minimum	-	1.30	Below Minimum	-	
DD-03	Bedroom 3	0.00	Below Minimum	-	0.80	Below Minimum	-	
DD-04	LKD	9.40	High	Compliant	9.40	High	Compliant	
DD-04	Bedroom 1	6.50	High	-	6.50	High	-	
DD-04	Bedroom 2	6.50	High	-	6.50	High	-	
DD-04	Bedroom 3	6.50	High	-	6.50	High	-	

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

<sup>\*\*</sup> The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

<sup>\*\*\*</sup> For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13.

For floor plans of the assessed units please refer to section C.1 on page 58.



		Table No.	C.4.7 - Sunlight	Exposure Results: I	Duplex Blo	ck D	
		Decidu	ious Trees as Op	aque Objects*	V	Vithout Deciduc	ous Trees*
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
DD-05	Kitchen/Dining	0.00	Below Minimum	Non-Compliant	0.80	Below Minimum	Non-Compliant
DD-05	Living	0.00	Below Minimum	-	0.00	Below Minimum	-
DD-05	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
DD-05	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DD-05	Bedroom 3	0.00	Below Minimum	-	0.80	Below Minimum	-
DD-06	Kitchen/Dining	6.50	High	Compliant	6.50	High	Compliant
DD-06	Living	0.80	Below Minimum	-	0.80	Below Minimum	-
DD-06	Bedroom 1	5.90	High	-	5.90	High	-
DD-06	Bedroom 2	5.90	High	-	5.90	High	-
DD-06	Bedroom 3	6.50	High	-	6.50	High	-

### C.4.8 SE Results: Duplex Block E

		Table No.	C.4.8 - Sunlight	Exposure Results:	Duplex Blo	ck E		
	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*			
Unit Number		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	
DE-01	LKD	5.50	High	Compliant	5.50	High	Compliant	
DE-01	Bedroom 1	2.80	Minimum	-	3.00	Medium	-	
DE-02	LKD	3.20	Medium	Compliant	3.20	Medium	Compliant	
DE-02	Bedroom 1	2.90	Minimum	-	2.90	Minimum	-	
DE-03	LKD	3.90	Medium	Compliant	5.70	High	Compliant	
DE-03	Bedroom 1	2.90	Minimum	-	2.90	Minimum	-	
DE-04	LKD	7.00	High	Compliant	7.00	High	Compliant	
DE-04	Bedroom 1	6.50	High	-	6.50	High	-	
DE-04	Bedroom 2	6.50	High	-	6.50	High	-	
DE-04	Bedroom 3	5.90	High	-	5.90	High	-	
DE-05	LKD	7.00	High	Compliant	7.00	High	Compliant	
DE-05	Bedroom 1	6.20	High	-	6.50	High	-	
DE-05	Bedroom 2	6.50	High	-	6.50	High	-	
DE-05	Bedroom 3	5.80	High	-	5.90	High	-	
DE-06	LKD	6.70	High	Compliant	6.80	High	Compliant	
DE-06	Bedroom 1	6.50	High	-	6.50	High	-	
DE-06	Bedroom 2	6.50	High	-	6.50	High	-	
DE-06	Bedroom 3	5.90	High	-	5.90	High	-	

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

<sup>\*\*</sup> The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

<sup>\*\*\*</sup> For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13. For floor plans of the assessed units please refer to section C.1 on page 58.



## C.4.9 SE Results: Duplex Block F

	T	Table No.	C.4.5 - Surnigiti	Exposure Results:			
		Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit complianc based on highest performing room**
DF-01	LKD	3.40	Medium	Compliant	3.40	Medium	Compliant
DF-01	Bedroom 1	0.80	Below Minimum	-	1.50	Minimum	-
DF-01	Bedroom 2	0.40	Below Minimum	-	1.20	Below Minimum	-
DF-02	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
DF-02	LKD	4.50	High	Compliant	4.50	High	Compliant
DF-02	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DF-03	LKD	5.50	High	Compliant	5.50	High	Compliant
DF-03	Bedroom 1	0.00	Below Minimum	-	1.30	Below Minimum	-
DF-03	Bedroom 2	0.00	Below Minimum	-	0.90	Below Minimum	-
DF-04	LKD	5.60	High	Compliant	5.90	High	Compliant
DF-04	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
DF-04	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DF-05	LKD	3.80	Medium	Compliant	4.10	High	Compliant
DF-05	Bedroom 1	0.00	Below Minimum	-	0.80	Below Minimum	-
DF-05	Bedroom 2	0.00	Below Minimum	-	0.90	Below Minimum	-
DF-06	LKD	1.10	Below Minimum	Non-Compliant	1.10	Below Minimum	Non-Compliant
DF-06	Bedroom 1	0.80	Below Minimum	-	0.80	Below Minimum	-
DF-07	LKD	4.80	High	Compliant	6.60	High	Compliant
DF-07	Bedroom 1	3.70	Medium	-	6.60	High	-
DF-07	Bedroom 2	4.30	High	-	5.90	High	-
DF-08	LKD	5.90	High	Compliant	6.80	High	Compliant
DF-08	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
DF-08	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DF-09	LKD	5.00	High	Compliant	6.40	High	Compliant
DF-09	Bedroom 1	1.00	Below Minimum	-	1.00	Below Minimum	-
DF-09	Bedroom 2	0.60	Below Minimum	-	0.60	Below Minimum	-
DF-10	LKD	4.90	High	Compliant	5.80	High	Compliant
DF-10	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
DF-10	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DF-11	LKD	0.30	Below Minimum	-	0.70	Below Minimum	-
DF-11	LKD	4.20	High	Compliant	5.90	High	Compliant
DF-11	Bedroom 2	0.00	Below Minimum	-	0.20	Below Minimum	-
DF-12	LKD	4.10	High	Compliant	5.90	High	Compliant
DF-12	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
DF-12	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DF-13	Kitchen/Dining	4.70	High	-	4.70	High	-
DF-13	Living	1.50	Minimum	-	1.50	Minimum	-
DF-13	Bedroom 1	1.40	Below Minimum	-	1.40	Below Minimum	-
DF-13	Bedroom 2	6.40	High	Compliant	6.40	High	Compliant
DF-13	Bedroom 3	1.10	Below Minimum		1.10	Below Minimum	-

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

<sup>\*\*</sup> The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

<sup>\*\*\*</sup> For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13. For floor plans of the assessed units please refer to section C.1 on page 58.



		Deciduous Trees as Opaque Objects*			Without Deciduous Trees*			
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliand based on highest performing room**	
DF-14	Kitchen/Dining	5.00	High	-	5.00	High	-	
DF-14	Living	0.10	Below Minimum	-	0.10	Below Minimum	-	
DF-14	Bedroom 1	1.40	Below Minimum	-	1.40	Below Minimum	-	
DF-14	Bedroom 2	5.70	High	Compliant	5.70	High	Compliant	
DF-14	Bedroom 3	0.70	Below Minimum	-	0.70	Below Minimum	-	
DF-15	Kitchen/Dining	6.20	High	-	6.20	High	-	
DF-15	Living	1.50	Minimum	-	1.50	Minimum	-	
DF-15	Bedroom 1	1.40	Below Minimum	-	1.40	Below Minimum	-	
DF-15	Bedroom 2	6.40	High	Compliant	6.40	High	Compliant	
DF-15	Bedroom 3	0.70	Below Minimum	-	0.70	Below Minimum	-	
DF-16	Kitchen/Dining	6.50	High	Compliant	6.50	High	Compliant	
DF-16	Living	0.10	Below Minimum	-	0.10	Below Minimum	-	
DF-16	Bedroom 1	1.40	Below Minimum	-	1.40	Below Minimum	-	
DF-16	Bedroom 2	6.40	High	-	6.40	High	-	
DF-16	Bedroom 3	0.90	Below Minimum	-	0.90	Below Minimum	-	
DF-17	Kitchen/Dining	4.80	High	-	4.80	High	-	
DF-17	Living	1.50	Minimum	-	1.50	Minimum	-	
DF-17	Bedroom 1	1.40	Below Minimum	-	1.40	Below Minimum	_	
DF-17	Bedroom 2	6.00	High	Compliant	6.00	High	Compliant	
DF-17	Bedroom 3	0.90	Below Minimum	-	0.90	Below Minimum	-	
DF-18	LKD	1.40	Below Minimum	Non-Compliant	1.40	Below Minimum	Non-Compliant	
DF-18	Bedroom 1	1.40	Below Minimum	-	1.40	Below Minimum	-	
DF-18	Bedroom 2	1.40	Below Minimum	_	1.40	Below Minimum	_	
DF-19	LKD	4.80	High	Compliant	6.70	High	Compliant	
DF-19	Bedroom 1	3.40	Medium	-	6.50	High	-	
DF-19	Bedroom 2	1.40	Below Minimum	_	1.40	Below Minimum	_	
DF-19	Bedroom 3	0.60	Below Minimum	_	0.60	Below Minimum	_	
DF-20	Kitchen/Dining	4.20	High	Compliant	6.60	High	Compliant	
DF-20	Living	0.00	Below Minimum	Compliant	0.00	Below Minimum	- Compilant	
DF-20	Bedroom 1	1.20	Below Minimum	-	1.20	Below Minimum	-	
DF-20	Bedroom 2	4.20	High	-	6.60	High		
DF-20	Bedroom 3	0.70	Below Minimum	-	0.70	Below Minimum		
		4.90		-	6.60			
DF-21	Kitchen/Dining		High	-		High	Compliant	
DF-21	Living	1.30	Below Minimum	-	1.30	Below Minimum	-	
DF-21	Bedroom 1	1.20	Below Minimum	-	1.20	Below Minimum	-	
DF-21	Bedroom 2	5.10	High	Compliant	6.60	High	-	
DF-21	Bedroom 3	0.70	Below Minimum	-	0.70	Below Minimum	-	
DF-22	Kitchen/Dining	6.10	High	Compliant	6.60	High	Compliant	
DF-22	Living	0.00	Below Minimum	-	0.00	Below Minimum	-	
DF-22	Bedroom 1	1.20	Below Minimum	-	1.20	Below Minimum	-	
DF-22	Bedroom 2	5.90	High	-	6.60	High	-	

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

\*\* The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

<sup>\*\*\*</sup> For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13. For floor plans of the assessed units please refer to section C.1 on page 58.



Table No. C.4.9 - Sunlight Exposure Results: Duplex Block F									
		Deciduous Trees as Opaque Objects*			Without Deciduous Trees*				
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**		
DF-23	Kitchen/Dining	5.60	High	-	6.60	High	Compliant		
DF-23	Living	1.20	Below Minimum	-	1.20	Below Minimum	-		
DF-23	Bedroom 1	1.20	Below Minimum	-	1.20	Below Minimum	-		
DF-23	Bedroom 2	5.90	High	Compliant	6.60	High	-		
DF-23	Bedroom 3	0.60	Below Minimum	-	0.60	Below Minimum	-		
DF-24	Kitchen/Dining	4.60	High	-	6.60	High	Compliant		
DF-24	Living	0.00	Below Minimum	-	0.00	Below Minimum	-		
DF-24	Bedroom 1	1.20	Below Minimum	-	1.20	Below Minimum	-		
DF-24	Bedroom 2	5.30	High	Compliant	6.60	High	-		
DF-24	Bedroom 3	0.60	Below Minimum	-	0.60	Below Minimum	-		

## C.4.10 SE Results: Duplex Block G

		Table No. (	C.4.10 - Sunlight	Exposure Results:	Duplex Blo	ck G	
		Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
DG-01	LKD	5.70	High	Compliant	6.80	High	Compliant
DG-01	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
DG-01	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DG-02	LKD	5.50	High	Compliant	5.50	High	Compliant
DG-02	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
DG-02	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DG-03	LKD	6.30	High	Compliant	6.30	High	Compliant
DG-03	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
DG-03	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DG-04	LKD	5.20	High	Compliant	6.40	High	Compliant
DG-04	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
DG-04	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DG-05	LKD	7.90	High	Compliant	9.40	High	Compliant
DG-05	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
DG-05	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DG-06	LKD	8.70	High	Compliant	9.30	High	Compliant
DG-06	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
DG-06	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DG-07	Kitchen/Dining	7.60	High	Compliant	7.60	High	Compliant
DG-07	Living	0.00	Below Minimum	-	0.00	Below Minimum	-
DG-07	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
DG-07	Bedroom 2	7.60	High	-	7.60	High	-
DG-07	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
DG-08	Kitchen/Dining	7.60	High	Compliant	7.60	High	Compliant
DG-08	Living	0.20	Below Minimum	-	0.20	Below Minimum	-

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

<sup>\*\*</sup> The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

<sup>\*\*\*</sup> For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13. For floor plans of the assessed units please refer to section C.1 on page 58.



	T	Table No. (	C.4.10 - Sunlight	Exposure Results:	Duplex Blo	ck G		
		Deciduous Trees as Opaque Objects*			Without Deciduous Trees*			
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	
DG-08	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-	
DG-08	Bedroom 2	7.60	High	-	7.60	High	-	
DG-08	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-	
DG-09	Kitchen/Dining	7.60	High	Compliant	7.60	High	Compliant	
DG-09	Living	0.00	Below Minimum	-	0.00	Below Minimum	-	
DG-09	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-	
DG-09	Bedroom 2	7.60	High	-	7.60	High	-	
DG-09	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-	
DG-10	Kitchen/Dining	7.60	High	Compliant	7.60	High	Compliant	
DG-10	Living	0.00	Below Minimum	-	0.00	Below Minimum	-	
DG-10	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-	
DG-10	Bedroom 2	7.60	High	-	7.60	High	-	
DG-10	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-	
DG-11	Kitchen/Dining	8.20	High	-	9.40	High	Compliant	
DG-11	Living	0.00	Below Minimum	-	0.00	Below Minimum	-	
DG-11	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-	
DG-11	Bedroom 2	8.50	High	Compliant	9.40	High	-	
DG-11	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-	
DG-12	Kitchen/Dining	7.90	High	-	9.40	High	Compliant	
DG-12	Living	0.00	Below Minimum	-	0.00	Below Minimum	-	
DG-12	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-	
DG-12	Bedroom 2	8.00	High	Compliant	9.40	High	-	
DG-12	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-	

## C.4.11 SE Results: Duplex Block H

Table No. C.4.11 - Sunlight Exposure Results: Duplex Block H										
		Deciduous Trees as Opaque Objects*			Without Deciduous Trees*					
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**			
DH-01	LKD	5.70	High	Compliant	5.70	High	Compliant			
DH-01	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-			
DH-01	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-			
DH-02	LKD	5.90	High	Compliant	5.90	High	Compliant			
DH-02	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-			
DH-02	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-			
DH-03	LKD	5.90	High	Compliant	5.90	High	Compliant			
DH-03	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-			
DH-03	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-			
DH-04	LKD	5.70	High	Compliant	6.90	High	Compliant			
DH-04	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-			
DH-04	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-			
		<u> </u>			<u> </u>					

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

<sup>\*\*</sup> The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

<sup>\*\*\*</sup> For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13. For floor plans of the assessed units please refer to section C.1 on page 58.



				Exposure Results:			Tro*
	Room		lous Trees as Op	T .		/ithout Deciduo	
Unit Number	Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
DH-05	LKD	7.40	High	Compliant	7.50	High	Compliant
DH-05	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
DH-05	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DH-06	LKD	7.70	High	Compliant	7.70	High	Compliant
DH-06	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
DH-06	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DH-07	Kitchen/Dining	8.60	High	-	8.70	High	Compliant
DH-07	Living	0.00	Below Minimum	-	0.00	Below Minimum	-
DH-07	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
DH-07	Bedroom 2	8.70	High	Compliant	8.70	High	-
DH-07	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
DH-08	Kitchen/Dining	8.50	High	-	8.50	High	-
DH-08	Living	0.00	Below Minimum	-	0.00	Below Minimum	-
DH-08	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
DH-08	Bedroom 2	8.70	High	Compliant	8.70	High	Compliant
DH-08	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
DH-09	Kitchen/Dining	7.00	High	-	7.00	High	-
DH-09	Living	0.00	Below Minimum	-	0.00	Below Minimum	-
DH-09	Bedroom 1	0.10	Below Minimum	-	0.10	Below Minimum	-
DH-09	Bedroom 2	7.60	High	Compliant	7.60	High	Compliant
DH-09	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
DH-10	Kitchen/Dining	7.50	High	-	7.50	High	-
DH-10	Living	0.20	Below Minimum	-	0.20	Below Minimum	-
DH-10	Bedroom 1	0.10	Below Minimum	-	0.10	Below Minimum	-
DH-10	Bedroom 2	7.60	High	Compliant	7.60	High	Compliant
DH-10	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
DH-11	Kitchen/Dining	7.60	High	Compliant	7.60	High	Compliant
DH-11	Living	0.00	Below Minimum	-	0.00	Below Minimum	-
DH-11	Bedroom 1	0.10	Below Minimum	-	0.10	Below Minimum	-
DH-11	Bedroom 2	7.60	High	-	7.60	High	-
DH-11	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
DH-12	Kitchen/Dining	7.60	High	Compliant	7.60	High	Compliant
DH-12	Living	0.20	Below Minimum	-	0.20	Below Minimum	- -
DH-12	Bedroom 1	0.10	Below Minimum	-	0.10	Below Minimum	-
DH-12	Bedroom 2	7.60	High	-	7.60	High	-
DH-12	Bedroom 3	0.00	Below Minimum	_	0.00	Below Minimum	

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

<sup>\*\*</sup> The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

<sup>\*\*\*</sup> For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13.

For floor plans of the assessed units please refer to section C.1 on page 58.



### C.4.12 SE Results: Duplex Block J

		Table No.	C.4.12 - Sunlight	Exposure Results:	Duplex Blo	ck J	
		Decidu	ious Trees as Op	aque Objects*	V	/ithout Decidud	ous Trees*
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
DJ-01	LKD	2.40	Minimum	Compliant	3.20	Medium	-
DJ-01	Bedroom 1	2.30	Minimum	-	4.60	High	Compliant
DJ-01	Bedroom 2	1.00	Below Minimum	-	3.30	Medium	-
DJ-02	LKD	3.40	Medium	Compliant	3.40	Medium	Compliant
DJ-02	Bedroom 1	2.20	Minimum	-	3.30	Medium	-
DJ-02	Bedroom 2	0.30	Below Minimum	-	3.30	Medium	-
DJ-03	LKD	2.90	Minimum	Compliant	4.10	High	Compliant
DJ-03	Bedroom 1	0.30	Below Minimum	-	3.30	Medium	-
DJ-03	Bedroom 2	2.70	Minimum	-	2.70	Minimum	-
DJ-04	LKD	4.50	High	Compliant	4.50	High	Compliant
DJ-04	Bedroom 1	1.80	Minimum	-	3.30	Medium	-
DJ-04	Bedroom 2	0.60	Below Minimum	-	3.30	Medium	-
DJ-05	LKD	2.80	Minimum	Compliant	4.10	High	Compliant
DJ-05	Bedroom 1	0.90	Below Minimum	-	3.30	Medium	-
DJ-05	Bedroom 2	0.90	Below Minimum	-	2.70	Minimum	-
DJ-06	LKD	4.40	High	Compliant	4.60	High	Compliant
DJ-06	Bedroom 1	3.40	Medium	-	3.40	Medium	-
DJ-06	Bedroom 2	0.00	Below Minimum	-	3.30	Medium	-
DJ-07	LKD	9.30	High	Compliant	9.30	High	Compliant
DJ-07	Bedroom 1	4.50	High	-	4.50	High	-
DJ-07	Bedroom 2	3.30	Medium	-	3.30	Medium	-
DJ-07	Bedroom 3	4.20	High	-	4.20	High	-
DJ-08	LKD	8.20	High	Compliant	8.20	High	Compliant
DJ-08	Bedroom 1	4.50	High	-	4.50	High	-
DJ-08	Bedroom 2	3.10	Medium	-	3.10	Medium	-
DJ-08	Bedroom 3	4.20	High	-	4.20	High	-
DJ-09	LKD	8.20	High	Compliant	8.20	High	Compliant
DJ-09	Bedroom 1	4.50	High	-	4.50	High	-
DJ-09	Bedroom 2	3.10	Medium	-	3.10	Medium	-
DJ-09	Bedroom 3	4.20	High	-	4.20	High	-
DJ-10	LKD	8.20	High	Compliant	8.20	High	Compliant
DJ-10	Bedroom 1	4.50	High	-	4.50	High	-
DJ-10	Bedroom 2	3.10	Medium	-	3.10	Medium	-
DJ-10	Bedroom 3	4.20	High	-	4.20	High	-
DJ-11	LKD	8.10	High	Compliant	8.10	High	Compliant
DJ-11	Bedroom 1	4.50	High	-	4.50	High	-
DJ-11	Bedroom 2	3.10	Medium	-	3.10	Medium	-
DJ-11	Bedroom 3	4.20	High	-	4.20	High	-

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

<sup>\*\*</sup> The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

<sup>\*\*\*</sup> For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13. For floor plans of the assessed units please refer to section C.1 on page 58.



