



## Housing Quality Assessment

Barington Tower Development,  
Brennanstown Road,  
Cabinteely,  
Dublin 18

## Mixed Use, Residential & Commercial Development

## ABP Application

March 2022  
Project Ref: P20-016D  
Reddy Architecture + Urbanism  
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Residential Development at Brennanstown Road, Cabinteely, Dublin 18  
for Cairn Homes

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#### DESIGN TEAM:

Applicant:  
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3rd Floor, Block 7, IE-DUB-VSO, 2 Grand Canal Street Lower, Dublin 2

Architects:  
**Reddy Architecture + Urbanism**  
Dartry Mills, Dartry Road, Dublin 6

Conservation Architects:  
**Howley Hayes Architects**  
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Planning Consultants:  
**McGill Planning Ltd.**  
22 Wicklow Street, Dublin 2

Civil / Structural / Roads Engineers:  
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CGIs / Photomontages / Visual Impact Assessment:  
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Landscape Architects:  
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The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17

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Site Surveys:  
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Arboriculture:  
**The Tree File Ltd.**  
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# 1.0 Executive Summary

## Project Description

Construction of a Build to Rent (BTR), Strategic Housing Development (SHD) comprising the following:

- Demolition of existing unoccupied dwelling ('Winterbrook'), and derelict, former dwelling attached to Barrington Tower (Protected Structure RPS 1729).
- Construction of 534 no. apartments (30 no. studios, 135 no. 1 -beds, 318 no. 2-bed, and 51 no. 3-bed) within 8 no. blocks ranging in height from 3 to 9 storeys (over lower ground floor).
- Provision of creche, retail unit, and Resident Support Facilities/ Resident Services and Amenities.
- Provision of car and cycle parking, at basement (2 levels) and ground level.
- Provision of vehicular and pedestrian/cyclist accesses from Brennanstown Road with public access through the development to Brennanstown Luas Stop to the south.
- Provision of public and communal open spaces including an enhanced landscaped setting in the vicinity of Barrington Tower.
- Provision of all landscaping, play areas and boundary treatment works, ESB substations, plant areas, waste management areas, and all other site development works, and site services required to facilitate the proposed development.

## Executive Summary

This Housing Quality Assessment forms part of a planning submission for a proposed residential Build to Rent development (BTR) at Barrington Tower Site, Brennanstown Road, Cabinteely, Dublin 18.

The site is bounded by Brennanstown Road to the North and the Luas Green line to the south.

The purpose of this document is to assess the residential element of the proposed development against the provisions of the Sustainable Urban Housing Standards for New Apartments and is intended to be read as a supplementary document to the Urban Design Report.

## Site Statistics

Total Site Area	3.81ha
No. of Units	534
Total Gross Area - Proposed (exc. basement)	55,484m <sup>2</sup>
Total Gross Area - Residential (inc. amenity)	54,528m <sup>2</sup>
Site Coverage	22%
Plot Ratio	1:46
Gross Density	140units/ha
Total public open space	9,370m <sup>2</sup>
Total communal facilities for residents	5,696m <sup>2</sup>
Resident's external amenity space	4,200m <sup>2</sup>
Resident's internal amenity space	1,496m <sup>2</sup>
Retail unit at at ground floor of blocks CD	366.8m <sup>2</sup>
Crèche at at ground floor of blocks CD	356.5m <sup>2</sup>
Basement car park spaces for residents	400
Surface car parking spaces for ancillary support facilities' users, staff and visitors.	19
Basement motorcycle parking spaces	17
Basement bicycle parking spaces for residents	1,058
Surface bicycle parking spaces for ancillary support facilities' users, staff and visitors.	182
Stacked bicycle parking spaces for Luas commuters.	26
Bat house	1

## 2.0 Policy Overview

### Housing Quality Assessment

The development is designed to be compliant with :

1. Sustainable Urban Housing: Design Standards for New Apartments
2. Apartments
3. Urban Design Manual: A best practice guide
4. Urban Development and Building Height Guidelines for Planning Authorities (2020)
5. Dun Laoghaire - Rathdown County Council Development Plan 2022-28.
6. Best practice guidelines Quality Housing for Sustainable Communities (2007);
7. Sustainable Residential Development in Urban Areas Guidelines for Planning Authorities (2009)
8. Design Manual for Urban Roads and Streets or 'DMURS' (2013);
9. Retail Design Manual (2012).
10. Childcare Facilities – Guidelines for Planning Authorities (2001);
11. Smarter Travel - A New Transport Policy for Ireland (2009-2020);

In the current Dun Laoghaire Rathdown County Council Development Plan 2022-2028 the site is zoned "A": To protect and/or improve residential amenity.