Table No. C.4.12 - Sunlight Exposure Results: Duplex Block J											
		Decidu	ious Trees as Op	aque Objects*	Without Deciduous Trees*						
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**				
DJ-12	LKD	7.90	High	Compliant	8.20	High	Compliant				
DJ-12	Bedroom 1	4.50	High	-	4.50	High	-				
DJ-12	Bedroom 2	3.10	Medium	3.10	Medium	-					
DJ-12	Bedroom 3	4.20	High	-	4.20	High	-				

### C.4.13 SE Results: Duplex Block K

	Table No. C.4.13 - Sunlight Exposure Results: Duplex Block K											
			ous Trees as Op		1	/ithout Deciduc	us Troos*					
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**					
DK-01	LKD	6.00	High	Compliant	6.00	High	Compliant					
DK-01	Bedroom 1	1.50	Minimum	-	2.40	Minimum	-					
DK-01	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-					
DK-02	LKD	7.60	High	Compliant	7.60	High	Compliant					
DK-02	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-					
DK-02	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-					
DK-03	LKD	7.70	High	Compliant	7.70	High	Compliant					
DK-03	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-					
DK-03	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-					
DK-04	LKD	9.10	High	Compliant	9.40	High	Compliant					
DK-04	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-					
DK-04	Bedroom 2	3.60	Medium	-	4.60	High	-					
DK-05	LKD	6.90	High	-	6.90	High	-					
DK-05	Bedroom 1	8.00	High	Compliant	8.00	High	Compliant					
DK-05	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-					
DK-05	Bedroom 3	7.30	High	-	7.30	High	-					
DK-06	LKD	5.80	High	-	5.80	High	-					
DK-06	Bedroom 1	8.00	High	Compliant	8.00	High	Compliant					
DK-06	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-					
DK-06	Bedroom 3	7.30	High	-	7.30	High	-					
DK-07	LKD	6.00	High	-	6.00	High	-					
DK-07	Bedroom 1	7.80	High	Compliant	7.80	High	Compliant					
DK-07	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-					
DK-07	Bedroom 3	5.70	High	-	5.70	High	-					
DK-08	LKD	9.40	High	Compliant	9.40	High	Compliant					
DK-08	Bedroom 1	6.90	High		6.90	High	-					
DK-08	Bedroom 2	9.40	High	-	9.40	High	-					
DK-08	Bedroom 3	8.00	High	-	8.00	High	-					

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

<sup>\*\*</sup> The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

<sup>\*\*\*</sup> For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13.



### C.4.14 SE Results: Duplex Block L

	r	Table No. (	C.4.14 - Sunlight	Exposure Results:	Duplex Blo	ock L	
		Decidu	ious Trees as Op	paque Objects*	V	Vithout Deciduo	us Trees*
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
DL-01	LKD	2.00	Minimum	-	2.00	Minimum	-
DL-01	Bedroom 1	2.50	Minimum	Compliant	2.50	Minimum	Compliant
DL-01	Bedroom 2	1.70	Minimum	-	1.70	Minimum	-
DL-02	LKD	0.00	Below Minimum	-	2.10	Minimum	Compliant
DL-02	Bedroom 1	1.90	Minimum	Compliant	2.10	Minimum	-
DL-02	Bedroom 2	0.00	Below Minimum	-	1.30	Below Minimum	-
DL-03	LKD	1.40	Below Minimum	-	1.40	Below Minimum	-
DL-03	Bedroom 1	2.90	Minimum	Compliant	2.90	Minimum	Compliant
DL-03	Bedroom 2	2.70	Minimum	-	2.70	Minimum	-
DL-04	LKD	2.00	Minimum	-	2.00	Minimum	-
DL-04	Bedroom 1	1.70	Minimum	-	1.70	Minimum	-
DL-04	Bedroom 2	2.60	Minimum	Compliant	2.60	Minimum	Compliant
DL-05	LKD	1.40	Below Minimum	-	1.40	Below Minimum	-
DL-05	Bedroom 1	3.60	Medium	Compliant	3.60	Medium	Compliant
DL-05	Bedroom 2	3.20	Medium	-	3.20	Medium	-
DL-06	LKD	1.50	Minimum	-	2.00	Minimum	-
DL-06	Bedroom 1	2.20	Minimum	-	2.20	Minimum	-
DL-06	Bedroom 2	2.60	Minimum	Compliant	2.60	Minimum	Compliant
DL-07	LKD	1.40	Below Minimum	-	1.40	Below Minimum	<u> </u>
DL-07	Bedroom 1	3.50	Medium	Compliant	3.50	Medium	Compliant
DL-07	Bedroom 2	3.20	Medium	-	3.20	Medium	-
DL-08	LKD	2.00	Minimum	-	2.00	Minimum	-
DL-08	Bedroom 1	3.50	Medium	-	3.50	Medium	-
DL-08	Bedroom 2	3.80	Medium	Compliant	3.80	Medium	Compliant
DL-09	Kitchen/Dining	4.70	High	-	4.70	High	-
DL-09	Living	5.70	High	-	5.70	High	-
DL-09	Bedroom 1	0.30	Below Minimum	-	0.30	Below Minimum	-
DL-09	Bedroom 2	5.80	High	Compliant	5.80	High	Compliant
DL-09	Bedroom 3	0.50	Below Minimum	-	0.50	Below Minimum	<u> </u>
DL-10	Kitchen/Dining	0.40	Below Minimum	-	2.20	Minimum	Compliant
DL-10	Living	1.70	Minimum	-	2.20	Minimum	<u> </u>
DL-10	Bedroom 1	0.50	Below Minimum	-	0.50	Below Minimum	_
DL-10	Bedroom 2	2.10	Minimum	Compliant	2.10	Minimum	<u> </u>
DL-10	Bedroom 3	0.50	Below Minimum	-	0.50	Below Minimum	_
DL-11	Kitchen/Dining	0.00	Below Minimum	-	0.00	Below Minimum	_
DL-11	Living	5.60	High	-	5.60	High	-
DL-11	Bedroom 1	2.10	Minimum	-	2.10	Minimum	-
DL-11	Bedroom 2	5.70	High	Compliant	5.70	High	Compliant
DL-11	Bedroom 3	1.30	Below Minimum	Compilant	1.30	Below Minimum	Compilation

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

<sup>\*\*</sup> The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

<sup>\*\*\*</sup> For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13.



		Table No. (	 C.4.14 - Sunlight	Exposure Results:	Duplex Blo	ck L	
			ous Trees as Op	,		/ithout Deciduc	ous Trees*
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
DL-12	Kitchen/Dining	0.10	Below Minimum	-	0.10	Below Minimum	-
DL-12	Living	5.30	High	-	5.30	High	-
DL-12	Bedroom 1	1.90	Minimum	-	1.90	Minimum	-
DL-12	Bedroom 2	5.70	High	Compliant	5.70	High	Compliant
DL-12	Bedroom 3	1.30	Below Minimum	-	1.30	Below Minimum	-
DL-13	Kitchen/Dining	0.00	Below Minimum	-	0.00	Below Minimum	-
DL-13	Living	5.50	High	-	5.50	High	-
DL-13	Bedroom 1	2.10	Minimum	-	2.10	Minimum	-
DL-13	Bedroom 2	5.70	High	Compliant	5.70	High	Compliant
DL-13	Bedroom 3	1.30	Below Minimum	-	1.30	Below Minimum	-
DL-14	Kitchen/Dining	0.10	Below Minimum	-	0.10	Below Minimum	-
DL-14	Living	5.40	High	-	5.40	High	-
DL-14	Bedroom 1	2.10	Minimum	-	2.10	Minimum	-
DL-14	Bedroom 2	5.70	High	Compliant	5.70	High	Compliant
DL-14	Bedroom 3	1.30	Below Minimum	-	1.30	Below Minimum	-
DL-15	Kitchen/Dining	0.00	Below Minimum	-	0.00	Below Minimum	-
DL-15	Living	5.60	High	-	5.60	High	-
DL-15	Bedroom 1	2.10	Minimum	-	2.10	Minimum	-
DL-15	Bedroom 2	5.70	High	Compliant	5.70	High	Compliant
DL-15	Bedroom 3	1.30	Below Minimum	-	1.30	Below Minimum	
DL-16	Kitchen/Dining	2.10	Minimum	-	2.10	Minimum	-
DL-16	Living	7.80	High	Compliant	8.50	High	Compliant
DL-16	Bedroom 1	2.10	Minimum	-	2.10	Minimum	-
DL-16	Bedroom 2	5.70	High	-	5.70	High	-
DL-16	Bedroom 3	1.30	Below Minimum	-	1.30	Below Minimum	-

### C.4.15 SE Results: Duplex Block M

		Table No. (	3415 - Sunlight	Exposure Results:	Duplex Blo	∽k M	
			ous Trees as Op	•	Without Deciduous Trees*		
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
DM-01	LKD	6.20	High	Compliant	6.50	High	Compliant
DM-01	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
DM-01	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DM-02	LKD	7.00	High	Compliant	7.00	High	Compliant
DM-02	Bedroom 1	0.10	Below Minimum	-	0.70	Below Minimum	-
DM-02	Bedroom 2	0.00	Below Minimum	-	0.50	Below Minimum	-
DM-03	LKD	6.50	High	Compliant	6.50	High	Compliant
DM-03	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
DM-03	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

<sup>\*\*</sup> The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

<sup>\*\*\*</sup> For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13. For floor plans of the assessed units please refer to section C.1 on page 58.



		Table No. (		Exposure Results:	Duplex Blo	ck M	
			ious Trees as Op		1	/ithout Deciduc	ous Trees*
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
DM-04	LKD	6.80	High	Compliant	6.80	High	Compliant
DM-04	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
DM-04	Bedroom 2	0.00	Below Minimum	-	0.20	Below Minimum	-
DM-05	Kitchen/Dining	6.80	High	Compliant	6.80	High	Compliant
DM-05	Living	0.00	Below Minimum	-	0.00	Below Minimum	-
DM-05	Bedroom 1	1.00	Below Minimum	-	1.00	Below Minimum	-
DM-05	Bedroom 2	6.80	High	-	6.80	High	-
DM-05	Bedroom 3	0.30	Below Minimum	-	0.30	Below Minimum	-
DM-06	Kitchen/Dining	6.80	High	Compliant	6.80	High	Compliant
DM-06	Living	1.10	Below Minimum	-	1.10	Below Minimum	-
DM-06	Bedroom 1	1.00	Below Minimum	-	1.00	Below Minimum	-
DM-06	Bedroom 2	6.80	High	-	6.80	High	-
DM-06	Bedroom 3	0.30	Below Minimum	-	0.30	Below Minimum	-
DM-07	Kitchen/Dining	6.80	High	Compliant	6.80	High	Compliant
DM-07	Living	0.00	Below Minimum	-	0.00	Below Minimum	-
DM-07	Bedroom 1	1.00	Below Minimum	-	1.00	Below Minimum	-
DM-07	Bedroom 2	6.80	High	-	6.80	High	-
DM-07	Bedroom 3	0.30	Below Minimum	-	0.30	Below Minimum	-
DM-08	Kitchen/Dining	6.80	High	Compliant	6.80	High	Compliant
DM-08	Living	0.20	Below Minimum	-	0.20	Below Minimum	-
DM-08	Bedroom 1	0.90	Below Minimum	-	0.90	Below Minimum	-
DM-08	Bedroom 2	6.80	High	-	6.80	High	-
DM-08	Bedroom 3	0.30	Below Minimum	-	0.30	Below Minimum	-

### C.4.16 SE Results: Duplex Block N

	Table No. C.4.16 - Sunlight Exposure Results: Duplex Block N											
			ious Trees as Op		Without Deciduous Trees*							
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**					
DN-01	LKD	2.00	Minimum	-	2.00	Minimum	-					
DN-01	Bedroom 1	2.20	Minimum	-	5.40	High	Compliant					
DN-01	Bedroom 2	2.50	Minimum	Compliant	5.10	High	-					
DN-02	LKD	1.50	Minimum	-	1.50	Minimum	-					
DN-02	Bedroom 1	1.80	Minimum	Compliant	5.00	High	Compliant					
DN-02	Bedroom 2	1.10	Below Minimum	-	2.20	Minimum	-					
DN-03	LKD	0.60	Below Minimum	-	0.60	Below Minimum	-					
DN-03	Bedroom 1	1.40	Below Minimum	Non-Compliant	5.40	High	Compliant					
DN-03	Bedroom 2	1.40	Below Minimum	-	5.10	High	-					
DN-04	LKD	2.60	Minimum	Compliant	2.60	Minimum	-					
DN-04	Bedroom 1	1.40	Below Minimum	-	5.00	High	Compliant					
DN-04	Bedroom 2	0.70	Below Minimum	-	2.20	Minimum	-					

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

<sup>\*\*</sup> The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

<sup>\*\*\*</sup> For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13. For floor plans of the assessed units please refer to section C.1 on page 58.



	Table No. C.4.16 - Sunlight Exposure Results: Duplex Block N											
			ous Trees as Op		Without Deciduous Trees*							
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**					
DN-05	Kitchen/Dining	5.70	High	Compliant	5.70	High	Compliant					
DN-05	Living	2.40	Minimum	-	2.40	Minimum	-					
DN-05	Bedroom 1	5.60	High	-	5.60	High	-					
DN-05	Bedroom 2	2.40	Minimum	-	2.40	Minimum	-					
DN-05	Bedroom 3	5.10	High	-	5.10	High	-					
DN-06	Kitchen/Dining	4.70	High	-	4.70	High	-					
DN-06	Living	2.40	Minimum	-	2.40	Minimum	-					
DN-06	Bedroom 1	5.60	High	Compliant	5.60	High	Compliant					
DN-06	Bedroom 2	2.40	Minimum	-	2.40	Minimum	-					
DN-06	Bedroom 3	5.10	High	-	5.10	High	-					
DN-07	Kitchen/Dining	3.60	Medium	-	5.70	High	Compliant					
DN-07	Living	2.40	Minimum	-	2.40	Minimum	-					
DN-07	Bedroom 1	5.50	High	Compliant	5.50	High	-					
DN-07	Bedroom 2	2.40	Minimum	-	2.40	Minimum	-					
DN-07	Bedroom 3	5.10	High	-	5.10	High	-					
DN-08	Kitchen/Dining	2.70	Minimum	-	4.70	High	-					
DN-08	Living	2.40	Minimum	-	2.40	Minimum	-					
DN-08	Bedroom 1	5.60	High	Compliant	5.60	High	Compliant					
DN-08	Bedroom 2	2.40	Minimum	-	2.40	Minimum	-					
DN-08	Bedroom 3	5.10	High	-	5.10	High	-					

# C.4.17 SE Results: Duplex Block P

		Table No. (	C.4.17 - Sunlight	Exposure Results:	Duplex Blo	ck P		
		Deciduous Trees as Opaque Objects*			Without Deciduous Trees*			
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	
DP-01	LKD	6.50	High	Compliant	6.90	High	Compliant	
DP-01	Bedroom 1	0.00	Below Minimum	-	0.80	Below Minimum	-	
DP-01	Bedroom 2	0.00	Below Minimum	-	0.50	Below Minimum	-	
DP-02	LKD	6.20	High	Compliant	6.20	High	Compliant	
DP-02	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-	
DP-02	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-	
DP-03	LKD	4.40	High	Compliant	6.20	High	Compliant	
DP-03	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-	
DP-03	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-	
DP-04	LKD	4.40	High	Compliant	8.90	High	Compliant	
DP-04	Bedroom 1	3.20	Medium	-	6.20	High	-	
DP-04	Bedroom 2	4.10	High	-	5.00	High	-	
DP-05	LKD	2.20	Minimum	Compliant	5.50	High	Compliant	
DP-05	Bedroom 1	0.00	Below Minimum	-	1.10	Below Minimum	-	
DP-05	Bedroom 2	0.00	Below Minimum	-	0.20	Below Minimum	-	

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

<sup>\*\*</sup> The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

<sup>\*\*\*</sup> For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13. For floor plans of the assessed units please refer to section C.1 on page 58.



		Table No. (	C.4.18 - Sunlight	Exposure Results:	Duplex Blo	ck P		
		Deciduous Trees as Opaque Objects*			Without Deciduous Trees*			
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	
DP-06	Kitchen/Dining	6.80	High	Compliant	6.80	High	Compliant	
DP-06	Living	0.40	Below Minimum	-	1.20	Below Minimum	-	
DP-06	Bedroom 1	0.80	Below Minimum	-	1.10	Below Minimum	-	
DP-06	Bedroom 2	6.60	High	-	6.60	High	-	
DP-06	Bedroom 3	0.20	Below Minimum	-	0.40	Below Minimum	-	
DP-07	Kitchen/Dining	6.80	High	Compliant	6.80	High	Compliant	
DP-07	Living	0.00	Below Minimum	-	0.00	Below Minimum	-	
DP-07	Bedroom 1	0.60	Below Minimum	-	1.10	Below Minimum	-	
DP-07	Bedroom 2	6.60	High	-	6.60	High	-	
DP-07	Bedroom 3	0.00	Below Minimum	-	0.40	Below Minimum	-	
DP-08	Kitchen/Dining	5.20	High	Compliant	5.20	High	Compliant	
DP-08	Living	0.00	Below Minimum	-	0.00	Below Minimum	-	
DP-08	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-	
DP-08	Bedroom 2	4.00	High	-	4.00	High	-	
DP-08	Bedroom 3	0.00	Below Minimum	-	0.40	Below Minimum	-	
DP-09	Kitchen/Dining	8.30	High	Compliant	9.40	High	Compliant	
DP-09	Living	6.70	High	-	6.70	High	-	
DP-09	Bedroom 1	5.40	High	-	6.30	High	-	
DP-09	Bedroom 2	6.70	High	-	6.70	High	-	
DP-09	Bedroom 3	5.30	High	-	6.30	High	-	
DP-10	Kitchen/Dining	4.60	High	-	6.40	High	Compliant	
DP-10	Living	0.00	Below Minimum	-	1.10	Below Minimum	-	
DP-10	Bedroom 1	4.80	High	-	6.30	High	-	
DP-10	Bedroom 2	0.30	Below Minimum	-	1.10	Below Minimum	-	
DP-10	Bedroom 3	5.00	High	Compliant	6.30	High	-	

### C.4.18 SE Results: Duplex Block Q

	Table No. C.4.18 - Sunlight Exposure Results: Duplex Block Q										
		Decidu	ious Trees as Op	aque Objects*	V	Without Deciduous Trees*					
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**				
DQ-01	LKD	3.20	Medium	Compliant	5.40	High	Compliant				
DQ-01	Bedroom 1	1.00	Below Minimum	-	1.00	Below Minimum	-				
DQ-01	Bedroom 2	0.20	Below Minimum	-	0.20	Below Minimum	-				
DQ-02	LKD	1.70	Minimum	-	9.00	High	Compliant				
DQ-02	Bedroom 1	3.10	Medium	Compliant	6.40	High	-				
DQ-02	Bedroom 2	2.20	Minimum	-	5.70	High	-				
DQ-03	LKD	5.50	High	Compliant	6.70	High	Compliant				
DQ-03	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-				
DQ-03	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-				

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

<sup>\*\*</sup> The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

<sup>\*\*\*</sup> For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13. For floor plans of the assessed units please refer to section C.1 on page 58.



Table No. C.4.18 - Sunlight Exposure Results: Duplex Block Q									
	T				·				
	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*				
Unit Number		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**		
DQ-04	LKD	5.90	High	Compliant	6.60	High	Compliant		
DQ-04	Bedroom 1	0.90	Below Minimum	-	0.90	Below Minimum	-		
DQ-04	Bedroom 2	0.40	Below Minimum	-	0.40	Below Minimum	-		
DQ-05	Kitchen/Dining	6.20	High	Compliant	6.30	High	Compliant		
DQ-05	Living	1.00	Below Minimum	-	1.00	Below Minimum	1		
DQ-05	Bedroom 1	6.20	High	-	6.20	High	•		
DQ-05	Bedroom 2	1.00	Below Minimum	-	1.00	Below Minimum	1		
DQ-05	Bedroom 3	5.90	High	-	5.90	High	1		
DQ-06	Kitchen/Dining	7.70	High	Compliant	9.40	High	Compliant		
DQ-06	Living	6.80	High	-	6.80	High	-		
DQ-06	Bedroom 1	4.80	High	-	6.30	High	1		
DQ-06	Bedroom 2	6.80	High	-	6.80	High	1		
DQ-06	Bedroom 3	5.30	High	-	5.90	High	1		
DQ-07	LKD	6.60	High	Compliant	7.30	High	Compliant		
DQ-07	Bedroom 1	6.40	High	-	6.80	High	-		
DQ-07	Bedroom 2	1.00	Below Minimum	-	1.00	Below Minimum	-		
DQ-07	Bedroom 3	5.90	High	-	6.10	High	1		
DQ-08	LKD	4.10	High	-	4.10	High	-		
DQ-08	Bedroom 1	4.20	High	-	4.20	High	-		
DQ-08	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-		
DQ-08	Bedroom 3	6.10	High	Compliant	6.10	High	Compliant		

### C.4.19 SE Results: Duplex Block R

		Table No. (	C.4.18 - Sunlight	Exposure Results:	Duplex Blo	ck R		
		Decidu	ious Trees as Op	aque Objects*	V	Without Deciduous Trees*		
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	
DR-01	LKD	7.30	High	Compliant	7.30	High	Compliant	
DR-01	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-	
DR-01	Bedroom 2	0.10	Below Minimum	-	0.10	Below Minimum	-	
DR-02	LKD	7.80	High	Compliant	7.80	High	Compliant	
DR-02	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-	
DR-02	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-	
DR-03	LKD	7.30	High	Compliant	7.30	High	Compliant	
DR-03	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-	
DR-03	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-	
DR-04	LKD	7.50	High	Compliant	7.80	High	Compliant	
DR-04	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-	
DR-04	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-	

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

<sup>\*\*</sup> The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

<sup>\*\*\*</sup> For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13. For floor plans of the assessed units please refer to section C.1 on page 58.



	Ī			Exposure Results:	1		
	Deepe		ious Trees as Op	T .		/ithout Deciduc	
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
DR-05	LKD	7.40	High	Compliant	7.40	High	Compliant
DR-05	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
DR-05	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DR-06	LKD	7.80	High	Compliant	8.20	High	Compliant
DR-06	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
DR-06	Bedroom 2	5.20	High	-	5.20	High	-
DR-07	Kitchen/Dining	7.60	High	Compliant	7.70	High	Compliant
DR-07	Living	1.80	Minimum	-	2.20	Minimum	-
DR-07	Bedroom 1	7.60	High	-	7.60	High	-
DR-07	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DR-07	Bedroom 3	6.90	High	-	6.90	High	-
DR-08	Kitchen/Dining	7.20	High	-	7.20	High	-
DR-08	Living	0.20	Below Minimum	-	0.20	Below Minimum	-
DR-08	Bedroom 1	7.60	High	Compliant	7.60	High	Compliant
DR-08	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DR-08	Bedroom 3	6.90	High	-	6.90	High	-
DR-09	Kitchen/Dining	7.70	High	Compliant	7.70	High	Compliant
DR-09	Living	0.20	Below Minimum	-	0.20	Below Minimum	-
DR-09	Bedroom 1	7.60	High	-	7.60	High	-
DR-09	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DR-09	Bedroom 3	6.90	High	-	6.90	High	-
DR-10	Kitchen/Dining	7.20	High	-	7.20	High	-
DR-10	Living	0.20	Below Minimum	-	0.20	Below Minimum	-
DR-10	Bedroom 1	7.60	High	Compliant	7.60	High	Compliant
DR-10	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DR-10	Bedroom 3	6.90	High	-	6.90	High	-
DR-11	Kitchen/Dining	7.70	High	Compliant	7.70	High	Compliant
DR-11	Living	0.20	Below Minimum	-	0.20	Below Minimum	-
DR-11	Bedroom 1	7.60	High	-	7.60	High	-
DR-11	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DR-11	Bedroom 3	6.90	High	-	6.90	High	_
DR-12	Kitchen/Dining	7.20	High	-	7.20	High	_
DR-12	Living	5.20	High	-	5.20	High	_
DR-12	Bedroom 1	7.60	High	Compliant	7.60	High	Compliant
DR-12	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
DR-12	Bedroom 3	6.90	High		6.90	High	

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

\*\* The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct

sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

\*\*\* For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13.

For floor plans of the assessed units please refer to section C.1 on page 58.



### C.4.20 SE Results: Duplex Block S

		D - 1	T		Duplex Block S		
	Deem		ious Trees as Op	1		Vithout Deciduo	
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
DS-01	LKD	2.70	Minimum	Compliant	3.00	Medium	Compliant
DS-01	Bedroom 1	1.50	Minimum	-	2.40	Minimum	-
DS-01	Bedroom 2	2.30	Minimum	-	2.30	Minimum	-
DS-02	LKD	4.10	High	-	5.00	High	Compliant
DS-02	Bedroom 1	4.20	High	Compliant	5.00	High	-
DS-02	Bedroom 2	0.30	Below Minimum	-	4.40	High	-
DS-03	LKD	4.50	High	Compliant	5.20	High	Compliant
DS-03	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
DS-04	LKD	4.80	High	Compliant	5.20	High	Compliant
DS-04	Bedroom 1	0.70	Below Minimum	-	2.20	Minimum	-
DS-05	LKD	3.70	Medium	Compliant	5.20	High	Compliant
DS-05	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
DS-06	LKD	3.90	Medium	Compliant	5.20	High	Compliant
DS-06	Bedroom 1	0.90	Below Minimum	-	0.90	Below Minimum	-
DS-07	LKD	4.50	High	Compliant	5.20	High	Compliant
DS-07	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
DS-08	LKD	3.50	Medium	Compliant	5.20	High	Compliant
DS-08	Bedroom 1	0.50	Below Minimum	-	0.50	Below Minimum	-
DS-09	Kitchen/Dining	3.00	Medium	-	3.00	Medium	-
DS-09	Living	3.20	Medium	Compliant	3.20	Medium	Compliant
DS-09	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
DS-09	Bedroom 2	3.00	Medium	-	3.00	Medium	-
DS-09	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
DS-10	Kitchen/Dining	4.40	High	-	5.00	High	-
DS-10	Living	4.50	High	-	5.20	High	Compliant
DS-10	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
DS-10	Bedroom 2	4.80	High	Compliant	5.00	High	-
DS-10	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
DS-11	Kitchen/Dining	4.70	High	Compliant	5.20	High	Compliant
DS-11	Living	1.90	Minimum	-	1.90	Minimum	-
DS-11	Bedroom 1	4.10	High	_	4.10	High	-
DS-11	Bedroom 2	2.70	Minimum	_	2.70	Minimum	-
DS-12	Kitchen/Dining	4.90	High	Compliant	5.20	High	Compliant
DS-12	Living	3.00	Medium	-	3.00	Medium	-
DS-12	Bedroom 1	4.00	High	-	4.10	High	_
DS-12	Bedroom 2	2.90	Minimum	_	2.90	Minimum	_
DS-13	Kitchen/Dining	3.30	Medium	_	3.30	Medium	-
DS-13	Living	1.30	Below Minimum	_	1.30	Below Minimum	_
DS-13	Bedroom 1	4.10	High	Compliant	4.10	High	Compliant
DS-13	Bedroom 2	2.70	Minimum	Compilant	2.70	Minimum	Compilation

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

<sup>\*\*</sup> The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

<sup>\*\*\*</sup> For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13. For floor plans of the assessed units please refer to section C.1 on page 58.



		Table No. (	 C.4.20 - Sunlight	Exposure Results:	Duplex Blo	ock S	
			ious Trees as Op		Without Deciduous Trees*		
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
DS-14	Kitchen/Dining	3.60	Medium	-	4.20	High	Compliant
DS-14	Living	1.60	Minimum	-	1.60	Minimum	-
DS-14	Bedroom 1	4.10	High	Compliant	4.10	High	-
DS-14	Bedroom 2	2.10	Minimum	-	2.10	Minimum	-
DS-15	Kitchen/Dining	5.00	High	Compliant	5.20	High	Compliant
DS-15	Living	0.40	Below Minimum	-	0.40	Below Minimum	-
DS-15	Bedroom 1	4.10	High	-	4.10	High	-
DS-15	Bedroom 2	2.00	Minimum	-	2.00	Minimum	-
DS-16	Kitchen/Dining	5.20	High	Compliant	5.20	High	Compliant
DS-16	Living	2.90	Minimum	-	2.90	Minimum	-
DS-16	Bedroom 1	4.10	High	-	4.10	High	-
DS-16	Bedroom 2	2.10	Minimum	-	2.10	Minimum	-

### C.4.21 SE Results: Duplex Block T

	lable No. (	C.4.21 - Sunlight	Exposure Results:	Duplex Blo	ck T					
	Decidu	ous Trees as Op	aque Objects*	Without Deciduous Trees*						
Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**				
LKD	2.50	Minimum	Compliant	3.40	Medium	Compliant				
Bedroom 1	2.30	Minimum	-	3.20	Medium	-				
Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-				
LKD	3.50	Medium	Compliant	3.80	Medium	-				
Bedroom 1	0.60	Below Minimum	-	4.20	High	Compliant				
Bedroom 2	0.40	Below Minimum	-	4.00	High	-				
LKD	3.10	Medium	Compliant	3.40	Medium	-				
Bedroom 1	2.80	Minimum	•	3.80	Medium	Compliant				
Bedroom 2	0.00	Below Minimum	-	0.30	Below Minimum	-				
LKD	1.90	Minimum	Compliant	1.90	Minimum	-				
Bedroom 1	1.90	Minimum	-	4.20	High	Compliant				
Bedroom 2	1.30	Below Minimum	-	4.10	High	-				
Kitchen/Dining	3.30	Medium	-	3.70	Medium	-				
Living	2.80	Minimum	-	3.10	Medium	-				
Bedroom 1	4.10	High	Compliant	4.10	High	Compliant				
Bedroom 2	3.50	Medium	-	3.60	Medium	-				
Bedroom 3	4.00	High	-	4.00	High	-				
(itchen/Dining	3.70	Medium	-	3.70	Medium	-				
Living	4.50	High	Compliant	4.50	High	Compliant				
Bedroom 1	4.30	High	-	4.30	High	-				
Bedroom 2	3.60	Medium	-	3.60	Medium	-				
Bedroom 3	4.00	High	-	4.00	High	-				
	LKD Bedroom 1 Bedroom 2 LKD Bedroom 2 LKD Bedroom 1 Bedroom 2 LKD Bedroom 1 Bedroom 2 LKD Bedroom 1 Bedroom 2 itchen/Dining Living Bedroom 3 itchen/Dining Living Bedroom 3 itchen/Dining Living Bedroom 3 itchen/Dining	Room Description         SE Hours on March 21st           LKD         2.50           Bedroom 1         2.30           Bedroom 2         0.00           LKD         3.50           Bedroom 1         0.60           Bedroom 2         0.40           LKD         3.10           Bedroom 1         2.80           Bedroom 2         0.00           LKD         1.90           Bedroom 1         1.90           Bedroom 2         1.30           itchen/Dining         3.30           Living         2.80           Bedroom 1         4.10           Bedroom 2         3.50           Bedroom 3         4.00           itchen/Dining         3.70           Living         4.50           Bedroom 1         4.30           Bedroom 2         3.60	Room Description SE Hours on March 21st LKD 2.50 Minimum Bedroom 2 0.00 Below Minimum LKD 3.50 Medium Bedroom 1 0.60 Below Minimum Bedroom 2 0.40 Below Minimum LKD 3.10 Medium Bedroom 1 2.80 Minimum  LKD 3.10 Medium  Bedroom 1 2.80 Minimum  LKD 3.10 Medium  Bedroom 2 1.90 Minimum  Bedroom 2 1.90 Minimum  LKD 1.90 Minimum  Bedroom 1 1.90 Minimum  Bedroom 1 2.80 Minimum  LKD 1.90 Minimum  Bedroom 1 1.90 Minimum  Bedroom 2 1.30 Below Minimum  Bedroom 2 1.30 Medium  Living 2.80 Minimum  Bedroom 1 4.10 High  Bedroom 2 3.50 Medium  Living 3.70 Medium  Living 4.50 High  Bedroom 1 4.30 High  Bedroom 2 3.60 Medium	Room Description SE Hours on March 21st 21st*** Unit compliance based on highest 21st*** Performing room***  LKD 2.50 Minimum Compliant  Bedroom 1 2.30 Minimum -  Bedroom 2 0.00 Below Minimum -  LKD 3.50 Medium Compliant  Bedroom 1 0.60 Below Minimum -  Bedroom 2 0.40 Below Minimum -  LKD 3.10 Medium Compliant  Bedroom 1 2.80 Minimum -  LKD 3.10 Medium Compliant  Bedroom 1 2.80 Minimum -  LKD 1.90 Minimum -  Bedroom 2 1.30 Below Minimum -  LKD 1.90 Minimum -  Bedroom 1 1.90 Minimum -  Bedroom 2 1.30 Below Minimum -  Bedroom 1 1.90 Minimum -  Bedroom 2 1.30 Below Minimum -  Bedroom 2 1.30 Below Minimum -  Bedroom 2 1.30 Medium -  Living 2.80 Minimum -  Bedroom 1 4.10 High Compliant  Bedroom 2 3.50 Medium -  Living 4.50 High Compliant  Bedroom 1 4.30 High -  Living 4.50 High Compliant  Bedroom 2 3.60 Medium -	Deciduous Trees as Opaque Objects*   SE Hours on March 21st   SE Hours on March 21st   Deciduous Trees as Opaque Objects*   SE Hours on March 21st   Dunit compliance based on highest performing room** on March 21st   Dunit compliant   SE Hours on March 22st   Dunit compliant   Dunit compli	Room Description         SE Hours on March 21st         Level of SE on March 21st         Unit compliance based on highest performing room**         SE Hours on March 21st         Level of SE on March 21st           LKD         2.50         Minimum         Compliant         3.40         Medium           Bedroom 1         2.30         Minimum         -         3.20         Medium           Bedroom 2         0.00         Below Minimum         -         0.00         Below Minimum           LKD         3.50         Medium         Compliant         3.80         Medium           Bedroom 1         0.60         Below Minimum         -         4.20         High           Bedroom 2         0.40         Below Minimum         -         4.00         High           Bedroom 2         0.40         Below Minimum         -         4.00         High           Bedroom 1         2.80         Minimum         -         0.30         Below Minimum           LKD         1.90         Minimum         -         0.30         Below Minimum           LKD         1.90         Minimum         -         0.30         Below Minimum           LKD         1.90         Minimum         -         0.30         Below Mini				

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

<sup>\*\*</sup> The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

<sup>\*\*\*</sup> For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13. For floor plans of the assessed units please refer to section C.1 on page 58.



		Table No. (	C.4.21 - Sunlight	Exposure Results:	Duplex Blo	ck T				
		Deciduous Trees as Opaque Objects*			Without Deciduous Trees*					
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**			
DT-07	Kitchen/Dining	3.70	Medium	-	3.70	Medium	-			
DT-07	Living	3.60	Medium	-	3.60	Medium	-			
DT-07	Bedroom 1	4.40	High	Compliant	4.40	High	Compliant			
DT-07	Bedroom 2	3.60	Medium	-	3.60	Medium	-			
DT-07	Bedroom 3	4.00	High	-	4.00	High	-			
DT-08	Kitchen/Dining	3.30	Medium	-	3.30	Medium	-			
DT-08	Living	2.70	Minimum	-	4.50	High	Compliant			
DT-08	Bedroom 1	4.40	High	Compliant	4.40	High	-			
DT-08	Bedroom 2	3.60	Medium	-	3.60	Medium	-			
DT-08	Bedroom 3	4.00	High	-	4.00	High	-			

### C.4.22SE Results: Duplex Block U

		Table No. 0	C.4.22 - Sunlight	Exposure Results:	Duplex Blo	ck U				
		Decidu	ous Trees as Op	aque Objects*	V	/ithout Deciduc	ous Trees*			
Unit Number	Room Description	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**			
DU-01	LKD	1.20	Below Minimum	-	2.00	Minimum	-			
DU-01	Bedroom 1	2.20	Minimum	Compliant	2.50	Minimum	Compliant			
DU-02	LKD	2.30	Minimum	Compliant	2.70	Minimum	Compliant			
DU-02	Bedroom 1	1.50	Minimum	-	2.00	Minimum	-			
DU-03	LKD	0.80	Below Minimum	Non-Compliant	2.00	Minimum	Compliant			
DU-03	Bedroom 1	0.10	Below Minimum	-	2.00	Minimum	-			
DU-04	LKD	1.30	Below Minimum	Non-Compliant	2.00	Minimum	Compliant			
DU-04	Bedroom 1	1.30	Below Minimum	-	2.00	Minimum	-			
DU-05	LKD	2.10	Minimum	Compliant	2.90	Minimum	Compliant			
DU-05	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-			
DU-06	LKD	7.30	High	Compliant	7.30	High	Compliant			
DU-06	Bedroom 1	3.20	Medium	-	3.20	Medium	-			
DU-06	Bedroom 2	4.70	High	-	4.70	High	-			
DU-07	LKD	5.80	High	Compliant	7.30	High	Compliant			
DU-07	Bedroom 1	3.10	Medium	-	3.20	Medium	-			
DU-07	Bedroom 2	4.40	High	-	4.40	High	-			
DU-08	LKD	6.50	High	Compliant	7.10	High	Compliant			
DU-08	Bedroom 1	3.10	Medium	-	3.20	Medium	-			
DU-08	Bedroom 2	4.40	High	-	4.40	High	-			
DU-09	LKD	6.50	High	Compliant	6.90	High	Compliant			
DU-09	Bedroom 1	3.00	Medium	-	3.20	Medium	-			
DU-09	Bedroom 2	4.20	High	-	4.20	High	-			
DU-10	LKD	5.60	High	Compliant	6.10	High	Compliant			
DU-10	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-			
DU-10	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-			

<sup>\*</sup> Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

<sup>\*\*</sup> The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 27.

<sup>\*\*\*</sup> For the interpretation of levels of Sunlight Exposure please refer to "3.3 Definition of Levels of Sunlight Exposure" on page 13. For floor plans of the assessed units please refer to section C.1 on page 58.



#### Sun On Ground (SOG) in Proposed Outdoor Amenity Areas **C.5**

Below is an example of the table used to describe SOG in proposed gardens and amenity spaces.

	Table Example. C.5 - Scheme Performance SOG								
Assigned Area Number	Assessed Area	Area Capable of Receiving 2 Hours of Sunlight on March 21st	Recommended Minimum	Level of Compliance with BRE Guidelines	Meets BR 209 Criteria				
Α	В	С	D	E	F				

#### A: Assigned Area Number

This column indicates the number that 3DDB have assigned to the assessed areas, which is included for the sole purpose of aiding in the identification of the corresponding space shown in the corresponding figure.

#### **B:** Assessed Area

This column identifies the assessed garden/amenity area.

### C: Area Capable of Receiving 2 Hours of Sunlight on March 21st

The percentage of the proposed area that can receive more than 2 hours of sunlight on March 21st.

### D: Recommended Minimum

The BRE Guidelines state that the percentage of a garden/amenity area that can receive more than 2 hours of sunlight on March 21st should be 50%. The target value for all spaces is set to 50%.

### **E:** Level of Compliance with BRE Guidelines

This column states the compliance of the assessed space with the BRE Target Value. If the assessed garden or amenity area complies with the BRE Guidelines this cell will state "BRE Compliant". If the garden or amenity area does not meet the criteria as set out in the BRE Guidelines, a percentage of compliance with the recommended minimum will be stated.

#### F: Meets BR 209 Criteria

This column states if the assessed area achieves the recommended level of sunlight on March 21st as per BR 209.

It should be noted that the figures displayed in the table of results have been rounded off. A manual calculation of these figures may yield a negligible difference and should not be considered an error.



### **C.5.1** Sun On Ground in Proposed Outdoor Amenity Areas - Public Open Spaces

	Table No. C.5.1 - SOG in Proposed Public Open Spaces Results:										
Assigned Area Number	Assessed Area	Area Capable of Receiving 2 Hours of Sunlight on March 21st	Recommended minimum	Level of Compliance with BRE Guidelines*	Meets BR 209 Criteria*						
1	Public Open Space 1	99.91%	50.00%	BRE Compliant	Yes						
2	Public Open Space 2	99.98%	50.00%	BRE Compliant	Yes						
3	Public Open Space 3	98.87%	50.00%	BRE Compliant	Yes						
4	Public Open Space 4	96.11%	50.00%	BRE Compliant	Yes						
5	Public Open Space 5	98.53%	50.00%	BRE Compliant	Yes						
6	Public Open Space 6	97.53%	50.00%	BRE Compliant	Yes						
7	Public Open Space 7	99.96%	50.00%	BRE Compliant	Yes						
8	Public Open Space 8	92.60%	50.00%	BRE Compliant	Yes						
9	Public Open Space 9	94.85%	50.00%	BRE Compliant	Yes						
10	Village Green Open Space	99.18%	50.00%	BRE Compliant	Yes						

<sup>\*</sup> The BRE Guidelines recommend that for a garden or amenity 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 March 21st.

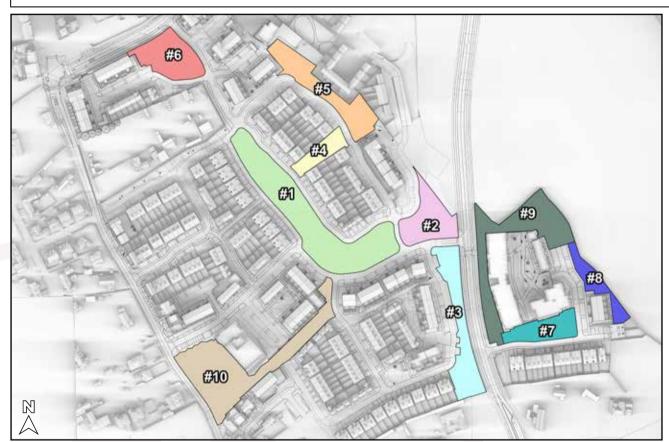


Figure C.2: Indication of the amenity areas that have been analysed

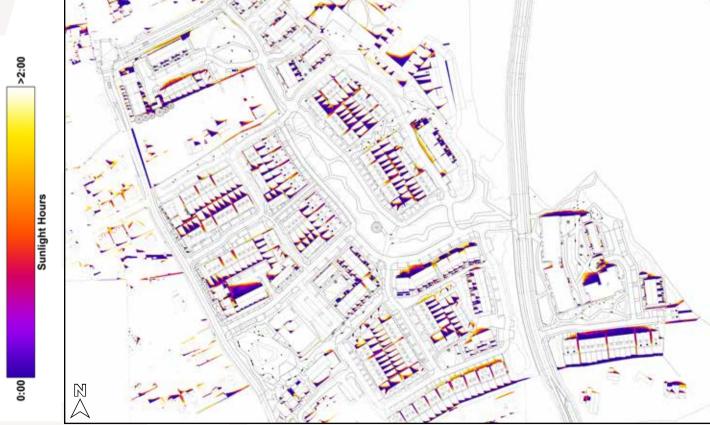


Figure C.1: Area capable of receiving 2 hours of sunlight on March 21st shown in white (R)



### C.5.2 Sun On Ground in Proposed Outdoor Amenity Areas - Communal Open Spaces

	Table No. C.	5.2 - SOG in Proposed Comr	nunal Open Space	Table No. C.5.2 - SOG in Proposed Communal Open Spaces Results:										
Assigned Area Number	Assessed Area	Area Capable of Receiving 2 Hours of Sunlight on March 21st	Recommended minimum	Level of Compliance with BRE Guidelines*	Meets BR 209 Criteria*									
11	Communal Open Space 1	99.09%	50.00%	BRE Compliant	Yes									
12	Communal Open Space 2	91.14%	50.00%	BRE Compliant	Yes									
13	Communal Open Space 3	97.98%	50.00%	BRE Compliant	Yes									
14	Communal Open Space 4	88.33%	50.00%	BRE Compliant	Yes									
15	Communal Open Space 5	98.51%	50.00%	BRE Compliant	Yes									
16	Communal Open Space 6	97.34%	50.00%	BRE Compliant	Yes									
17	Communal Open Space 7	69.61%	50.00%	BRE Compliant	Yes									

<sup>\*</sup> The BRE Guidelines recommend that for a garden or amenity 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 March 21st.