The proposal also responds to:

-Policy Res 3: Residential Density:

*'It is Council Policy to promote higher residential densities provided that proposals ensure a balance between the reasonable protection of existing residential amenities and the established character of areas, with the need to provide for sustainable residential development. In promoting more compact, good quality, higher density forms of residential development it is Council Policy to have regard to the policies and objectives contained in the following Guidelines:*

*-Sustainable Residential Development in Urban Areas (DoEHLG 2009)*  
*-Urban Design Manual - A Best Practice Guide (DoEHLG)*  
*-Irish Design Manual for Urban Roads and Streets (DTTaS and DoECLG, 2013)*  
*-National Climate Change Adaptation Framework - Building Resilience to Climate Change (DoECLG, 2013).'*

-Policy Res 7: Overall Housing Mix:

*'It is Council Policy to encourage the establishment of sustainable residential communities by ensuring that a wide variety of housing and apartment types sizes and tenures is provided within the Country in accordance with the provisions of the Interim Housing Strategy.'*

Key deliverables on these policies which the proposed scheme will deliver include:

- Provision of high quality professionally managed accommodation providing 534 residential apartments.
- Enhancement of the protected structure "Barrington Tower", as a central feature of the proposed development creating a focal point on the public zone.
- Provision of generous, high standard residential communal amenity areas both external and internal, including `crèche, Gym, Function Room etc.
- Providing different character communal open space in form of terraced courtyard landscaped gardens, enhancing biodiversity and SUDS, as well as exploiting the natural sharp differences of topography levels.
- Providing two levels of basement car park.
- Minimising vehicular traffic to maximise pedestrian and cycle routes with easy public access to the Luas Station, located at the south of the site.

This Housing Quality Assessment provides a framework which quantifies each of the criteria required by the 'Sustainable Urban Housing Design Standards for New Apartments Guidelines for Planning Authorities' against the proposed development.

Accordingly, where SPPRS are stated in the guidelines' document, they take precedence over any conflicting policies and objectives of development plans, local area plans and strategic development zone planning schemes. Where such conflicts arise, such plans should be amended by the relevant planning authority to reflect the content of these guidelines and properly inform the public of the relevant SPPR requirements.

### 3.0 Compliance with Sustainable Urban Housing: Design Standards for New Apartments

#### Apartment Mix

The mix of residential units within the entire scheme is outlined in the table to the right.

It is noted under the ‘Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities’ Specific Planning Policy Requirement 8, for proposals that qualify as specific BTR development in accordance with SPPR 7:

*(i) no restrictions on dwelling mix and all other requirements of the guidelines shall apply unless specified otherwise.*

*(ii) Flexibility shall apply in relation to the provision of a proportion of the storage and private amenity space associated with individual units as set out in Appendix 1 and in relation to the provision of all of the communal amenity space as set out in Appendix 1, on the basis of the provision of alternative, compensatory communal support facilities and amenities within the development. This shall be at the discretion of the planning authority...*

*(iii) There shall be a default of minimal or significantly reduced car parking provision on the basis of BTR development being more suitable for central locations and/or proximity to public transport services...*

*(iv) The requirement that the majority of all apartments in a proposed scheme exceed the minimum floor area standards by a minimum of 10% shall not apply to BTR schemes.*

*(v) The requirement for a maximum of 12 apartments per floor per core shall not apply to BTR schemes, subject to overall design quality and compliance with building regulations.*

PROPOSED SCHEDULE OF UNITS													
Block	Proposed number of levels	Proposed Total Appts per Block	Proposed Mix of Apartments (Number of Units)						Other (Number of Units)			DUAL ASPECT	
			Studio	1 bed	2 bed C	2 bed DB	3 bed	3 bed (P)	Communal Internal Space	Commercial Space			
										Creche incl. Bin Store (356.5m <sup>2</sup> )	Retail incl. Bin Store (336.8 m <sup>2</sup> )	Total (units)	%
AB	5	40	0	0	40	0	0	0				33	83%
CD	5	32	0	0	32	0	0	0		1	1	28	88%
E	7+LG	68	0	3	39	24	0	2	1			33	49%
F	9+LG	96	0	10	42	39	1	4				45	47%
G	7+LG	89	14	30	9	20	12	4				38	43%
H	9	99	0	63	32	0	0	4				42	42%
I	5+LG	48	6	16	11	3	8	4	1			23	48%
J	5+LG	62	10	13	17	10	8	4				27	44%

		Studio	1 bed	2 bed C	2 bed DB	3 bed	3 bed (P)				
				222	96	29	22				
<b>GRAND TOTAL</b>	<b>534</b>	30	135	318		51		2	2	269	50.4%
100.0%		5.6%	25.3%	41.6%	18.0%	5.4%	4.1%				
		59.6%			9.6%						

### 3.0 Compliance with Sustainable Urban Housing: Design Standards for New Apartments

#### Apartment Mix - Private Residential

The mix of private residential units within the scheme is outlined in the table to the right.

PROPOSED SCHEDULE OF UNITS - PRIVATE RESIDENTIAL											
Block	Proposed number of levels	Proposed Total Appts per Block	Proposed Mix of Apartments						DUAL ASPECT		NORTH FACING ONLY
			Studio S2P	1 bed 1B2P	2 bed C 2B4P	2 bed DB 2B4P	3 bed 3B6P	3 bed (P) 3B6P	Total	%	
AB	5	36	0	0	36	0	0	0	29	81%	0
CD	5	28	0	0	28	0	0	0	26	93%	0
E	7+LG	61	0	3	35	21	0	2	32	52%	0
F	9+LG	87	0	10	38	34	1	4	42	48%	0
G	7+LG	82	14	30	6	16	12	4	36	44%	0
H	9	93	0	63	26	0	0	4	39	42%	0
I	5+LG	43	6	16	8	1	8	4	20	47%	0
J	5+LG	51	10	13	14	2	8	4	24	47%	0
<b>GRAND TOTAL</b>		<b>481</b>			<b>191</b>	<b>74</b>	<b>29</b>	<b>22</b>			
			<b>30</b>	<b>135</b>	<b>265</b>		<b>51</b>		<b>248</b>	<b>51.6%</b>	<b>0</b>
		100.0%	6.2%	28.1%	39.7%	15.4%	6.0%	4.6%			
		45 per acre			55.1%		10.6%				
		110 per hectare									

### 3.0 Compliance with Sustainable Urban Housing: Design Standards for New Apartments

#### Apartment Mix - Part V Residential

The mix of Part V residential units within the scheme is outlined in the table to the right.

PROPOSED SCHEDULE OF UNITS - PART V									
Block	Proposed number of levels	Proposed Total Appts per Block	Proposed Mix of Apartments				DUAL ASPECT		NORTH FACING ONLY
			Studio S2P	1 bed 1B2P	2 bed 2B4P	3 bed 3B6P	Total	%	Total
AB	5	4	0	0	4	0	4	100%	0
CD	5	4	0	0	4	0	2	50%	0
E	7+LG	7	0	0	7	0	1	14%	0
F	9+LG	9	0	0	9	0	3	33%	0
G	7+LG	7	0	0	7	0	2	29%	0
H	9	6	0	0	6	0	3	50%	0
I	5+LG	5	0	0	5	0	3	60%	0
J	5+LG	11	0	0	11	0	3	27%	0
<b>GRAND TOTAL</b>		<b>53</b>	<b>0</b>	<b>0</b>	<b>53</b>	<b>0</b>	<b>21</b>	<b>39.6%</b>	<b>0</b>

## 3.0 Compliance with Sustainable Urban Housing: Design Standards for New Apartments

### Apartment Floor Areas

The proposed scheme offers a unique response to the contextual restrictions of this key site which results in a variety of different unit types across the development.

We confirm that all units comply with the requirements of the Sustainable Urban Housing Design Standards for New Apartments 2018.

All individual habitable rooms, floor areas and room widths comply or exceed the design guideline requirements.

Please see Appendix A for full detailed Housing Quality Assessment schedule.