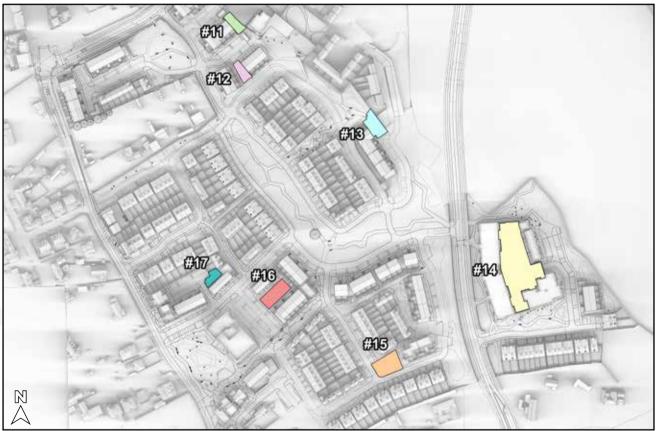


Figure C.4: Indication of the amenity areas that have been analysed

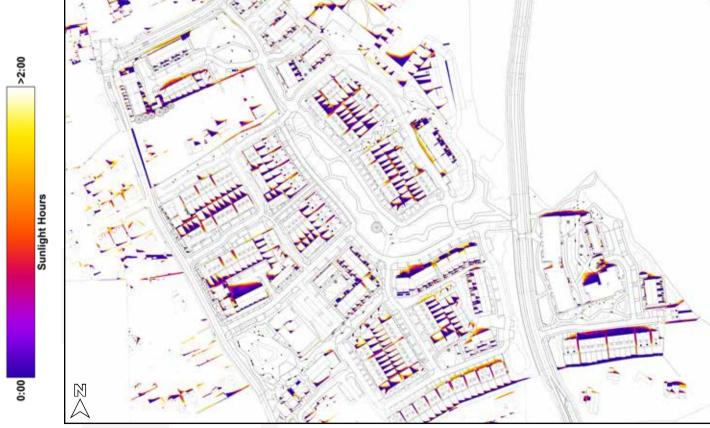


Figure C.3: Area capable of receiving 2 hours of sunlight on March 21st shown in white (R)



# **D.0 Supplementary Study Results**

### D.1 SDA study, under the I.S. EN 17037 criteria and No Sky Line (NSL)

Below is an example of the table used to describe the supplementary assessment results for SDA under the I.S. EN 17037 criteria and 'No Sky Line' in proposed units..

	Ta	able Exar	mple. D.1	- Supple	mentary	SDA (I.S.	EN 1703'	7 criteria) and NSL Resul	ts			
	SDA (I.S. EN 17037 criteria) No Sky Line (NSL)											
Unit	Room	No T	No Trees Winter Trees Summer Trees % of room									
Number	Description	Area	Area Area Area Area Area Compliance with							Above		
		above	above	above	above	above	above	I.S. EN 17037 Criteria	the sky is	80%		
		300 Lux   100 Lux   300 Lux   100 Lux   300 Lux   100 Lux   visible										
Α	A B C D C D C D E F G											

#### A: Unit Number

This column identifies the assessed unit. All unit numbers are determined by the architect's drawings, unless otherwise stated.

#### **B:** Room Description

Room Description details which room in the unit has been assessed, e.g. bedroom, LKD, etc.

#### C: % of area above 300 Lux

I.S. EN 17037 recommends at least 50% of the working plane receives above 300 lux for at least half the daylight hours.

This column states percentage of the working plane of the assessed room that is capable of receiving more than 300 lux for at least half the daylight hours when the assessment is carried out without trees in the analytical model.

The values are calculated without trees in the analytical model, with trees in the analytical model configured in the winter state i.e. bare branch, and with trees in the analytical model configured in the summer state i.e. full leaf.

#### D: % of area above 100 Lux

I.S. EN 17037 recommends at least 95% of the working plane receives above 100 lux for at least half the daylight hours.

This column states percentage of the working plane of the assessed room that is capable of receiving more than 100 lux for at least half the daylight hours when the assessment is carried out without trees in the analytical model.

The values are calculated without trees in the analytical model, with trees in the analytical model configured in the winter state i.e. bare branch, and with trees in the analytical model configured in the summer state i.e. full leaf.

### E: Compliance with I.S. EN 17037 Criteria

This column states if the assessed room achieves the recommended level of daylight as per I.S. EN 17037 with consideration to the various tree states.

If the recommended lux levels are achieved on the working plane, for half the daylight hours, both with and without trees, this column will state: 'Compliant'.

If the recommended lux levels are not achieved on the working plane, for half the daylight hours, both with and without trees, this column will state: 'Non-compliant'.

If the recommended lux levels are achieved on the working plane, for half the daylight hours, without trees but are not achieved with trees, this column will state: 'Trees affecting compliance'.

If the recommended lux levels are achieved on the working plane, for half the daylight hours, with the trees in the winter state but are not achieved with trees in the summer state, this column will state: 'Trees affecting compliance (summer only)'.

Compliance rates will be stated for SDA compliance with trees in all of the above states.

It should be noted that the figures displayed in the table of results have been rounded off. A manual calculation of these figures may yield a negligible difference and should not be considered an error.

### F: % of room where the sky is visible from the working plane

This column states the percentage of the room from which there is a direct line of sight to the sky when assessed at the working plane height, which is 850mm above the finished floor level in residential rooms or 700mm above the finished floor level in offices or classrooms.

#### **G: Above 80%**

Whilst the BRE Guidelines only provide recommendations for NSL in the context of an impact analysis, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."

If this column states: 'Yes', it signifies that the sky will be visible from more than 80% of the working plane.

If this column states: 'No', it signifies that the sky will be visible from less than 80% of the working plane and supplementary electric lighting may be required.

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# D.1.1 Supplementary SDA Results (I.S. EN 17037 criteria): Block 01

					SDA (I.:	S. EN 170	37 criteria	a)	No Sky Line	: (NSL
Unit	Room	No T	rees	Winte	r Trees	Summe	er Trees	Compliance with	% of room	Abov
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	80%
B1-01	LKD	95%	100%	88%	100%	75%	96%	Compliant	100%	Yes
31-01	Bedroom 1	100%	100%	88%	100%	36%	100%	Trees affecting compliance (summer only)	98%	Ye
B1-01	Bedroom 2	91%	100%	67%	100%	48%	100%	Trees affecting compliance (summer only)	99%	Ye
B1-01	Bedroom 3	100%	100%	93%	100%	57%	100%	Compliant	100%	Ye
B1-02	LKD	38%	100%	33%	100%	28%	96%	Non-compliant	100%	Ye
B1-02	Bedroom 1	39%	100%	15%	100%	2%	91%	Non-compliant	99%	Ye
B1-03	LKD	48%	100%	41%	99%	32%	76%	Non-compliant	100%	Ye
B1-03	Bedroom 1	93%	100%	59%	100%	37%	100%	Trees affecting compliance (summer only)	99%	Ye
B1-04	LKD	57%	93%	50%	91%	41%	87%	Non-compliant	98%	Ye
B1-04	Bedroom 1	100%	100%	95%	100%	60%	100%	Compliant	98%	Ye
B1-04	Bedroom 2	59%	100%	41%	100%	26%	100%	Trees affecting compliance	98%	Ye
B1-04	Bedroom 3	53%	100%	37%	100%	10%	90%	Trees affecting compliance	98%	Ye
B1-05	LKD	44%	95%	34%	85%	18%	73%	Non-compliant	97%	Ye
B1-05	Bedroom 1	100%	100%	94%	100%	63%	100%	Compliant	98%	Ye
B1-05	Bedroom 2	85%	100%	65%	100%	46%	100%	Trees affecting compliance (summer only)	98%	Ye
B1-05	Bedroom 3	89%	100%	74%	100%	59%	100%	Compliant	100%	Ye
B1-06	LKD	52%	100%	48%	100%	41%	100%	Trees affecting compliance	100%	Ye
B1-06	Bedroom 1	93%	100%	82%	100%	66%	100%	Compliant	97%	Ye
B1-07	LKD	52%	100%	45%	100%	39%	99%	Trees affecting compliance	100%	Ye
B1-07	Bedroom 1	89%	100%	65%	100%	46%	100%	Trees affecting compliance (summer only)	98%	Ye
B1-08	LKD	97%	100%	88%	100%	65%	93%	Trees affecting compliance (summer only)	100%	Ye
B1-08	Bedroom 1	100%	100%	93%	100%	64%	100%	Compliant	98%	Ye
B1-08	Bedroom 2	78%	100%	63%	100%	46%	100%	Trees affecting compliance (summer only)	99%	Ye
B1-08	Bedroom 3	63%	100%	43%	100%	30%	100%	Trees affecting compliance	97%	Ye
B1-08 B1-09	LKD	98%	100%	92%	100%	90%	100%	Compliant	100%	Ye
								·		-
B1-09	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Ye
B1-09	Bedroom 2	100%	100%	87%	100%	76%	100%	Compliant	99%	Ye
B1-09	Bedroom 3	100%	100%	100%	100%	97%	100%	Compliant	100%	Ye
B1-10	LKD	53%	100%	49%	100%	48%	100%	Trees affecting compliance	100%	Ye
B1-10	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Ye
B1-11	LKD	55%	100%	50%	100%	46%	100%	Trees affecting compliance (summer only)	100%	Ye
B1-11	Bedroom 1	100%	100%	98%	100%	93%	100%	Compliant	99%	Ye
B1-12	LKD	79%	95%	70%	94%	63%	93%	Trees affecting compliance	97%	Ye
B1-12	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Ye
B1-12	Bedroom 2	69%	100%	59%	100%	56%	100%	Compliant	98%	Ye
B1-12	Bedroom 3	57%	100%	53%	100%	50%	100%	Compliant	98%	Ye
B1-13	LKD	49%	100%	45%	99%	44%	93%	Non-compliant	97%	Ye
B1-13	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Ye
B1-13	Bedroom 2	100%	100%	100%	100%	91%	100%	Compliant	98%	Ye
B1-13	Bedroom 3	100%	100%	100%	100%	96%	100%	Compliant	99%	Ye

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."

For floor plans of the assessed units please refer to section C.1 on page 58.



					CD 4 /1 /	C EN 100	7D '. '	1		/NICI
l loi+	Doom	NI - T		\		S. EN 1703		a) 	No Sky Line	· (NSL
Unit No.	Room Description	Area above 300 Lux*	Area above	Area above 300 Lux*	Area above	Area above 300 Lux*	Area above	Compliance with I.S. EN 17037 Criteria*	% of room where the sky is visible	Abov 80%*
B1-14	LKD	58%	100%	54%	100%	49%	100%	Trees affecting compliance (summer only)	100%	Yes
B1-14	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B1-14	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B1-15	LKD	58%	100%	53%	100%	51%	100%	Compliant	100%	Yes
B1-15	Bedroom 1	100%	100%	96%	100%	91%	100%	Compliant	98%	Yes
B1-16	LKD	100%	100%	92%	100%	88%	100%	Compliant	100%	Yes
B1-16	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B1-16	Bedroom 2	98%	100%	78%	100%	65%	100%	Compliant	99%	Yes
B1-16	Bedroom 3	80%	100%	70%	100%	60%	100%	Compliant	97%	Yes
B1-17	LKD	100%	100%	96%	100%	93%	100%	Compliant	100%	Yes
B1-17	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B1-17	Bedroom 2	100%	100%	100%	100%	91%	100%	Compliant	99%	Yes
B1-17	Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
B1-18	LKD	56%	100%	54%	100%	51%	100%	Compliant	100%	Yes
B1-18	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Ye
B1-19	LKD	59%	100%	56%	100%	54%	100%	Compliant	100%	Ye
B1-19	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Ye
B1-20	LKD	83%	96%	83%	96%	81%	96%	Compliant	95%	Ye
B1-20	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Ye
B1-20	Bedroom 2	74%	100%	70%	100%	69%	100%	Compliant	98%	Ye
B1-20	Bedroom 3	67%	100%	63%	100%	53%	100%	Compliant	98%	Ye
B1-21	LKD	51%	100%	51%	100%	49%	100%	Trees affecting compliance (summer only)	97%	Ye
B1-21	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Ye
B1-21	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	98%	Ye
B1-21	Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant	99%	Ye
B1-22	LKD	61%	100%	59%	100%	59%	100%	Compliant	100%	Ye
B1-22	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Ye
B1-22	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	98%	Ye
B1-23	LKD	61%	100%	59%	100%	56%	100%	Compliant	100%	Ye
B1-23	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Ye
B1-24	LKD	100%	100%	94%	100%	91%	100%	Compliant	100%	Ye
B1-24	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Ye
B1-24	Bedroom 2	100%	100%	96%	100%	93%	100%	Compliant	99%	Ye
B1-24	Bedroom 3	83%	100%	80%	100%	77%	100%	Compliant	97%	Ye
B1-25	LKD	100%	100%	98%	100%	96%	100%	Compliant	100%	Ye
B1-25	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Ye
B1-25	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Ye
B1-25	Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant	100%	Ye
B1-26	LKD	61%	100%	61%	100%	60%	100%	Compliant	100%	Ye
B1-26	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Ye
B1-27	LKD	66%	100%	66%	100%	64%	100%	Compliant	100%	Ye
	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Ye

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."



		Table No	. D.1.1 - Su	 ıpplemer	ntary SDA	۱.S. EN	 17037 crit	eria) and NSL Results: Block (	)]	
					SDA (I.	S. EN 1703	37 criteria	h)	No Sky Line	: (NSL)
Unit	Room	No T	rees	Winte	r Trees	Summe	er Trees	Compliance with	% of room	Λ la a) (a
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Compliance with I.S. EN 17037 Criteria*	where the sky is visible	Above 80%**
B1-28	LKD	89%	100%	88%	100%	87%	99%	Compliant	96%	Yes
B1-28	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B1-28	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B1-28	Bedroom 3	93%	100%	93%	100%	93%	100%	Compliant	98%	Yes
B1-29	LKD	66%	100%	66%	100%	64%	100%	Compliant	98%	Yes
B1-29	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B1-29	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B1-29	Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
B1-30	LKD	73%	100%	70%	100%	69%	100%	Compliant	100%	Yes
B1-30	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B1-30	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B1-31	LKD	72%	100%	69%	100%	66%	100%	Compliant	100%	Yes
B1-31	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B1-32	LKD	100%	100%	96%	100%	94%	100%	Compliant	100%	Yes
B1-32	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B1-32	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
B1-32	Bedroom 3	93%	100%	93%	100%	90%	100%	Compliant	97%	Yes

### D.1.2 Supplementary SDA Results (I.S. EN 17037 criteria): Block 02

	_	Гable No.	D.1.2 - Su	ıpplemer	ntary SDA	A (I.S. EN	17037 crit	eria) and NSL Results: Block C	2	
					SDA (I.S	S. EN 170	37 criteria	a)	No Sky Line	· (NSL)
Unit	Room	No T	rees	Winte	r Trees	Summe	er Trees	Compliance with	% of room	Above
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	80%**
B2-01	LKD	97%	100%	95%	100%	94%	100%	Compliant	100%	Yes
B2-01	Bedroom 1	100%	100%	100%	100%	50%	100%	Compliant	99%	Yes
B2-01	Bedroom 2	96%	100%	85%	100%	76%	100%	Compliant	99%	Yes
B2-01	Bedroom 3	98%	100%	91%	100%	83%	100%	Compliant	99%	Yes
B2-02	LKD	39%	100%	35%	100%	35%	100%	Non-compliant	100%	Yes
B2-02	Bedroom 1	37%	100%	35%	100%	30%	100%	Non-compliant	100%	Yes
B2-03	LKD	47%	100%	46%	100%	45%	100%	Non-compliant	100%	Yes
B2-03	Bedroom 1	93%	100%	91%	100%	83%	100%	Compliant	99%	Yes
B2-04	LKD	58%	92%	53%	91%	46%	87%	Non-compliant	100%	Yes
B2-04	Bedroom 1	100%	100%	100%	100%	86%	100%	Compliant	99%	Yes
B2-04	Bedroom 2	70%	100%	65%	100%	65%	100%	Compliant	99%	Yes
B2-04	Bedroom 3	60%	100%	50%	100%	50%	100%	Compliant	99%	Yes
B2-05	LKD	42%	95%	26%	87%	14%	76%	Non-compliant	98%	Yes
B2-05	Bedroom 1	100%	100%	84%	100%	55%	100%	Compliant	98%	Yes
B2-05	Bedroom 2	83%	100%	67%	100%	50%	100%	Compliant	99%	Yes
B2-05	Bedroom 3	85%	100%	67%	100%	54%	100%	Compliant	99%	Yes
B2-06	LKD	48%	100%	39%	100%	32%	86%	Non-compliant	100%	Yes
B2-06	Bedroom 1	82%	100%	55%	100%	39%	100%	Trees affecting compliance (summer only)	98%	Yes

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line." For floor plans of the assessed units please refer to section C.1 on page 58.



					SDA (I.	S. EN 170	37 criteria	a)	No Sky Line	· (NSL
Unit	Room	No T	rees	Winte	r Trees	l	er Trees		% of room	Ì
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Compliance with I.S. EN 17037 Criteria*	where the sky is visible	Above 80%**
B2-07	LKD	38%	98%	32%	85%	26%	73%	Non-compliant	83%	Yes
B2-07	Bedroom 1	50%	100%	43%	100%	39%	100%	Trees affecting compliance	89%	Yes
B2-08	LKD	98%	100%	96%	100%	95%	100%	Compliant	100%	Yes
B2-08	Bedroom 1	67%	100%	64%	100%	52%	100%	Compliant	96%	Yes
B2-08	Bedroom 2	43%	100%	35%	100%	33%	100%	Non-compliant	82%	Yes
B2-08	Bedroom 3	33%	100%	30%	93%	23%	83%	Non-compliant	76%	No
B2-09	LKD	99%	100%	97%	100%	96%	100%	Compliant	100%	Yes
B2-09	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B2-09	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
B2-09	Bedroom 3	100%	100%	100%	100%	98%	100%	Compliant	99%	Yes
B2-10	LKD	53%	100%	51%	100%	49%	100%	Trees affecting compliance (summer only)	100%	Yes
B2-10	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
B2-11	LKD	52%	100%	52%	100%	51%	100%	Compliant	100%	Yes
B2-11	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
B2-12	LKD	79%	95%	72%	93%	66%	92%	Trees affecting compliance	99%	Yes
B2-12	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
B2-12	Bedroom 2	76%	100%	72%	100%	72%	100%	Compliant	99%	Yes
B2-12	Bedroom 3	63%	100%	63%	100%	60%	100%	Compliant	99%	Yes
B2-13	LKD	46%	100%	43%	98%	40%	92%	Non-compliant	98%	Yes
B2-13	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B2-13	Bedroom 2	100%	100%	100%	100%	94%	100%	Compliant	99%	Yes
B2-13	Bedroom 3	100%	100%	100%	100%	91%	100%	Compliant	99%	Yes
B2-14	LKD	49%	100%	45%	100%	43%	100%	Non-compliant	100%	Yes
B2-14	Bedroom 1	100%	100%	98%	100%	93%	100%	Compliant	98%	Yes
B2-14	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B2-15	LKD	48%	100%	44%	100%	41%	99%	Non-compliant	100%	Yes
B2-15	Bedroom 1	87%	100%	85%	100%	76%	100%	Compliant	98%	Yes
B2-16	LKD	100%	100%	100%	100%	99%	100%	Compliant	99%	Yes
B2-16	Bedroom 1	100%	100%	100%	100%	98%	100%	Compliant	98%	Yes
B2-16	Bedroom 2	63%	100%	59%	100%	57%	100%	·	99%	Yes
								Compliant		1
B2-16	Bedroom 3	57%	100%	53%	100%	50%	100%	Compliant	97%	Yes
B2-17	LKD	100%	100%	99%	100%	98%	100%	Compliant	100%	Yes
B2-17	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B2-17	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
B2-17	Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
B2-18	LKD	57%	100%	56%	100%	55%	100%	Compliant	100%	Yes
B2-18	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
B2-19	LKD	56%	100%	56%	100%	56%	100%	Compliant	100%	Yes

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."