### Apartment Design

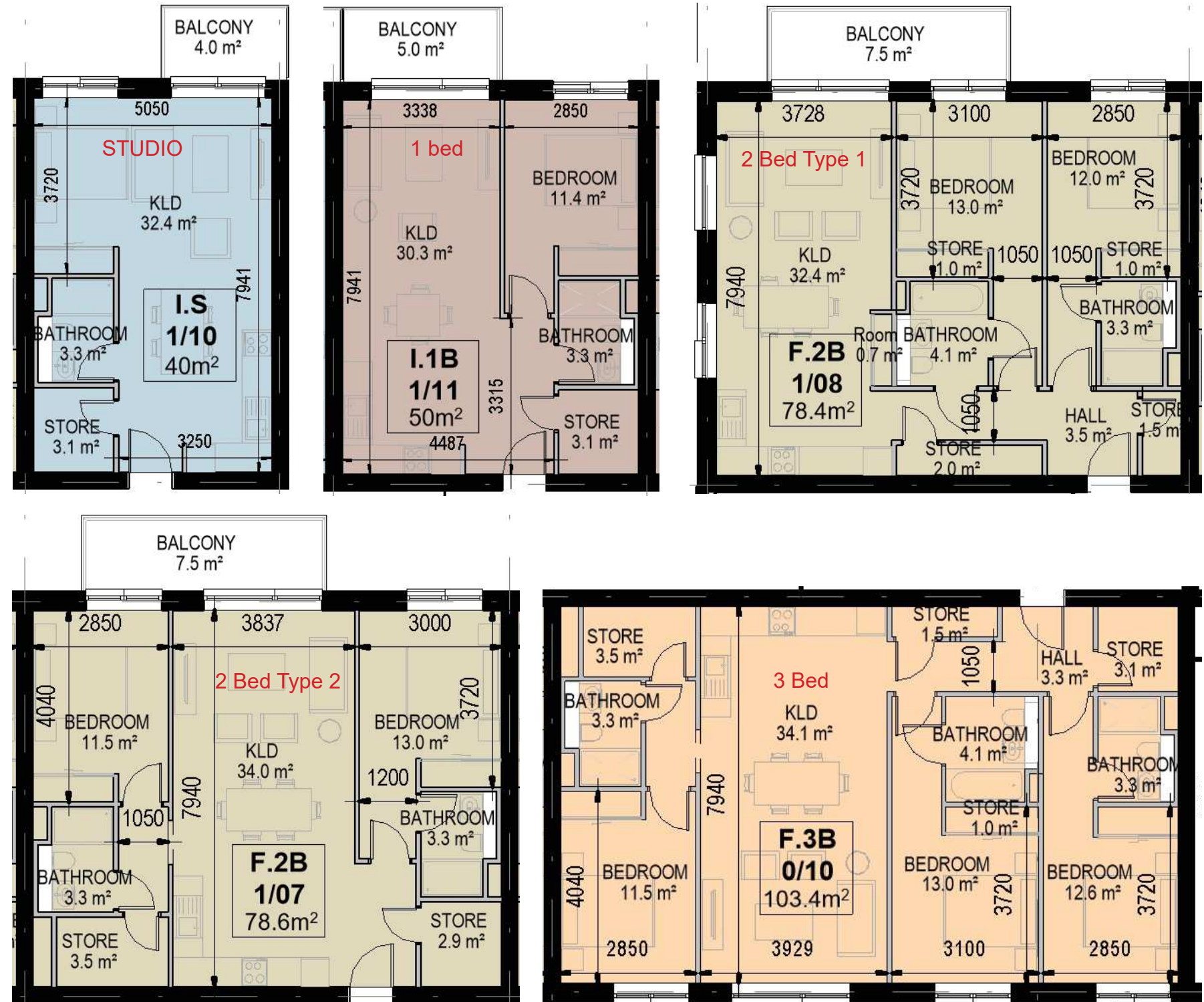
Apartment and multi-residential unit development design is constantly evolving, learning from best practice around the globe. New forms of homes are emerging that take into account the current demographic household types and tenures. There is now a need for studio, one bedroom and two bedroom apartments in Dublin city for young professionals, office workers/ teachers/ public servants as affordable rental accommodation.

The 2016 Census indicates that 1-2 person households now comprise a majority of households and this trend is set to continue, yet Ireland has only one-quarter the EU average of apartments as a proportion of housing stock.

The design and layout of unit types are also developing into open plan apartment layouts. These layouts are being made possible through the utilisation of a sprinklered fire prevention strategy which is becoming more common in new apartment developments. The proposed layouts are being developed through consultation with Michael Slattery Associates Fire Consultants and are based on proven layouts.

### Apartment Layouts

The following unit types comprise the typical layouts in the scheme:



CGI View of Proposed Southerly Courtyard Elevation Design



### 3.0 Compliance with Sustainable Urban Housing: Design Standards for New Apartments

#### Dual Aspect Ratios

The scheme was designed from the outset to maximise good sun and day light penetration into the individual apartment units, whilst simultaneously making efforts to protect the privacy of the adjacent properties. The proposed scheme also seeks to take advantage of the spectacular views across greater Dublin area at high level.

The apartment blocks have been aligned on a north-south axis thus presenting the optimum approach to ensure the maximum number of apartments will receive east-west day light.

All apartments with a northern aspect are dual aspect and no single aspect north facing apartments are proposed within the development.