Unit No.  B2-20 B2-20 B2-20 B2-21 B2-21 B2-21 B2-21 B2-21	Room Description  LKD Bedroom 1 Bedroom 2 Bedroom 3 LKD Bedroom 1	No T Area above 300 Lux* 83% 100% 94% 67%	Area above 100 Lux* 97% 100%	Winte Area above 300 Lux* 82%	r Trees Area above 100 Lux*	Summe Area above	37 criteria er Trees	a) Compliance with	No Sky Line % of room	
No.  B2-20  B2-20  B2-20  B2-21  B2-21  B2-21	LKD  Bedroom 1  Bedroom 2  Bedroom 3  LKD	Area above 300 Lux* 83% 100% 94%	Area above 100 Lux* 97% 100%	Area above 300 Lux*	Area above 100 Lux*	Area above	er Trees	Compliance with		۸ ا
B2-20 B2-20 B2-20 B2-21 B2-21 B2-21	Bedroom 1 Bedroom 2 Bedroom 3 LKD	83% 100% 94%	97% 100%	82%		300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	Above 80%**
B2-20 B2-20 B2-21 B2-21 B2-21	Bedroom 2 Bedroom 3 LKD	94%		100%	96%	81%	95%	Compliant	98%	Yes
B2-20 B2-21 B2-21 B2-21	Bedroom 3 LKD		100%		100%	100%	100%	Compliant	99%	Yes
B2-21 B2-21 B2-21	LKD	67%		89%	100%	85%	100%	Compliant	98%	Yes
B2-21 B2-21			100%	67%	100%	63%	100%	Compliant	99%	Yes
B2-21	Bedroom 1	49%	100%	48%	100%	46%	100%	Non-compliant	98%	Yes
		100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B2-21	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
	Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
B2-22	LKD	55%	100%	54%	100%	52%	100%	Compliant	100%	Yes
B2-22	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B2-22	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B2-23	LKD	56%	100%	54%	100%	52%	100%	Compliant	100%	Yes
B2-23	Bedroom 1	100%	100%	100%	100%	98%	100%	Compliant	98%	Yes
B2-24	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
B2-24	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B2-24	Bedroom 2	80%	100%	78%	100%	78%	100%	Compliant	99%	Yes
B2-24	Bedroom 3	67%	100%	67%	100%	67%	100%	Compliant	97%	Yes
B2-25	LKD	100%	100%	100%	100%	98%	100%	Compliant	100%	Yes
B2-25	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B2-25	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
B2-25	Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
B2-26	LKD	66%	100%	65%	100%	65%	100%	Compliant	100%	Yes
B2-26	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B2-27	LKD	66%	100%	65%	100%	64%	100%	Compliant	100%	Yes
B2-27	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B2-28	LKD	84%	99%	84%	98%	84%	98%	Compliant	97%	Yes
B2-28	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B2-28	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
B2-28	Bedroom 3	93%	100%	93%	100%	93%	100%	Compliant	99%	Yes
B2-29	LKD	64%	100%	63%	100%	61%	100%	Compliant	98%	Yes
B2-29	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B2-29 B2-29	Bedroom 2  Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant  Compliant	99%	Yes Yes
B2-29 B2-30	LKD	68%	100%	66%	100%	65%	100%	Compliant	100%	Yes
B2-30	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B2-30	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B2-31	LKD	68%	100%	66%	100%	66%	100%	Compliant	100%	Yes
B2-31	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B2-31	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
B2-32	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B2-32	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
B2-32	Bedroom 3	80%	100%	80%	100%	80%	100%	Compliant	97%	Yes

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."



# D.1.3 Supplementary SDA Results (I.S. EN 17037 criteria): Block 03

										-
				Γ		S. EN 1703	37 criteria	a) I	No Sky Line	: (NSL
Unit No.	Room Description	No T Area above 300 Lux*	rees Area above 100 Lux*	Winte Area above 300 Lux*	r Trees Area above 100 Lux*	Area above 300 Lux*	Area above	Compliance with I.S. EN 17037 Criteria*	% of room where the sky is visible	Abov 80%*
B3-01	LKD	48%	100%	37%	100%	26%	77%	Non-compliant	80%	Yes
B3-01	Bedroom 1	100%	100%	100%	100%	90%	100%	Compliant	99%	Yes
B3-01	Bedroom 2	87%	100%	70%	100%	61%	100%	Compliant	98%	Yes
B3-02	LKD	53%	100%	46%	100%	37%	100%	Trees affecting compliance	90%	Yes
B3-02	Bedroom 1	100%	100%	75%	100%	55%	100%	Compliant	98%	Yes
B3-03	LKD	54%	100%	47%	100%	40%	100%	Trees affecting compliance	92%	Yes
B3-03	Bedroom 1	100%	100%	76%	100%	46%	100%	Trees affecting compliance (summer only)	98%	Yes
B3-04	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
B3-04	Bedroom 1	91%	100%	67%	100%	59%	100%	Compliant	98%	Yes
B3-05	LKD	90%	100%	82%	100%	71%	94%	Trees affecting compliance (summer only)	100%	Yes
B3-05	Bedroom 1	88%	100%	29%	100%	4%	65%	Trees affecting compliance	96%	Yes
B3-05	Bedroom 2	76%	100%	41%	100%	11%	80%	Trees affecting compliance	99%	Yes
B3-05	Bedroom 3	53%	100%	27%	100%	13%	87%	Trees affecting compliance	97%	Ye
B3-05	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Ye
B3-06	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	
								·		Ye
B3-06	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	98%	Ye
B3-07	LKD	62%	100%	58%	100%	54%	100%	Compliant	100%	Ye
B3-07	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Ye
B3-08	LKD	62%	100%	60%	100%	56%	100%	Compliant	100%	Ye
B3-08	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Ye
B3-09	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Ye
B3-09	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Ye
B3-09	Bedroom 2	100%	100%	96%	100%	87%	100%	Compliant	99%	Ye
B3-10	LKD	93%	100%	90%	100%	87%	100%	Compliant	100%	Ye
B3-10	Bedroom 1	100%	100%	83%	100%	69%	100%	Compliant	98%	Ye
B3-10	Bedroom 2	89%	100%	59%	100%	46%	100%	Trees affecting compliance (summer only)	99%	Ye
B3-10	Bedroom 3	77%	100%	63%	100%	50%	100%	Compliant	97%	Ye
B3-11	LKD	99%	100%	86%	100%	85%	100%	Compliant	98%	Ye
B3-11	Bedroom 1	0%	60%	0%	60%	0%	52%	Non-compliant	70%	No
B3-11	Bedroom 2	24%	100%	24%	100%	22%	100%	Non-compliant	57%	No
B3-12	LKD	77%	96%	67%	94%	49%	92%	Trees affecting compliance	84%	Ye
B3-12	Bedroom 1	93%	100%	90%	100%	81%	100%	Compliant	97%	Ye
B3-12	Bedroom 2	46%	100%	41%	100%	35%	100%	Non-compliant	98%	Ye
B3-12	Bedroom 3	43%	100%	30%	100%	27%	100%	Non-compliant	96%	Ye
B3-13	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Ye
B3-13	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Ye
B3-13	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	98%	Ye
B3-14	LKD	66%	100%	65%	100%	64%	100%	Compliant	100%	Ye
B3-14	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Ye
B3-15	LKD	67%	100%	66%	100%	65%	100%	Compliant	100%	Ye
B3-15	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Ye

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line." For floor plans of the assessed units please refer to section C.1 on page 58.



	-	Гable No.	D.1.3 - Su	ıpplemer	ntary SDA	A (I.S. EN	17037 crit	eria) and NSL Results: Block (	)3	
					SDA (I.	S. EN 170	37 criteria	a)	No Sky Line	(NSL)
Unit	Room	No T	rees	Winte	r Trees	Summe	er Trees	Compliance with	% of room	Above
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	80%**
B3-16	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
B3-16	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B3-16	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
B3-17	LKD	94%	100%	92%	100%	90%	100%	Compliant	100%	Yes
B3-17	Bedroom 1	100%	100%	98%	100%	83%	100%	Compliant	96%	Yes
B3-17	Bedroom 2	100%	100%	76%	100%	63%	100%	Compliant	99%	Yes
B3-17	Bedroom 3	80%	100%	67%	100%	63%	100%	Compliant	97%	Yes
B3-18	LKD	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B3-18	Bedroom 1	5%	88%	5%	81%	5%	81%	Non-compliant	61%	No
B3-18	Bedroom 2	33%	100%	31%	100%	31%	100%	Non-compliant	75%	No
B3-19	LKD	85%	100%	84%	100%	82%	98%	Compliant	86%	Yes
B3-19	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	97%	Yes
B3-19	Bedroom 2	59%	100%	57%	100%	56%	100%	Compliant	98%	Yes
B3-19	Bedroom 3	50%	100%	50%	100%	50%	100%	Compliant	98%	Yes
B3-20	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
B3-20	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B3-20	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B3-21	LKD	79%	100%	78%	100%	78%	100%	Compliant	100%	Yes
B3-21	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B3-22	LKD	79%	100%	78%	100%	78%	100%	Compliant	100%	Yes
B3-22	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B3-23	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
B3-23	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B3-23	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
B3-24	LKD	95%	100%	93%	100%	92%	100%	Compliant	100%	Yes
B3-24	Bedroom 1	100%	100%	98%	100%	98%	100%	Compliant	96%	Yes
B3-24	Bedroom 2	100%	100%	100%	100%	98%	100%	Compliant	99%	Yes
B3-24	Bedroom 3	90%	100%	80%	100%	70%	100%	Compliant	97%	Yes
B3-25	LKD	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
B3-25	Bedroom 1	48%	100%	48%	100%	48%	100%	Non-compliant	83%	Yes
B3-25	Bedroom 2	67%	100%	67%	100%	63%	100%	Compliant	98%	Yes
B3-26	LKD	89%	100%	89%	100%	88%	100%	Compliant	87%	Yes
B3-26	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
B3-26	Bedroom 2	93%	100%	91%	100%	91%	100%	Compliant	99%	Yes
B3-26	Bedroom 3	60%	100%	60%	100%	60%	100%	Compliant	97%	Yes
								<u>'</u>		

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."



# D.1.4 Supplementary SDA Results (I.S. EN 17037 criteria): Duplex Block A

	Tabl	e No. D.1.	.4 - Supp	lementar	y SDA (I.:	S. EN 170	37 criteria	a) and NSL Results: Duplex Blo	ock A	
					SDA (I.	S. EN 170	37 criteria	n)	No Sky Line	(NSL)
Unit	Room	No T	rees	Winte	r Trees	Summe	er Trees	Compliance with	% of room	Above
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	80%**
DA-01	LKD	56%	100%	54%	100%	53%	100%	Compliant	100%	Yes
DA-01	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
DA-01	Bedroom 2	59%	100%	43%	100%	38%	100%	Trees affecting compliance	95%	Yes
DA-02	LKD	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DA-02	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	96%	Yes
DA-02	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DA-03	Kitchen/Dining	100%	100%	97%	100%	90%	100%	Compliant	100%	Yes
DA-03	Living	82%	100%	82%	100%	82%	100%	Compliant	97%	Yes
DA-03	Bedroom 1	100%	100%	100%	100%	98%	100%	Compliant	98%	Yes
DA-03	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DA-04	Kitchen/Dining	100%	100%	100%	100%	96%	100%	Compliant	100%	Yes
DA-04	Living	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DA-04	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
DA-04	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DA-05	Kitchen/Dining	100%	100%	100%	100%	96%	100%	Compliant	100%	Yes
DA-05	Living	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DA-05	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
DA-05	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DA-06	Kitchen/Dining	98%	100%	95%	100%	86%	100%	Compliant	100%	Yes
DA-06	Living	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DA-06	Bedroom 1	98%	100%	98%	100%	98%	100%	Compliant	98%	Yes
DA-06	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DA-07	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	95%	Yes
DA-07	Living	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DA-07	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
DA-07	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DA-08	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DA-08	Living	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DA-08	Bedroom 1	98%	100%	98%	100%	97%	100%	Compliant	98%	Yes
DA-08	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DA-09	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DA-09	Living	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DA-09	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DA-09	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DA-09	Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
DA-10	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DA-10	Bedroom 1	91%	100%	91%	100%	91%	100%	Compliant	97%	Yes
DA-10	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DA-10	Bedroom 3	50%	100%	50%	100%	50%	100%	Compliant	74%	No

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."



	Tabl	le No. D.1.	.4 - Supp	lementar	ry SDA (I.:	S. EN 170	37 criteria	a) and NSL Results: Duplex Blo	ock A	
					SDA (I.	S. EN 170	37 criteria	a)	No Sky Line	(NSL)
Unit	Room	No T	rees	Winte	r Trees	Summe	er Trees	Compliance with	% of room	Above
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	80%**
DA-11	Kitchen/Dining	13%	100%	13%	100%	12%	100%	Non-compliant	89%	Yes
DA-11	Living	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DA-11	Bedroom 1	100%	100%	100%	100%	97%	100%	Compliant	99%	Yes
DA-11	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DA-11	Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DA-12	Kitchen/Dining	9%	92%	9%	92%	9%	92%	Non-compliant	89%	Yes
DA-12	Living	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DA-12	Bedroom 1	71%	100%	71%	100%	71%	100%	Compliant	99%	Yes
DA-12	Bedroom 2	76%	100%	76%	100%	75%	100%	Compliant	100%	Yes
DA-12	Bedroom 3	98%	100%	98%	100%	98%	100%	Compliant	100%	Yes

### D.1.5 Supplementary SDA Results (I.S. EN 17037 criteria): Duplex Block B

	Tab	le No. D.1.	.5 - Suppl	lementar	y SDA (I.s	S. EN 170	37 criteria	a) and NSL Results: Duplex Blo	ock B	
					SDA (I.	S. EN 170	37 criteria	a)	No Sky Line	(NSL)
Unit	Room	No T	rees	Winte	r Trees	Summe	er Trees	Compliance with	% of room	A la av (a
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	Above 80%**
DB-01	LKD	52%	100%	39%	100%	28%	100%	Trees affecting compliance	100%	Yes
DB-01	Bedroom 1	58%	100%	45%	100%	35%	100%	Trees affecting compliance	97%	Yes
DB-02	LKD	63%	100%	56%	100%	47%	100%	Trees affecting compliance (summer only)	100%	Yes
DB-02	Bedroom 1	58%	100%	52%	100%	47%	100%	Trees affecting compliance (summer only)	98%	Yes
DB-03	LKD	56%	100%	51%	100%	47%	100%	Trees affecting compliance (summer only)	100%	Yes
DB-03	Bedroom 1	61%	100%	58%	100%	48%	100%	Trees affecting compliance (summer only)	98%	Yes
DB-04	LKD	56%	100%	55%	100%	54%	100%	Compliant	100%	Yes
DB-04	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DB-04	Bedroom 2	100%	100%	100%	100%	98%	100%	Compliant	99%	Yes
DB-04	Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DB-05	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DB-05	Bedroom 1	98%	100%	97%	100%	88%	100%	Compliant	99%	Yes
DB-05	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DB-05	Bedroom 3	69%	100%	67%	100%	67%	100%	Compliant	98%	Yes
DB-06	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DB-06	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DB-06	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DB-06	Bedroom 3	69%	100%	67%	100%	67%	100%	Compliant	99%	Yes
DB-07	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DB-07	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DB-07	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DB-07	Bedroom 3	75%	100%	72%	100%	69%	100%	Compliant	98%	Yes
DB-08	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DB-08	Bedroom 1	13%	91%	13%	89%	13%	89%	Non-compliant	45%	No
DB-08	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."

For floor plans of the assessed units please refer to section C.1 on page 58.



### D.1.6 Supplementary SDA Results (I.S. EN 17037 criteria): Duplex Block C

	Tabl	le No. D.1.	.6 - Supp	lementar	y SDA (I.:	S. EN 170	37 criteria	a) and NSL Results: Duplex Blo	ock C	
					SDA (I.:	S. EN 1703	37 criteria	a)	No Sky Line	: (NSL)
Unit	Room	No T	rees	Winte	r Trees	Summe	er Trees	Compliance with	% of room	Λ la a
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	Above 80%**
DC-01	Kitchen/Dining	100%	100%	100%	100%	71%	100%	Compliant	99%	Yes
DC-01	Living	100%	100%	100%	100%	78%	100%	Compliant	99%	Yes
DC-01	Bedroom 1	97%	100%	61%	100%	28%	100%	Trees affecting compliance (summer only)	98%	Yes
DC-01	Bedroom 2	92%	100%	85%	100%	75%	100%	Compliant	96%	Yes
DC-01	Bedroom 3	100%	100%	89%	100%	27%	100%	Trees affecting compliance (summer only)	99%	Yes
DC-02	LKD	100%	100%	100%	100%	83%	100%	Compliant	100%	Yes
DC-02	Bedroom 1	77%	100%	37%	100%	17%	99%	Trees affecting compliance	98%	Yes
DC-02	Bedroom 2	94%	100%	76%	100%	50%	100%	Compliant	95%	Yes
DC-03	LKD	65%	100%	51%	100%	43%	100%	Trees affecting compliance (summer only)	95%	Yes
DC-03	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DC-03	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	97%	Yes
DC-03	Study	0%	50%	0%	50%	0%	50%	Non-compliant	26%	No
DC-04	LKD	55%	100%	40%	100%	29%	84%	Trees affecting compliance	93%	Yes
DC-04	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DC-04	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
DC-04	Study	0%	50%	0%	42%	0%	38%	Non-compliant	12%	No
DC-05	LKD	98%	100%	84%	100%	69%	100%	Compliant	100%	Yes
DC-05	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DC-05	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DC-05	Bedroom 3	43%	100%	39%	100%	32%	100%	Non-compliant	95%	Yes

### D.1.7 Supplementary SDA Results (I.S. EN 17037 criteria): Duplex Block D

	Tabl	e No. D.1.	7 - Supp	lementar	y SDA (I.S	S. EN 1703	37 criteria	) and NSL Results: Duplex Blo	ock D	
					SDA (I.S	S. EN 170	37 criteria	a)	No Sky Line	(NSL)
Unit	Room	No T	rees	Winter Trees		Summe	er Trees	Compliance with	% of room	A b 0) (0
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	Above 80%**
DD-00	Community Hall	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DD-01	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DD-01	Bedroom 2	100%	100%	100%	100%	79%	100%	Compliant	97%	Yes
DD-01	Bedroom 2	100%	100%	100%	100%	86%	100%	Compliant	98%	Yes
DD-02	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DD-02	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
DD-02	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	97%	Yes
DD-03	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DD-03	Living	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DD-03	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DD-03	Bedroom 2	100%	100%	100%	100%	94%	100%	Compliant	100%	Yes
DD-03	Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant	97%	Yes

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line." For floor plans of the assessed units please refer to section C.1 on page 58.



	Tabl	a Na Di	7 Cupp	lomontor		C EN 170		A) and NCL Decults: Dupley Dis		
	Тарі	e No. D.I.	. / - Supp	ementar	y SDA (1.3	5. EN 1703		n) and NSL Results: Duplex Blo	JCK D	
					SDA (I.	S. EN 170	37 criteria	a)	No Sky Line	: (NSL)
Unit	Room	No T	rees	Winte	r Trees	Summe	er Trees	Compliance with	% of room	Above
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	80%**
DD-04	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DD-04	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DD-04	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DD-04	Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DD-05	Kitchen/Dining	45%	100%	25%	100%	15%	69%	Non-compliant	100%	Yes
DD-05	Living	52%	100%	15%	100%	0%	100%	Trees affecting compliance	100%	Yes
DD-05	Bedroom 1	68%	100%	46%	100%	32%	100%	Trees affecting compliance	99%	Yes
DD-05	Bedroom 2	100%	100%	98%	100%	78%	100%	Compliant	100%	Yes
DD-05	Bedroom 3	93%	100%	72%	100%	51%	100%	Compliant	100%	Yes
DD-06	Kitchen/Dining	69%	100%	65%	100%	61%	100%	Compliant	98%	Yes
DD-06	Living	100%	100%	100%	100%	98%	100%	Compliant	100%	Yes
DD-06	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
DD-06	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DD-06	Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes

## D.1.8 Supplementary SDA Results (I.S. EN 17037 criteria): Duplex Block E

	Tabl	le No. D.1	.8 - Supp	lementar	y SDA (I.	S. EN 170	37 criteria	a) and NSL Results: Duplex Blo	ock E	
					a)	No Sky Line	(NSL)			
Unit	Room	No T	rees	Winte	r Trees	Summe	er Trees	Compliance with	% of room	Above
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	80%**
DE-01	LKD	57%	100%	52%	100%	47%	100%	Trees affecting compliance (summer only)	96%	Yes
DE-01	Bedroom 1	39%	100%	35%	100%	32%	97%	Non-compliant	78%	No
DE-02	LKD	59%	100%	54%	100%	50%	100%	Compliant	95%	Yes
DE-02	Bedroom 1	39%	100%	34%	100%	31%	98%	Non-compliant	78%	No
DE-03	LKD	94%	100%	78%	100%	59%	100%	Compliant	100%	Yes
DE-03	Bedroom 1	53%	100%	52%	100%	44%	100%	Trees affecting compliance (summer only)	93%	Yes
DE-04	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DE-04	Bedroom 1	95%	100%	94%	100%	91%	100%	Compliant	99%	Yes
DE-04	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DE-04	Bedroom 3	67%	100%	67%	100%	67%	100%	Compliant	97%	Yes
DE-05	LKD	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DE-05	Bedroom 1	95%	100%	95%	100%	89%	100%	Compliant	99%	Yes
DE-05	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DE-05	Bedroom 3	67%	100%	67%	100%	64%	100%	Compliant	97%	Yes
DE-06	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DE-06	Bedroom 1	100%	100%	100%	100%	98%	100%	Compliant	99%	Yes
DE-06	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DE-06	Bedroom 3	75%	100%	67%	100%	67%	100%	Compliant	97%	Yes

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."

For floor plans of the assessed units please refer to section C.1 on page 58.



# D.1.9 Supplementary SDA Results (I.S. EN 17037 criteria): Duplex Block F

					SDV /II	S. EN 170	77 critaria	1	No Sky Line	/NICI
Unit	Room	No T	rooc	\\/into	r Trees	l	er Trees	a) 		(1421
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above	Compliance with I.S. EN 17037 Criteria*	% of room where the sky is visible	Abo\ 80%
DF-01	LKD	24%	100%	20%	100%	16%	100%	Non-compliant	97%	Yes
DF-01	Bedroom 1	100%	100%	62%	100%	28%	100%	Trees affecting compliance (summer only)	100%	Yes
DF-01	Bedroom 2	84%	100%	39%	100%	24%	100%	Trees affecting compliance	92%	Ye:
DF-02	LKD	100%	100%	63%	100%	30%	100%	Trees affecting compliance (summer only)	100%	Ye
DF-02	LKD	30%	100%	28%	100%	25%	99%	Non-compliant	83%	Ye
DF-02	Bedroom 2	10%	43%	6%	18%	6%	14%	Non-compliant	81%	Ye
DF-03	LKD	48%	100%	41%	100%	39%	100%	Non-compliant	99%	Ye
DF-03	Bedroom 1	100%	100%	60%	100%	20%	100%	Trees affecting compliance (summer only)	100%	Ye
DF-03	Bedroom 2	10%	49%	6%	18%	0%	8%	Non-compliant	81%	Ye
DF-04	LKD	44%	100%	40%	100%	36%	100%	Non-compliant	99%	Ye
DF-04	Bedroom 1	100%	100%	60%	100%	20%	97%	Trees affecting compliance (summer only)	100%	Ye
DF-04	Bedroom 2	10%	45%	6%	14%	0%	8%	Non-compliant	81%	Ye
DF-05	LKD	33%	100%	30%	100%	28%	99%	Non-compliant	88%	Ye
DF-05	Bedroom 1	100%	100%	72%	100%	50%	100%	Compliant	100%	Ye
DF-05	Bedroom 2	10%	51%	8%	29%	6%	18%	Non-compliant	81%	Ye
DF-06	LKD	30%	75%	20%	55%	13%	41%	Non-compliant	100%	Ye
DF-06	Bedroom 1	100%	100%	78%	100%	54%	100%	Compliant	100%	Ye
DF-07	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Ye
DF-07	Bedroom 1	100%	100%	83%	100%	68%	100%	Compliant	100%	Ye
DF-07	Bedroom 2	67%	100%	48%	100%	40%	100%	Trees affecting compliance	99%	Ye
DF-08	LKD	60%	100%	47%	100%	33%	100%	Trees affecting compliance	95%	Ye
DF-08	Bedroom 1	65%	100%	63%	100%	63%	100%	Compliant	100%	Ye
DF-08	Bedroom 2	8%	27%	8%	27%	8%	24%	Non-compliant	78%	No
DF-09	LKD	53%	100%	44%	100%	33%	100%	Trees affecting compliance	71%	No
DF-09	Bedroom 1	75%	100%	73%	100%	67%	100%	Compliant	96%	Ye
DF-09	Bedroom 2	8%	27%	8%	24%	8%	24%	Non-compliant	66%	No
DF-10	LKD	53%	100%	45%	100%	36%	100%	Trees affecting compliance	70%	No
DF-10	Bedroom 1	73%	100%	67%	100%	62%	100%	Compliant	95%	Ye
DF-10	Bedroom 2	8%	20%	8%	20%	6%	14%	Non-compliant	62%	No
DF-11	LKD	73%	100%	62%	100%	37%	100%	Trees affecting compliance (summer only)	92%	Ye
DF-11	LKD	57%	100%	47%	100%	38%	100%	Trees affecting compliance	90%	Ye
DF-11	Bedroom 2	8%	24%	8%	20%	6%	14%	Non-compliant	51%	N
DF-12	LKD	58%	100%	45%	100%	35%	100%	Trees affecting compliance	86%	Ye
DF-12	Bedroom 1	72%	100%	62%	100%	37%	100%	Trees affecting compliance (summer only)	92%	Ye
DF-12	Bedroom 2	8%	20%	6%	14%	4%	12%	Non-compliant //	53%	No
DF-13	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	95%	Ye
DF-13	Living	100%	100%	79%	100%	49%	100%	Trees affecting compliance (summer only)	98%	Ye
DF-13	Bedroom 1	100%	100%	79%	100%	72%	100%	Compliant	100%	Ye
DF-13	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Ye
	2501001112	100%	100%	100%	100%	100%	100%	Compliant	100%	Ye

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line." For floor plans of the assessed units please refer to section C.1 on page 58.



	. Tab	ie No. D.i	.9 - Supp	iementai	ry SDA (I.:	5. EN 170.	37 Criteria	a) and NSL Results: Duplex Blo	JCK F	
					SDA (I.:	S. EN 170	37 criteria	a)	No Sky Line	: (NSL)
Unit No.	Room Description	No T Area above 300 Lux*	rees Area above 100 Lux*	Winte Area above 300 Lux*	r Trees  Area above 100 Lux*	Summe Area above 300 Lux*	Area above	Compliance with I.S. EN 17037 Criteria*	% of room where the sky is visible	Above 80%**
DF-14	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	96%	Yes
DF-14	Living	100%	100%	98%	100%	73%	100%	Compliant	99%	Yes
DF-14	Bedroom 1	99%	100%	79%	100%	72%	100%	Compliant	99%	Yes
DF-14	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DF-14	Bedroom 3	63%	100%	53%	100%	43%	100%	Trees affecting compliance (summer only)	95%	Yes
DF-15	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DF-15	Living	100%	100%	90%	100%	58%	100%	Compliant	99%	Yes
DF-15	Bedroom 1	100%	100%	81%	100%	72%	100%	Compliant	100%	Yes
DF-15	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DF-15	Bedroom 3	55%	100%	45%	100%	40%	100%	Trees affecting compliance	96%	Yes
DF-16	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DF-16	Living	100%	100%	98%	100%	70%	100%	Compliant	99%	Yes
DF-16	Bedroom 1	100%	100%	85%	100%	74%	100%	Compliant	99%	Yes
DF-16	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DF-16	Bedroom 3	98%	100%	75%	100%	65%	100%	Compliant	96%	Yes
DF-17	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DF-17	Living	100%	100%	100%	100%	78%	100%	Compliant	99%	Yes
DF-17	Bedroom 1	100%	100%	86%	100%	75%	100%	Compliant	100%	Yes
DF-17	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DF-17	Bedroom 3	100%	100%	73%	100%	63%	100%	Compliant	100%	Yes
DF-18	LKD	90%	100%	88%	100%	84%	100%	Compliant	100%	Yes
DF-18	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DF-18	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DF-19	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DF-19	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DF-19	Bedroom 2	100%	100%	100%	100%	98%	100%	Compliant	99%	Yes
DF-19	Bedroom 3	47%	100%	42%	100%	42%	100%	Non-compliant	96%	Yes
DF-20	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DF-20	Living	97%	100%	96%	100%	94%	100%	Compliant	98%	Yes
DF-20	Bedroom 1	83%	100%	82%	100%	81%	100%	Compliant	99%	Yes
DF-20	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DF-20	Bedroom 3	73%	100%	73%	100%	73%	100%	Compliant	96%	Yes
DF-21	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
DF-21	Living	99%	100%	98%	100%	93%	100%	Compliant	98%	Yes
DF-21	Bedroom 1	79%	100%	78%	100%	78%	100%	Compliant	99%	Yes
DF-21	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DF-21	Bedroom 3	75%	100%	73%	100%	70%	100%	Compliant	96%	Yes
DF-22	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DF-22	Living	98%	100%	90%	100%	81%	100%	Compliant	98%	Yes
DF-22	Bedroom 1	78%	100%	78%	100%	76%	100%	Compliant	99%	Yes
DF-22	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DF-22	Bedroom 3	48%	100%	45%	100%	45%	100%	Non-compliant	95%	Yes

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."



	Tab	e No. D.1	.9 - Supp	lementa	ry SDA (I.:	S. EN 170	37 criteria	a) and NSL Results: Duplex Blo	ock F	
					SDA (I.	S. EN 170	37 criteria	a)	No Sky Line	· (NSL)
Unit	Room	No T	No Trees		Winter Trees		er Trees	Compliance with	% of room	Above
No.	Description			Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	80%**
DF-23	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DF-23	Living	99%	100%	88%	100%	73%	100%	Compliant	98%	Yes
DF-23	Bedroom 1	78%	100%	76%	100%	75%	100%	Compliant	99%	Yes
DF-23	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DF-23	Bedroom 3	48%	100%	45%	100%	43%	100%	Non-compliant	95%	Yes
DF-24	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DF-24	Living	97%	100%	87%	100%	73%	100%	Compliant	97%	Yes
DF-24	Bedroom 1	78%	100%	78%	100%	76%	100%	Compliant	99%	Yes
DF-24	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DF-24	Bedroom 3	53%	100%	53%	100%	53%	100%	Compliant	95%	Yes

### D.1.10 Supplementary SDA Results (I.S. EN 17037 criteria): Duplex Block G

	Table	e No. D.1.	10 - Supp	lementa	ry SDA (I.	S. EN 170	37 criteria	a) and NSL Results: Duplex Blo	ock G	
					SDA (I.	S. EN 170	37 criteria	a)	No Sky Line	(NSL)
Unit	Room	No T	rees	Winte	r Trees	Summe	er Trees	Compliance with	% of room	Abovo
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	Above 80%**
DG-01	LKD	39%	100%	35%	100%	32%	100%	Non-compliant	55%	No
DG-01	Bedroom 1	82%	100%	48%	100%	29%	97%	Trees affecting compliance	100%	Yes
DG-01	Bedroom 2	10%	45%	8%	24%	6%	14%	Non-compliant	83%	Yes
DG-02	LKD	51%	100%	49%	100%	46%	100%	Trees affecting compliance	88%	Yes
DG-02	Bedroom 1	81%	100%	48%	100%	24%	84%	Trees affecting compliance	100%	Yes
DG-02	Bedroom 2	10%	43%	6%	14%	2%	8%	Non-compliant	98%	Yes
DG-03	LKD	57%	100%	52%	100%	47%	100%	Trees affecting compliance (summer only)	99%	Yes
DG-03	Bedroom 1	79%	100%	47%	100%	27%	84%	Trees affecting compliance	100%	Yes
DG-03	Bedroom 2	10%	45%	6%	18%	4%	12%	Non-compliant	84%	Yes
DG-04	LKD	53%	100%	43%	100%	35%	100%	Trees affecting compliance	96%	Yes
DG-04	Bedroom 1	76%	100%	48%	100%	32%	98%	Trees affecting compliance	100%	Yes
DG-04	Bedroom 2	10%	43%	6%	14%	4%	10%	Non-compliant	90%	Yes
DG-05	LKD	76%	100%	71%	100%	66%	100%	Compliant	100%	Yes
DG-05	Bedroom 1	81%	100%	48%	100%	27%	89%	Trees affecting compliance	100%	Yes
DG-05	Bedroom 2	10%	45%	6%	18%	4%	12%	Non-compliant	81%	Yes
DG-06	LKD	99%	100%	98%	100%	96%	100%	Compliant	100%	Yes
DG-06	Bedroom 1	81%	100%	56%	100%	31%	100%	Trees affecting compliance (summer only)	100%	Yes
DG-06	Bedroom 2	10%	45%	8%	24%	4%	14%	Non-compliant	100%	Yes
DG-07	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DG-07	Living	100%	100%	83%	100%	56%	100%	Compliant	98%	Yes
DG-07	Bedroom 1	82%	100%	67%	100%	58%	100%	Compliant	99%	Yes
DG-07	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DG-07	Bedroom 3	58%	100%	43%	100%	33%	100%	Trees affecting compliance	95%	Yes
DG-08	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DG-08	Living	100%	100%	76%	100%	53%	100%	Compliant	98%	Yes

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line." For floor plans of the assessed units please refer to section C.1 on page 58.



	Table	e No. D.1.	10 - Supp	lementa	ry SDA (I.	S. EN 170	37 criteri	a) and NSL Results: Duplex Blo	ock G	
					SDA (I.:	S. EN 170	37 criteria	a)	No Sky Line	: (NSL)
Unit	Room	No T	rees	Winte	r Trees	Summe	er Trees	Compliance with	% of room	Above
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	80%**
DG-08	Bedroom 1	78%	100%	65%	100%	57%	100%	Compliant	99%	Yes
DG-08	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DG-08	Bedroom 3	65%	100%	45%	100%	35%	100%	Trees affecting compliance	95%	Yes
DG-09	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DG-09	Living	100%	100%	80%	100%	58%	100%	Compliant	98%	Yes
DG-09	Bedroom 1	82%	100%	68%	100%	58%	100%	Compliant	99%	Yes
DG-09	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DG-09	Bedroom 3	60%	100%	45%	100%	38%	100%	Trees affecting compliance	95%	Yes
DG-10	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DG-10	Living	100%	100%	87%	100%	60%	100%	Compliant	98%	Yes
DG-10	Bedroom 1	78%	100%	69%	100%	60%	100%	Compliant	99%	Yes
DG-10	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DG-10	Bedroom 3	63%	100%	45%	100%	38%	100%	Trees affecting compliance	95%	Yes
DG-11	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DG-11	Living	100%	100%	88%	100%	64%	100%	Compliant	98%	Yes
DG-11	Bedroom 1	82%	100%	71%	100%	64%	100%	Compliant	99%	Yes
DG-11	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DG-11	Bedroom 3	58%	100%	43%	100%	38%	100%	Trees affecting compliance	96%	Yes
DG-12	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DG-12	Living	100%	100%	95%	100%	64%	100%	Compliant	98%	Yes
DG-12	Bedroom 1	85%	100%	72%	100%	64%	100%	Compliant	99%	Yes
DG-12	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DG-12	Bedroom 3	68%	100%	50%	100%	38%	100%	Trees affecting compliance (summer only)	95%	Yes

### D.1.11 Supplementary SDA Results (I.S. EN 17037 criteria): Duplex Block H

	Tabl	e No. D.1.	11 - Supp	lementai	y SDA (I.S	S. EN 1703	37 criteria	a) and NSL Results: Duplex Blo	ock H	
					SDA (I.	S. EN 170	37 criteria	a)	No Sky Line	(NSL)
Unit	Room	No T	rees	Winte	r Trees	Summe	er Trees	Compliance with	% of room	A la au .a
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	Above 80%**
DH-01	LKD	64%	100%	48%	100%	33%	100%	Trees affecting compliance	98%	Yes
DH-01	Bedroom 1	87%	100%	65%	100%	35%	100%	Trees affecting compliance (summer only)	100%	Yes
DH-01	Bedroom 2	10%	53%	8%	22%	6%	14%	Non-compliant	81%	Yes
DH-02	LKD	36%	100%	33%	100%	29%	100%	Non-compliant	83%	Yes
DH-02	Bedroom 1	82%	100%	56%	100%	37%	100%	Trees affecting compliance (summer only)	100%	Yes
DH-02	Bedroom 2	10%	49%	8%	24%	6%	16%	Non-compliant	84%	Yes
DH-03	LKD	56%	100%	50%	100%	42%	100%	Trees affecting compliance (summer only)	92%	Yes
DH-03	Bedroom 1	82%	100%	52%	100%	31%	100%	Trees affecting compliance (summer only)	100%	Yes
DH-03	Bedroom 2	10%	49%	6%	16%	4%	12%	Non-compliant	81%	Yes
DH-04	LKD	60%	100%	55%	100%	50%	100%	Compliant	98%	Yes
DH-04	Bedroom 1	81%	100%	48%	100%	26%	89%	Trees affecting compliance	100%	Yes
DH-04	Bedroom 2	10%	45%	6%	14%	2%	8%	Non-compliant	100%	Yes

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line." For floor plans of the assessed units please refer to section C.1 on page 58.



	No T Area above 300 Lux* 66% 82% 10% 48% 81%	rees Area above 100 Lux*  100%  47%  100%	Winte Area above 300 Lux* 63% 48%	SDA (I.S r Trees Area above 100 Lux* 100%	l	37 criteria er Trees Area above 100 Lux*	Compliance with	No Sky Line % of room where the	Above
LKD Bedroom 1 Bedroom 2 LKD Bedroom 1 Bedroom 1	Area above 300 Lux* 66% 82% 10% 48% 81%	Area above 100 Lux* 100% 100% 47%	Area above 300 Lux* 63% 48%	Area above 100 Lux* 100%	Area above 300 Lux*	Area above	·		
LKD Sedroom 1 Sedroom 2 LKD Sedroom 1 Sedroom 2	300 Lux* 66% 82% 10% 48% 81%	100 Lux* 100% 100% 47%	300 Lux* 63% 48%	100 Lux*	300 Lux*		I.S. EN 17037 Criteria*		I D \( \O \( \O \) \( \*\*
Bedroom 1 Bedroom 2 LKD Bedroom 1 Bedroom 2	82% 10% 48% 81%	100% 47%	48%		59%			sky is visible	80%**
LKD Bedroom 1 Bedroom 2	10% 48% 81%	47%		100%	1	100%	Compliant	100%	Yes
LKD Bedroom 1 Bedroom 2	48% 81%		6%		29%	95%	Trees affecting compliance	100%	Yes
Bedroom 1	81%	100%	<b>3</b> /3	16%	4%	12%	Non-compliant	82%	Yes
Sedroom 2			42%	100%	38%	100%	Non-compliant	87%	Yes
	1.00/	100%	48%	100%	26%	92%	Trees affecting compliance	100%	Yes
chen/Dining	10%	47%	8%	22%	6%	14%	Non-compliant	100%	Yes
, 0	100%	100%	100%	100%	100%	100%	Compliant	95%	Yes
Living	100%	100%	100%	100%	65%	100%	Compliant	98%	Yes
Bedroom 1	83%	100%	75%	100%	67%	100%	Compliant	99%	Yes
Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
Bedroom 3	60%	100%	45%	100%	38%	100%	Trees affecting compliance	96%	Yes
chen/Dining	100%	100%	100%	100%	100%	100%	Compliant	94%	Yes
Living	100%	100%	96%	100%	64%	100%	Compliant	98%	Yes
Bedroom 1	85%	100%	72%	100%	65%	100%	Compliant	99%	Yes
Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
Sedroom 3	68%	100%	50%	100%	38%	100%	Trees affecting compliance (summer only)	95%	Yes
chen/Dining	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
Living	100%	100%	81%	100%	55%	100%	Compliant	98%	Yes
Bedroom 1	82%	100%	71%	100%	58%	100%	Compliant	99%	Yes
Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
Sedroom 3	60%	100%	43%	100%	33%	100%	Trees affecting compliance	95%	Yes
chen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
Living	100%	100%	74%	100%	51%	100%	Compliant	99%	Yes
Bedroom 1	82%	100%	68%	100%	57%	100%	Compliant	99%	Yes
Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
Sedroom 3	65%	100%	45%	100%	35%	100%	Trees affecting compliance	95%	Yes
chen/Dining	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
Living	100%	100%	74%	100%	52%	100%	Compliant	98%	Yes
Bedroom 1	82%	100%	68%	100%	57%	100%	Compliant	99%	Yes
Sedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
Sedroom 3	60%	100%	43%	100%	33%	100%	Trees affecting compliance	95%	Yes
chen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
Living	100%	100%	76%	100%	51%	100%	Compliant	98%	Yes
Bedroom 1	81%	100%	71%	100%	57%	100%	Compliant	99%	Yes
Sedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
Sedroom 3	65%	100%	43%	100%	35%	100%	Trees affecting compliance	95%	Yes
36	edroom 1 edroom 2 edroom 3 chen/Dining Living edroom 3 chen/Dining Living edroom 1 edroom 2 edroom 3 chen/Dining Living	edroom 1 83% edroom 2 100% edroom 3 60% then/Dining 100% Living 100% edroom 1 85% edroom 2 100% edroom 3 68% then/Dining 100% Living 100% edroom 1 82% edroom 2 100% edroom 3 60% then/Dining 100% Living 100% Edroom 3 60% then/Dining 100% Edroom 1 82% edroom 1 82% edroom 1 82% edroom 2 100% edroom 1 82% edroom 2 100% edroom 3 65% then/Dining 100% Living 100% Living 100% Edroom 3 65% then/Dining 100% Living 100% edroom 1 82% edroom 1 82% edroom 1 82% edroom 2 100% edroom 3 60% then/Dining 100% Living 100% edroom 3 60% then/Dining 100% Edroom 1 81% edroom 2 100%	edroom 1 83% 100% edroom 2 100% 100% edroom 3 60% 100% then/Dining 100% 100% edroom 1 85% 100% edroom 2 100% 100% edroom 3 68% 100% edroom 3 68% 100% then/Dining 100% 100% edroom 1 82% 100% edroom 2 100% 100% edroom 3 60% 100% edroom 3 60% 100% edroom 3 60% 100% edroom 4 82% 100% edroom 5 100% 100% edroom 6 100% then/Dining 100% 100% edroom 1 82% 100% edroom 1 82% 100% edroom 1 82% 100% edroom 1 82% 100% edroom 2 100% 100% edroom 3 65% 100% edroom 3 65% 100% edroom 1 82% 100% edroom 1 82% 100% edroom 3 60% 100% edroom 1 82% 100% edroom 2 100% 100% edroom 3 60% 100% edroom 3 60% 100% edroom 1 82% 100% edroom 1 82% 100% edroom 1 82% 100% edroom 2 100% 100% edroom 1 81% 100% edroom 2 100% 100% edroom 1 81% 100% edroom 2 100% 100%	edroom 1 83% 100% 75% edroom 2 100% 100% 100% edroom 3 60% 100% 100% Living 100% 100% 100% edroom 1 85% 100% 72% edroom 2 100% 100% 100% edroom 3 68% 100% 50% edroom 3 68% 100% 50% chen/Dining 100% 100% 100% Living 100% 100% 100% Eliving 100% 100% 100% edroom 1 82% 100% 71% edroom 2 100% 100% 100% edroom 3 60% 100% 100% edroom 3 60% 100% 43% chen/Dining 100% 100% 100% Eliving 100% 100% 100% Eliving 100% 100% 100% Eliving 100% 100% 100% Edroom 3 65% 100% 45% edroom 4 82% 100% 68% edroom 5 65% 100% 45% chen/Dining 100% 100% 100% Edroom 1 82% 100% 68% edroom 1 82% 100% 68% edroom 3 65% 100% 45% edroom 3 65% 100% 45% edroom 1 82% 100% 68% edroom 1 82% 100% 68% edroom 1 82% 100% 68% edroom 1 80% 100% 100% Eliving 100% 100% 100% Eliving 100% 100% 100% Edroom 3 60% 100% 100% Edroom 1 81% 100% 76% edroom 1 81% 100% 71% edroom 2 100% 100% 100%	edroom 1 83% 100% 75% 100% edroom 2 100% 100% 100% 100% edroom 3 60% 100% 100% 100% Living 100% 100% 96% 100% edroom 1 85% 100% 72% 100% edroom 2 100% 100% 100% 100% edroom 3 68% 100% 50% 100% edroom 3 68% 100% 50% 100% edroom 1 82% 100% 100% 100% edroom 1 82% 100% 100% 100% edroom 2 100% 100% 100% 100% edroom 3 68% 100% 50% 100% edroom 1 82% 100% 71% 100% edroom 1 82% 100% 100% 100% edroom 2 100% 100% 100% 100% edroom 3 60% 100% 43% 100% edroom 3 60% 100% 43% 100% edroom 1 82% 100% 74% 100% edroom 1 82% 100% 68% 100% edroom 2 100% 100% 100% 100% edroom 3 65% 100% 45% 100% edroom 1 82% 100% 68% 100% edroom 3 65% 100% 45% 100% edroom 1 82% 100% 68% 100% edroom 3 60% 100% 100% 100% edroom 1 82% 100% 68% 100% edroom 1 82% 100% 100% 100% edroom 1 81% 100% 71% 100% edroom 1 81% 100% 71% 100% edroom 2 100% 100% 100% 100%	edroom 1 83% 100% 75% 100% 67% edroom 2 100% 100% 100% 100% 100% 100% 100% 10	edroom 1 83% 100% 75% 100% 67% 100% edroom 2 100% 100% 100% 100% 100% 100% 100% 10	edroom 1         83%         100%         75%         100%         67%         100%         Compliant           edroom 2         100%         100%         100%         100%         100%         100%         Compliant           edroom 3         60%         100%         45%         100%         38%         100%         Trees affecting compliance           chen/Dining         100%         100%         100%         100%         100%         Compliant           Living         100%         100%         100%         64%         100%         Compliant           edroom 1         85%         100%         100%         100%         100%         Compliant           edroom 2         100%         100%         100%         100%         Trees affecting compliance (summer only)           edroom 3         68%         100%         50%         100%         100%         Trees affecting compliance           Living         100%         100%         100%         100%         100%         Compliant           edroom 1         82%         100%         71%         100%         58%         100%         Compliant           edroom 2         100%         100%         100%	edroom 1 83% 100% 75% 100% 67% 100% Compliant 99% edroom 2 100% 100% 100% 100% 100% 100% 100% Compliant 100% edroom 3 60% 100% 100% 100% 100% 100% 100% Compliant 94% Edroom 1 85% 100% 100% 100% 100% 100% 100% Edroom 1 85% 100% 100% 100% 100% 100% 100% Edroom 2 100% 100% 100% 100% 100% 100% 100% Edroom 2 100% 100% 100% 100% 100% 100% 100% Edroom 2 100% 100% 100% 100% 100% 100% 100% 10

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."



### D.1.12 Supplementary SDA Results (I.S. EN 17037 criteria): Duplex Block J

	Tabl	e No. D.1.	.12 - Supp	lementa	ry SDA (I.	S. EN 170	37 criteri	a) and NSL Results: Duplex Bl	ock J	
					SDA (I.	S. EN 170	37 criteria	a)	No Sky Line	(NSL)
Unit	Room	No T	rees	Winte	r Trees	Summe	er Trees	Compliance with	% of room	Above
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	80%**
DJ-01	LKD	33%	94%	28%	87%	23%	82%	Non-compliant	95%	Yes
DJ-01	Bedroom 1	100%	100%	97%	100%	74%	100%	Compliant	100%	Yes
DJ-01	Bedroom 2	100%	100%	98%	100%	69%	100%	Compliant	99%	Yes
DJ-02	LKD	36%	100%	32%	97%	25%	91%	Non-compliant	92%	Yes
DJ-02	Bedroom 1	77%	100%	58%	100%	31%	100%	Trees affecting compliance (summer only)	99%	Yes
DJ-02	Bedroom 2	100%	100%	100%	100%	73%	100%	Compliant	99%	Yes
DJ-03	LKD	42%	100%	35%	97%	28%	90%	Non-compliant	96%	Yes
DJ-03	Bedroom 1	75%	100%	69%	100%	58%	100%	Compliant	100%	Yes
DJ-03	Bedroom 2	100%	100%	94%	100%	63%	100%	Compliant	99%	Yes
DJ-04	LKD	39%	100%	34%	98%	27%	91%	Non-compliant	88%	Yes
DJ-04	Bedroom 1	75%	100%	68%	100%	57%	100%	Compliant	99%	Yes
DJ-04	Bedroom 2	100%	100%	100%	100%	81%	100%	Compliant	99%	Yes
DJ-05	LKD	45%	100%	38%	100%	29%	92%	Non-compliant	95%	Yes
DJ-05	Bedroom 1	75%	100%	60%	100%	35%	100%	Trees affecting compliance (summer only)	100%	Yes
DJ-05	Bedroom 2	100%	100%	88%	100%	52%	100%	Compliant	99%	Yes
DJ-06	LKD	74%	100%	60%	100%	44%	100%	Trees affecting compliance (summer only)	95%	Yes
DJ-06	Bedroom 1	100%	100%	87%	100%	69%	100%	Compliant	100%	Yes
DJ-06	Bedroom 2	100%	100%	100%	100%	96%	100%	Compliant	100%	Yes
DJ-07	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DJ-07	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DJ-07	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	97%	Yes
DJ-07	Bedroom 3	94%	100%	94%	100%	94%	100%	Compliant	90%	Yes
DJ-08	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DJ-08	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DJ-08	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	97%	Yes
DJ-08	Bedroom 3	89%	100%	86%	100%	86%	100%	Compliant	93%	Yes
DJ-09	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DJ-09	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DJ-09	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	96%	Yes
DJ-09	Bedroom 3	94%	100%	91%	100%	91%	100%	Compliant	90%	Yes
DJ-10	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DJ-10	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DJ-10	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	97%	Yes
DJ-10	Bedroom 3	86%	100%	86%	100%	83%	100%	Compliant	93%	Yes
DJ-11	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DJ-11	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DJ-11	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	97%	Yes
DJ-11	Bedroom 3	89%	100%	89%	100%	86%	100%	Compliant	89%	Yes

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."

For floor plans of the assessed units please refer to section C.1 on page 58.



	Tabl	le No. D.1.	12 - Supp	lementa	ry SDA (I.	S. EN 170	37 criteria	a) and NSL Results: Duplex Bl	ock J				
					SDA (I.	S. EN 170	37 criteria	a)	No Sky Line	(NSL)			
Unit	Room	No T	No Trees Winter Trees Summer Trees Compliance with % of r										
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	Above 80%**			
DJ-12	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes			
DJ-12	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes			
DJ-12	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	97%	Yes			
DJ-12	Bedroom 3	86%	100%	86%	100%	86%	100%	Compliant	93%	Yes			

### D.1.13 Supplementary SDA Results (I.S. EN 17037 criteria): Duplex Block K

	Tabl	e No. D.1.	13 - Supp	lementa	ry SDA (I.	S. EN 170	37 criteria	a) and NSL Results: Duplex Blo	ock K	
					SDA (I.S	S. EN 170	37 criteria	a)	No Sky Line	(NSL)
Unit No.	Room Description	Area above	rees Area above	Area above	r Trees Area above	Area above	er Trees Area above	Compliance with I.S. EN 17037 Criteria*	% of room where the sky is visible	Above 80%**
		300 Lux*	100 Lux*	300 Lux*	100 Lux*	300 Lux*	100 Lux*			
DK-01	LKD	96%	100%	90%	100%	88%	100%	Compliant	100%	Yes
DK-01	Bedroom 1	95%	100%	82%	100%	68%	100%	Compliant	100%	Yes
DK-01	Bedroom 2	92%	100%	71%	100%	50%	100%	Compliant	100%	Yes
DK-02	LKD	47%	100%	46%	100%	44%	100%	Non-compliant	100%	Yes
DK-02	Bedroom 1	54%	100%	29%	100%	14%	75%	Trees affecting compliance	100%	Yes
DK-02	Bedroom 2	90%	100%	75%	100%	63%	100%	Compliant	100%	Yes
DK-03	LKD	48%	100%	46%	100%	45%	100%	Non-compliant	95%	Yes
DK-03	Bedroom 1	46%	100%	31%	100%	22%	88%	Non-compliant	100%	Yes
DK-03	Bedroom 2	48%	100%	46%	100%	38%	100%	Non-compliant	90%	Yes
DK-04	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DK-04	Bedroom 1	98%	100%	65%	100%	18%	100%	Trees affecting compliance (summer only)	100%	Yes
DK-04	Bedroom 2	100%	100%	100%	100%	91%	100%	Compliant	100%	Yes
DK-05	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DK-05	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DK-05	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	96%	Yes
DK-05	Bedroom 3	97%	100%	97%	100%	97%	100%	Compliant	88%	Yes
DK-06	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DK-06	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DK-06	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DK-06	Bedroom 3	100%	100%	97%	100%	97%	100%	Compliant	90%	Yes
DK-07	LKD	99%	100%	99%	100%	98%	100%	Compliant	100%	Yes
DK-07	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DK-07	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
DK-07	Bedroom 3	91%	100%	91%	100%	89%	100%	Compliant	87%	Yes
DK-08	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DK-08	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DK-08	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DK-08	Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."

For floor plans of the assessed units please refer to section C.1 on page 58.



### D.1.14 Supplementary SDA Results (I.S. EN 17037 criteria): Duplex Block L

	Tabl	e No. D.1.	14 - Supp	lementa	ry SDA (I.	S. EN 170	37 criteri	a) and NSL Results: Duplex Bl	ock L	
					SDA (I.	S. EN 170	37 criteria	a)	No Sky Line	(NSL)
Unit	Room	No T	rees	Winte	r Trees	Summe	er Trees	Compliance with	% of room	Abovo
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	Above 80%**
DL-01	LKD	39%	89%	38%	87%	35%	86%	Non-compliant	100%	Yes
DL-01	Bedroom 1	15%	66%	15%	66%	15%	66%	Non-compliant	100%	Yes
DL-01	Bedroom 2	25%	100%	25%	100%	25%	100%	Non-compliant	99%	Yes
DL-02	LKD	90%	100%	79%	100%	67%	100%	Compliant	100%	Yes
DL-02	Bedroom 1	85%	100%	60%	100%	23%	100%	Trees affecting compliance (summer only)	100%	Yes
DL-02	Bedroom 2	44%	100%	23%	100%	6%	98%	Non-compliant	95%	Yes
DL-03	LKD	62%	100%	48%	100%	36%	100%	Trees affecting compliance	100%	Yes
DL-03	Bedroom 1	43%	100%	43%	100%	43%	100%	Non-compliant	100%	Yes
DL-03	Bedroom 2	30%	92%	30%	90%	30%	88%	Non-compliant	100%	Yes
DL-04	LKD	67%	100%	60%	100%	53%	100%	Compliant	100%	Yes
DL-04	Bedroom 1	43%	100%	43%	100%	43%	100%	Non-compliant	99%	Yes
DL-04	Bedroom 2	30%	92%	30%	92%	28%	92%	Non-compliant	100%	Yes
DL-05	LKD	68%	100%	58%	100%	49%	100%	Trees affecting compliance (summer only)	100%	Yes
DL-05	Bedroom 1	57%	100%	57%	100%	57%	100%	Compliant	99%	Yes
DL-05	Bedroom 2	40%	100%	40%	100%	40%	100%	Non-compliant	100%	Yes
DL-06	LKD	65%	100%	63%	100%	61%	100%	Compliant	100%	Yes
DL-06	Bedroom 1	55%	100%	55%	100%	55%	100%	Compliant	99%	Yes
DL-06	Bedroom 2	32%	100%	30%	100%	30%	100%	Non-compliant	100%	Yes
DL-07	LKD	69%	100%	67%	100%	65%	100%	Compliant	100%	Yes
DL-07	Bedroom 1	63%	100%	59%	100%	57%	100%	Compliant	99%	Yes
DL-07	Bedroom 2	40%	100%	40%	100%	40%	100%	Non-compliant	100%	Yes
DL-08	LKD	72%	100%	66%	100%	60%	100%	Compliant	100%	Yes
DL-08	Bedroom 1	69%	100%	63%	100%	59%	100%	Compliant	100%	Yes
DL-08	Bedroom 2	85%	100%	75%	100%	73%	100%	Compliant	99%	Yes
DL-09	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DL-09	Living	52%	100%	51%	100%	50%	100%	Compliant	100%	Yes
DL-09	Bedroom 1	97%	100%	93%	100%	85%	100%	Compliant	100%	Yes
DL-09	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DL-09	Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DL-10	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DL-10	Living	100%	100%	63%	100%	35%	100%	Trees affecting compliance (summer only)	100%	Yes
DL-10	Bedroom 1	100%	100%	99%	100%	93%	100%	Compliant	99%	Yes
DL-10	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DL-10	Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DL-11	Kitchen/Dining	95%	100%	87%	100%	75%	100%	Compliant	95%	Yes
DL-11	Living	86%	100%	85%	100%	82%	100%	Compliant	100%	Yes
DL-11	Bedroom 1	84%	100%	79%	100%	77%	100%	Compliant	99%	Yes
DL-11	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DL-11	Bedroom 3	77%	100%	71%	100%	67%	100%	Compliant	93%	Yes

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."



	Tabl	e No. D.1.	14 - Supp	olementa	ry SDA (I.	.S. EN 170	37 criteri	a) and NSL Results: Duplex Bl	ock L	
					SDA (I.	S. EN 170	37 criteria	a)	No Sky Line	(NSL)
Unit	Room	No T	rees	Winte	r Trees	Summe	er Trees	Compliance with	% of room	Above
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	80%**
DL-12	Kitchen/Dining	99%	100%	99%	100%	98%	100%	Compliant	99%	Yes
DL-12	Living	79%	100%	76%	100%	75%	100%	Compliant	100%	Yes
DL-12	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DL-12	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DL-12	Bedroom 3	65%	100%	63%	100%	60%	100%	Compliant	94%	Yes
DL-13	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DL-13	Living	97%	100%	96%	100%	94%	100%	Compliant	100%	Yes
DL-13	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DL-13	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DL-13	Bedroom 3	79%	100%	79%	100%	73%	100%	Compliant	93%	Yes
DL-14	Kitchen/Dining	99%	100%	99%	100%	99%	100%	Compliant	100%	Yes
DL-14	Living	88%	100%	82%	100%	82%	100%	Compliant	100%	Yes
DL-14	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DL-14	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DL-14	Bedroom 3	69%	100%	67%	100%	63%	100%	Compliant	94%	Yes
DL-15	Kitchen/Dining	97%	100%	97%	100%	97%	100%	Compliant	99%	Yes
DL-15	Living	100%	100%	99%	100%	97%	100%	Compliant	100%	Yes
DL-15	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DL-15	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DL-15	Bedroom 3	81%	100%	79%	100%	77%	100%	Compliant	94%	Yes
DL-16	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DL-16	Living	100%	100%	100%	100%	99%	100%	Compliant	100%	Yes
DL-16	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DL-16	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DL-16	Bedroom 3	67%	100%	67%	100%	63%	100%	Compliant	93%	Yes

### D.1.15 Supplementary SDA Results (I.S. EN 17037 criteria): Duplex Block M

	Table	e No. D.1.1	l5 - Supp	lementai	ry SDA (I.:	S. EN 170	37 criteria	a) and NSL Results: Duplex Blo	ock M	
					SDA (I.S	S. EN 1703	37 criteria	a)	No Sky Line	(NSL)
Unit	Room	No T	rees	Winte	r Trees	Summe	er Trees	Compliance with	% of room	Abovo
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	Above 80%**
DM-01	LKD	74%	100%	63%	100%	55%	100%	Compliant	94%	Yes
DM-01	Bedroom 1	90%	100%	68%	100%	46%	100%	Trees affecting compliance (summer only)	100%	Yes
DM-01	Bedroom 2	10%	39%	8%	24%	6%	18%	Non-compliant	79%	No
DM-02	LKD	57%	100%	55%	100%	53%	100%	Compliant	84%	Yes
DM-02	Bedroom 1	90%	100%	84%	100%	72%	100%	Compliant	100%	Yes
DM-02	Bedroom 2	10%	35%	10%	31%	8%	31%	Non-compliant	82%	Yes
DM-03	LKD	57%	100%	54%	100%	53%	100%	Compliant	87%	Yes
DM-03	Bedroom 1	92%	100%	70%	100%	44%	100%	Trees affecting compliance (summer only)	100%	Yes
DM-03	Bedroom 2	8%	31%	8%	18%	4%	14%	Non-compliant	79%	No

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."

For floor plans of the assessed units please refer to section C.1 on page 58.



	Table	e No. D.1.	 15 - Supp	 lementai	ry SDA (I.:	S. EN 170	37 criteria	a) and NSL Results: Duplex Blo	ock M	
					SDA (I.:	S. EN 170	37 criteria	a)	No Sky Line	(NSL)
Unit	Room	No T	rees	Winte	r Trees	Summe	er Trees	Compliance with	% of room	Above
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	80%**
DM-04	LKD	56%	100%	54%	100%	53%	100%	Compliant	74%	No
DM-04	Bedroom 1	90%	100%	68%	100%	30%	100%	Trees affecting compliance (summer only)	100%	Yes
DM-04	Bedroom 2	10%	33%	8%	24%	6%	18%	Non-compliant	84%	Yes
DM-05	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DM-05	Living	100%	100%	93%	100%	71%	100%	Compliant	99%	Yes
DM-05	Bedroom 1	79%	100%	72%	100%	71%	100%	Compliant	100%	Yes
DM-05	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DM-05	Bedroom 3	58%	100%	50%	100%	45%	100%	Trees affecting compliance (summer only)	97%	Yes
DM-06	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DM-06	Living	100%	100%	98%	100%	88%	100%	Compliant	99%	Yes
DM-06	Bedroom 1	98%	100%	93%	100%	89%	100%	Compliant	99%	Yes
DM-06	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DM-06	Bedroom 3	55%	100%	53%	100%	45%	100%	Trees affecting compliance (summer only)	95%	Yes
DM-07	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DM-07	Living	100%	100%	92%	100%	66%	100%	Compliant	99%	Yes
DM-07	Bedroom 1	98%	100%	95%	100%	91%	100%	Compliant	100%	Yes
DM-07	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DM-07	Bedroom 3	55%	100%	53%	100%	45%	100%	Trees affecting compliance (summer only)	97%	Yes
DM-08	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DM-08	Living	100%	100%	95%	100%	74%	100%	Compliant	99%	Yes
DM-08	Bedroom 1	96%	100%	91%	100%	91%	100%	Compliant	99%	Yes
DM-08	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DM-08	Bedroom 3	58%	100%	53%	100%	50%	100%	Compliant	95%	Yes

# D.1.16 Supplementary SDA Results (I.S. EN 17037 criteria): Duplex Block N

	Tabl	e No. D.1. <sup>-</sup>	16 - Supp	lementa	ry SDA (I.	S. EN 170	37 criteria	a) and NSL Results: Duplex Blo	ock N	
				,	SDA (I.	S. EN 170	37 criteria	)	No Sky Line	(NSL)
Unit	Room	No T	rees	Winte	r Trees	Summe	er Trees	Compliance with	% of room	A l
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Compliance with I.S. EN 17037 Criteria*	where the sky is visible	Above 80%**
DN-01	LKD	49%	100%	35%	100%	34%	100%	Non-compliant	100%	Yes
DN-01	Bedroom 1	100%	100%	96%	100%	63%	100%	Compliant	100%	Yes
DN-01	Bedroom 2	14%	69%	12%	55%	10%	37%	Non-compliant	89%	Yes
DN-02	LKD	35%	100%	30%	100%	29%	100%	Non-compliant	97%	Yes
DN-02	Bedroom 1	100%	100%	88%	100%	52%	100%	Compliant	100%	Yes
DN-02	Bedroom 2	12%	59%	10%	37%	6%	20%	Non-compliant	87%	Yes
DN-03	LKD	29%	100%	28%	100%	26%	100%	Non-compliant	95%	Yes
DN-03	Bedroom 1	100%	100%	90%	100%	52%	100%	Compliant	100%	Yes
DN-03	Bedroom 2	12%	69%	10%	45%	6%	22%	Non-compliant	97%	Yes
DN-04	LKD	37%	100%	33%	100%	31%	100%	Non-compliant	95%	Yes
DN-04	Bedroom 1	100%	100%	94%	100%	62%	100%	Compliant	100%	Yes
DN-04	Bedroom 2	12%	63%	8%	35%	6%	18%	Non-compliant	84%	Yes

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line." For floor plans of the assessed units please refer to section C.1 on page 58.



	Table	e No. D.1.	 16 - Supp	lementa	ry SDA (I.:	S. EN 170	37 criteria	a) and NSL Results: Duplex Blo	ock N	
					SDA (I.S	S. EN 1703	37 criteria	a)	No Sky Line	(NSL)
Unit	Room	No T	rees	Winte	r Trees	Summe	er Trees	Compliance with	% of room	Above
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	80%**
DN-05	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DN-05	Living	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DN-05	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DN-05	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DN-05	Bedroom 3	100%	100%	100%	100%	98%	100%	Compliant	99%	Yes
DN-06	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DN-06	Living	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DN-06	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DN-06	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DN-06	Bedroom 3	100%	100%	100%	100%	93%	100%	Compliant	95%	Yes
DN-07	Kitchen/Dining	100%	100%	100%	100%	78%	100%	Compliant	99%	Yes
DN-07	Living	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DN-07	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DN-07	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DN-07	Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
DN-08	Kitchen/Dining	100%	100%	100%	100%	83%	100%	Compliant	99%	Yes
DN-08	Living	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DN-08	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DN-08	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DN-08	Bedroom 3	100%	100%	100%	100%	98%	100%	Compliant	95%	Yes

### D.1.17 Supplementary SDA Results (I.S. EN 17037 criteria): Duplex Block P

	Tabl	e No. D.1.	17 - Supp	lementa	ry SDA (I.	S. EN 170	37 criteria	a) and NSL Results: Duplex Bl	ock P	
					SDA (I.	S. EN 1703	37 criteria	a)	No Sky Line	(NSL)
Unit	Room	No T	rees	Winte	r Trees	Summe	er Trees	Compliance with	% of room	Above
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	80%**
DP-01	LKD	44%	100%	43%	100%	41%	100%	Non-compliant	83%	Yes
DP-01	Bedroom 1	83%	100%	69%	100%	40%	100%	Trees affecting compliance (summer only)	100%	Yes
DP-01	Bedroom 2	8%	31%	6%	16%	2%	10%	Non-compliant	83%	Yes
DP-02	LKD	48%	100%	43%	100%	40%	100%	Non-compliant	89%	Yes
DP-02	Bedroom 1	81%	100%	58%	100%	33%	100%	Trees affecting compliance (summer only)	100%	Yes
DP-02	Bedroom 2	8%	31%	6%	16%	2%	12%	Non-compliant	80%	Yes
DP-03	LKD	53%	100%	46%	100%	42%	100%	Trees affecting compliance	89%	Yes
DP-03	Bedroom 1	79%	100%	69%	100%	67%	100%	Compliant	100%	Yes
DP-03	Bedroom 2	8%	29%	8%	29%	8%	27%	Non-compliant	74%	No
DP-04	LKD	89%	100%	79%	100%	55%	100%	Compliant	98%	Yes
DP-04	Bedroom 1	93%	100%	80%	100%	58%	100%	Compliant	99%	Yes
DP-04	Bedroom 2	58%	100%	50%	100%	46%	100%	Trees affecting compliance (summer only)	97%	Yes
DP-05	LKD	93%	100%	82%	100%	63%	100%	Compliant	100%	Yes
DP-05	Bedroom 1	92%	100%	83%	100%	73%	100%	Compliant	100%	Yes
DP-05	Bedroom 2	38%	100%	15%	100%	0%	31%	Non-compliant	98%	Yes

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."

For floor plans of the assessed units please refer to section C.1 on page 58.



	Tabl	e No. D.1.	17 - Supp	lementa	ry SDA (I.	S. EN 170	37 criteri	a) and NSL Results: Duplex Blo	ock P	
					SDA (I.	S. EN 170	37 criteria	a)	No Sky Line	· (NSL)
Unit	Room	No T	rees	Winte	r Trees	Summe	er Trees	Compliance with	% of room	Above
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	80%**
DP-06	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DP-06	Living	100%	100%	97%	100%	74%	100%	Compliant	99%	Yes
DP-06	Bedroom 1	98%	100%	93%	100%	91%	100%	Compliant	99%	Yes
DP-06	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DP-06	Bedroom 3	58%	100%	50%	100%	40%	100%	Trees affecting compliance (summer only)	95%	Yes
DP-07	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DP-07	Living	100%	100%	93%	100%	66%	100%	Compliant	99%	Yes
DP-07	Bedroom 1	98%	100%	91%	100%	91%	100%	Compliant	100%	Yes
DP-07	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DP-07	Bedroom 3	53%	100%	50%	100%	45%	100%	Trees affecting compliance (summer only)	100%	Yes
DP-08	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DP-08	Living	100%	100%	94%	100%	82%	100%	Compliant	99%	Yes
DP-08	Bedroom 1	91%	100%	88%	100%	86%	100%	Compliant	99%	Yes
DP-08	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DP-08	Bedroom 3	58%	100%	50%	100%	43%	100%	Trees affecting compliance (summer only)	95%	Yes
DP-09	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DP-09	Living	60%	100%	56%	100%	52%	100%	Compliant	97%	Yes
DP-09	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DP-09	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DP-09	Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
DP-10	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DP-10	Living	56%	100%	50%	100%	46%	100%	Trees affecting compliance (summer only)	99%	Yes
DP-10	Bedroom 1	100%	100%	100%	100%	85%	100%	Compliant	99%	Yes
DP-10	Bedroom 2	100%	100%	100%	100%	94%	100%	Compliant	100%	Yes
DP-10	Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes

## D.1.18 Supplementary SDA Results (I.S. EN 17037 criteria): Duplex Block Q

	Table	e No. D.1.	18 - Supp	lementa	ry SDA (I.	S. EN 170	37 criteria	) and NSL Results: Duplex Bl	ock Q	
					SDA (I.	S. EN 170	37 criteria	)	No Sky Line	(NSL)
Unit	Room	No T	rees	Winte	r Trees	Summe	er Trees	Compliance with	% of room	Above
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	80%**
DQ-01	LKD	93%	100%	88%	100%	85%	100%	Compliant	100%	Yes
DQ-01	Bedroom 1	100%	100%	96%	100%	92%	100%	Compliant	100%	Yes
DQ-01	Bedroom 2	52%	100%	48%	100%	38%	100%	Trees affecting compliance	97%	Yes
DQ-02	LKD	93%	100%	80%	100%	53%	100%	Compliant	99%	Yes
DQ-02	Bedroom 1	88%	100%	78%	100%	59%	100%	Compliant	94%	Yes
DQ-02	Bedroom 2	60%	100%	40%	100%	26%	100%	Trees affecting compliance	98%	Yes
DQ-03	LKD	56%	100%	47%	100%	39%	99%	Trees affecting compliance	90%	Yes
DQ-03	Bedroom 1	79%	100%	67%	100%	61%	100%	Compliant	99%	Yes
DQ-03	Bedroom 2	100%	100%	100%	100%	94%	100%	Compliant	100%	Yes

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line." For floor plans of the assessed units please refer to section C.1 on page 58.



	Table	e No. D.1.	 18 - Supp	lementa	ry SDA (I.	S. EN 170	37 criteria	a) and NSL Results: Duplex Blo	ock Q	
					SDA (I.:	S. EN 170	37 criteria	a)	No Sky Line	(NSL)
Unit	Room	No T	rees	Winte	r Trees	Summe	er Trees	Compliance with	% of room	Above
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	80%**
DQ-04	LKD	64%	100%	59%	100%	53%	100%	Compliant	98%	Yes
DQ-04	Bedroom 1	100%	100%	100%	100%	98%	100%	Compliant	99%	Yes
DQ-04	Bedroom 2	100%	100%	100%	100%	96%	100%	Compliant	100%	Yes
DQ-05	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DQ-05	Living	99%	100%	84%	100%	75%	100%	Compliant	100%	Yes
DQ-05	Bedroom 1	100%	100%	100%	100%	93%	100%	Compliant	99%	Yes
DQ-05	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DQ-05	Bedroom 3	100%	100%	96%	100%	71%	100%	Compliant	95%	Yes
DQ-06	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DQ-06	Living	59%	100%	50%	100%	45%	100%	Trees affecting compliance (summer only)	91%	Yes
DQ-06	Bedroom 1	100%	100%	90%	100%	66%	100%	Compliant	99%	Yes
DQ-06	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DQ-06	Bedroom 3	100%	100%	100%	100%	80%	100%	Compliant	95%	Yes
DQ-07	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DQ-07	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DQ-07	Bedroom 2	100%	100%	100%	100%	98%	100%	Compliant	96%	Yes
DQ-07	Bedroom 3	91%	100%	89%	100%	89%	100%	Compliant	88%	Yes
DQ-08	LKD	100%	100%	99%	100%	95%	100%	Compliant	97%	Yes
DQ-08	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DQ-08	Bedroom 2	100%	100%	100%	100%	98%	100%	Compliant	99%	Yes
DQ-08	Bedroom 3	91%	100%	91%	100%	86%	100%	Compliant	97%	Yes

## D.1.19 Supplementary SDA Results (I.S. EN 17037 criteria): Duplex Block R

	Tabl	e No. D.1.	19 - Supp	lementa	ry SDA (I.	S. EN 170	37 criteria	a) and NSL Results: Duplex Bl	ock R	
				1)	No Sky Line (NSL)					
Unit	Room	No T	rees	Winter Trees		Summer Trees		Compliance with	% of room	A b a v a
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	Above 80%**
DR-01	LKD	63%	100%	56%	100%	53%	100%	Compliant	100%	Yes
DR-01	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DR-01	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DR-02	LKD	63%	100%	60%	100%	58%	100%	Compliant	89%	Yes
DR-02	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DR-02	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DR-03	LKD	61%	100%	59%	100%	56%	100%	Compliant	84%	Yes
DR-03	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DR-03	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DR-04	LKD	60%	100%	59%	100%	57%	100%	Compliant	69%	No
DR-04	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DR-04	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DR-05	LKD	59%	100%	56%	100%	54%	100%	Compliant	70%	No
DR-05	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DR-05	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

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<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line." For floor plans of the assessed units please refer to section C.1 on page 58.



	labi	e 110. D.1.	15 - Supp	- Incirca				a) and NSL Results: Duplex Bl 、		
Unit	Room	NI - T		\		l	37 criteria	a) 	No Sky Line 	; (NSL
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above	Area above 300 Lux*	Area above	Compliance with I.S. EN 17037 Criteria*	% of room where the sky is visible	Above 80%**
DR-06	LKD	100%	100%	100%	100%	99%	100%	Compliant	95%	Yes
DR-06	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DR-06	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DR-07	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DR-07	Living	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DR-07	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DR-07	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	97%	Yes
DR-07	Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant	93%	Yes
DR-08	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DR-08	Living	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DR-08	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DR-08	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	97%	Yes
DR-08	Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant	93%	Yes
DR-09	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DR-09	Living	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DR-09	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DR-09	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	97%	Yes
DR-09	Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant	94%	Yes
DR-10	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DR-10	Living	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DR-10	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DR-10	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	97%	Yes
DR-10	Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant	93%	Yes
DR-11	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DR-11	Living	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DR-11	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DR-11	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	97%	Yes
DR-11	Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant	94%	Yes
DR-12	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DR-12	Living	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DR-12	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DR-12	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
DR-12	Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant	93%	Yes

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."

For floor plans of the assessed units please refer to section C.1 on page 58.



### D.1.20 Supplementary SDA Results (I.S. EN 17037 criteria): Duplex Block S

	Tabl	e No. D.1.2	20 - Supp	olementa	ıry SDA (I	.S. EN 170	37 criteri	a) and NSL Results: Duplex Bl	ock S	-
					SDA (I.	S. EN 1703	37 criteria	a)	No Sky Line	: (NSL)
Unit	Room	No T	rees	Winte	r Trees	Summe	er Trees	Compliance with	% of room	Above
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	80%**
DS-01	LKD	70%	100%	68%	100%	67%	100%	Compliant	97%	Yes
DS-01	Bedroom 1	72%	100%	65%	100%	63%	100%	Compliant	99%	Yes
DS-01	Bedroom 2	33%	100%	31%	100%	29%	100%	Non-compliant	89%	Yes
DS-02	LKD	88%	100%	85%	100%	81%	100%	Compliant	100%	Yes
DS-02	Bedroom 1	100%	100%	82%	100%	73%	100%	Compliant	99%	Yes
DS-02	Bedroom 2	69%	100%	44%	100%	23%	100%	Trees affecting compliance	97%	Yes
DS-03	LKD	99%	100%	79%	100%	66%	100%	Compliant	100%	Yes
DS-03	Bedroom 1	76%	100%	39%	100%	8%	100%	Trees affecting compliance	95%	Yes
DS-04	LKD	96%	100%	73%	100%	61%	100%	Compliant	100%	Yes
DS-04	Bedroom 1	89%	100%	77%	100%	68%	100%	Compliant	97%	Yes
DS-05	LKD	99%	100%	76%	100%	63%	100%	Compliant	100%	Yes
DS-05	Bedroom 1	87%	100%	56%	100%	31%	100%	Trees affecting compliance (summer only)	97%	Yes
DS-06	LKD	99%	100%	73%	100%	57%	100%	Compliant	100%	Yes
DS-06	Bedroom 1	87%	100%	55%	100%	32%	100%	Trees affecting compliance (summer only)	97%	Yes
DS-07	LKD	100%	100%	74%	100%	57%	100%	Compliant	100%	Yes
DS-07	Bedroom 1	82%	100%	55%	100%	39%	100%	Trees affecting compliance (summer only)	97%	Yes
DS-08	LKD	100%	100%	76%	100%	58%	100%	Compliant	100%	Yes
DS-08	Bedroom 1	87%	100%	31%	100%	13%	92%	Trees affecting compliance	98%	Yes
DS-09	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DS-09	Living	79%	100%	73%	100%	69%	100%	Compliant	99%	Yes
DS-09	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DS-09	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DS-09	Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DS-10	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DS-10	Living	100%	100%	100%	100%	99%	100%	Compliant	100%	Yes
DS-10	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DS-10	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DS-10	Bedroom 3	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DS-11	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DS-11	Living	100%	100%	100%	100%	90%	100%	Compliant	96%	Yes
DS-11	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	94%	Yes
DS-11	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
DS-12	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DS-12	Living	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
DS-12	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
DS-12	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DS-13	Kitchen/Dining	100%	100%	100%	100%	99%	100%	Compliant	100%	Yes
DS-13	Living	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
DS-13	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
DS-13	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
						<u>l</u>		<u> </u>		

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line." For floor plans of the assessed units please refer to section C.1 on page 58.



	Table	e No. D.1.2	20 - Supp	olementa	ıry SDA (I	.S. EN 170	37 criteri	a) and NSL Results: Duplex Bl	ock S	
			No Sky Line (NSL)							
Unit	Room	No Trees		Winter Trees		Summer Trees		Compliance with	% of room	Above
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	80%**
DS-14	Kitchen/Dining	100%	100%	100%	100%	98%	100%	Compliant	100%	Yes
DS-14	Living	100%	100%	99%	100%	78%	100%	Compliant	98%	Yes
DS-14	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
DS-14	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DS-15	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DS-15	Living	100%	100%	100%	100%	88%	100%	Compliant	98%	Yes
DS-15	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
DS-15	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DS-16	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DS-16	Living	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DS-16	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
DS-16	Bedroom 2	100%	100%	98%	100%	97%	100%	Compliant	99%	Yes

### D.1.21 Supplementary SDA Results (I.S. EN 17037 criteria): Duplex Block T

	Tabl	e No. D.1.	21 - Supp	lementa	ry SDA (I.	S. EN 170	37 criteri	a) and NSL Results: Duplex Bl	ock T	
					SDA (I.S	S. EN 170	37 criteria	a)	No Sky Line	· (NSL)
Unit	Room	No T	Trees Winter Trees		Summer Trees		Compliance with	% of room	Above	
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	80%**
DT-01	LKD	68%	100%	29%	100%	16%	86%	Trees affecting compliance	100%	Yes
DT-01	Bedroom 1	76%	100%	64%	100%	48%	100%	Trees affecting compliance (summer only)	85%	Yes
DT-01	Bedroom 2	8%	16%	6%	14%	4%	12%	Non-compliant	33%	No
DT-02	LKD	56%	100%	30%	100%	21%	94%	Trees affecting compliance	100%	Yes
DT-02	Bedroom 1	96%	100%	66%	100%	28%	100%	Trees affecting compliance (summer only)	98%	Yes
DT-02	Bedroom 2	10%	41%	8%	24%	6%	14%	Non-compliant	70%	No
DT-03	LKD	53%	100%	35%	100%	24%	100%	Trees affecting compliance	100%	Yes
DT-03	Bedroom 1	86%	100%	68%	100%	42%	100%	Trees affecting compliance (summer only)	97%	Yes
DT-03	Bedroom 2	10%	27%	8%	24%	8%	18%	Non-compliant	62%	No
DT-04	LKD	50%	100%	36%	100%	30%	100%	Trees affecting compliance	100%	Yes
DT-04	Bedroom 1	100%	100%	92%	100%	66%	100%	Compliant	100%	Yes
DT-04	Bedroom 2	12%	59%	10%	51%	10%	35%	Non-compliant	85%	Yes
DT-05	Kitchen/Dining	100%	100%	100%	100%	98%	100%	Compliant	100%	Yes
DT-05	Living	95%	100%	80%	100%	61%	100%	Compliant	92%	Yes
DT-05	Bedroom 1	91%	100%	91%	100%	89%	100%	Compliant	99%	Yes
DT-05	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DT-05	Bedroom 3	73%	100%	68%	100%	65%	100%	Compliant	95%	Yes
DT-06	Kitchen/Dining	100%	100%	100%	100%	99%	100%	Compliant	99%	Yes
DT-06	Living	98%	100%	93%	100%	78%	100%	Compliant	94%	Yes
DT-06	Bedroom 1	96%	100%	96%	100%	95%	100%	Compliant	100%	Yes
DT-06	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DT-06	Bedroom 3	63%	100%	63%	100%	58%	100%	Compliant	95%	Yes

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line." For floor plans of the assessed units please refer to section C.1 on page 58.



	Tabl	e No. D.1.	21 - Supp	lementa	ry SDA (I.	S. EN 170	37 criteria	a) and NSL Results: Duplex Bl	ock T	
			No Sky Line (NSL)							
Unit	Room	No T	rees	Winter Trees		Summer Trees		Compliance with	% of room	Above
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	80%**
DT-07	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DT-07	Living	98%	100%	95%	100%	85%	100%	Compliant	95%	Yes
DT-07	Bedroom 1	100%	100%	100%	100%	98%	100%	Compliant	99%	Yes
DT-07	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DT-07	Bedroom 3	75%	100%	73%	100%	73%	100%	Compliant	95%	Yes
DT-08	Kitchen/Dining	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DT-08	Living	100%	100%	100%	100%	85%	100%	Compliant	98%	Yes
DT-08	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DT-08	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DT-08	Bedroom 3	73%	100%	70%	100%	68%	100%	Compliant	95%	Yes

### D.1.22 Supplementary SDA Results (I.S. EN 17037 criteria): Duplex Block U

	Table	e No. D.1.2	22 - Supp	lementa	ry SDA (I.	S. EN 170	37 criteri	a) and NSL Results: Duplex Bl	ock U	
					SDA (I.	S. EN 170	37 criteria	No Sky Line (NSL)		
Unit	Room	No T	rees	Winte	Winter Trees		er Trees	Compliance with	% of room	Above
No.	Description	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	I.S. EN 17037 Criteria*	where the sky is visible	80%**
DU-01	LKD	68%	100%	44%	100%	33%	100%	Trees affecting compliance	99%	Yes
DU-01	Bedroom 1	100%	100%	88%	100%	63%	100%	Compliant	100%	Yes
DU-02	LKD	73%	100%	46%	100%	40%	100%	Trees affecting compliance	99%	Yes
DU-02	Bedroom 1	100%	100%	75%	100%	48%	100%	Trees affecting compliance (summer only)	100%	Yes
DU-03	LKD	65%	100%	39%	100%	32%	99%	Trees affecting compliance	99%	Yes
DU-03	Bedroom 1	100%	100%	75%	100%	44%	100%	Trees affecting compliance (summer only)	100%	Yes
DU-04	LKD	67%	100%	43%	100%	35%	100%	Trees affecting compliance	99%	Yes
DU-04	Bedroom 1	100%	100%	100%	100%	77%	100%	Compliant	100%	Yes
DU-05	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DU-05	Bedroom 1	100%	100%	77%	100%	65%	100%	Compliant	99%	Yes
DU-06	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DU-06	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	96%	Yes
DU-06	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DU-07	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DU-07	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	96%	Yes
DU-07	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	99%	Yes
DU-08	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DU-08	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	96%	Yes
DU-08	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	98%	Yes
DU-09	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DU-09	Bedroom 1	100%	100%	100%	100%	100%	100%	Compliant	96%	Yes
DU-09	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	96%	Yes
DU-10	LKD	100%	100%	100%	100%	100%	100%	Compliant	100%	Yes
DU-10	Bedroom 1	100%	100%	100%	100%	98%	100%	Compliant	99%	Yes
DU-10	Bedroom 2	100%	100%	100%	100%	100%	100%	Compliant	96%	Yes

<sup>\*</sup> For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 19.

<sup>\*\*</sup> Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."

For floor plans of the assessed units please refer to section C.1 on page 58.