*'In suburban or intermediate locations, it is an objective that there shall generally be a minimum of 50% dual aspect apartments in a single scheme.'*

The combined apartment blocks A-B, C-D, E, F, G, H, I and J achieve the minimum standard of 50% within their own regard as per the table below:

Block	Proposed number of levels	Proposed Total Apts per Block	DUAL ASPECT	
			Total (units)	%
AB	5	40	33	83%
CD	5	32	28	88%
E	7+LG	68	33	49%
F	9+LG	96	45	47%
G	7+LG	89	38	43%
H	9	99	42	42%
I	5+LG	48	23	48%
J	5+LG	62	27	44%

<b>GRAND TOTAL</b>		<b>534</b>	269	50.4%
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Dual aspect units.

Typical floor layout showing dual aspect units.

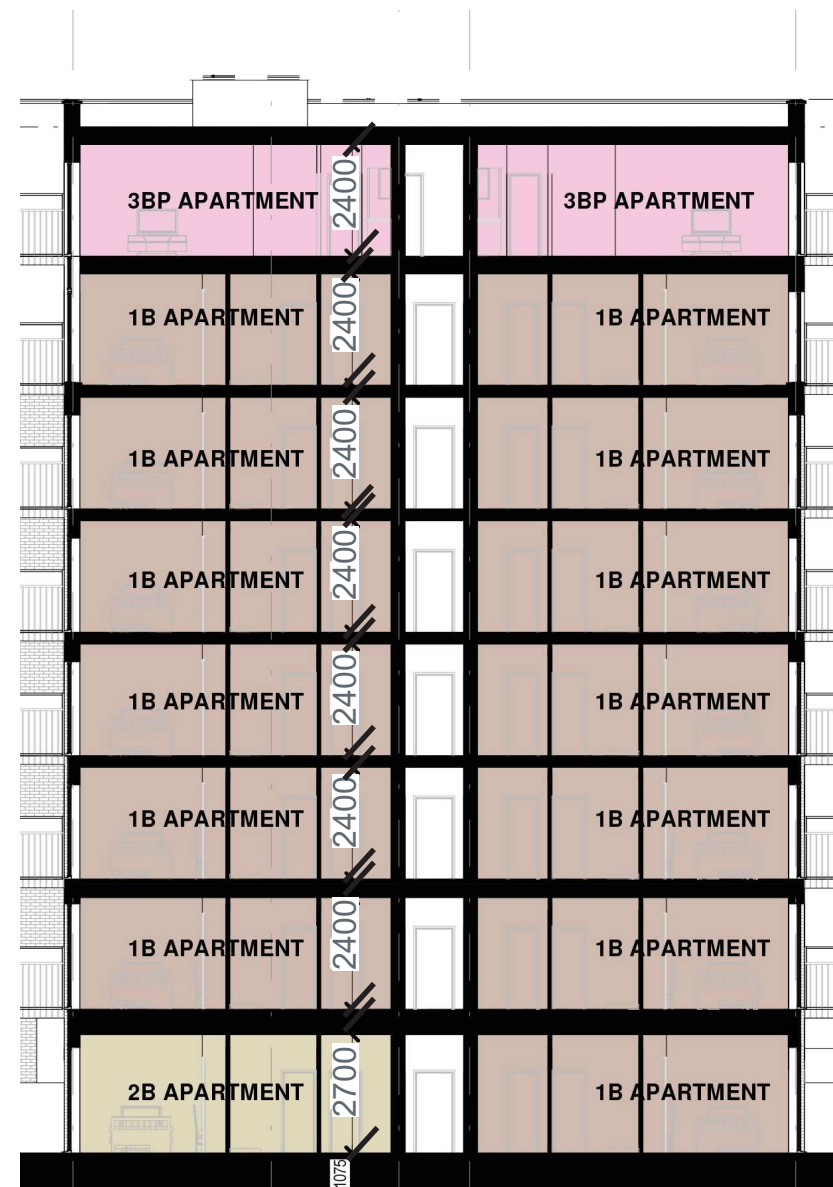
For further information on the daylight-sunlight analysis, please refer to the Avison Young report.

# 3.0 Compliance with Sustainable Urban Housing: Design Standards for New Apartments

## Floor to Ceiling Height

Sustainable Urban Housing: Design Standards for New Apartment guidelines 2020, section 3.21 requires a minimum floor to ceiling height of 2.4m.

The ground floor units will achieve a minimum floor to ceiling height of 2.7m and all other levels will achieve a minimum floor to ceiling height of 2.4m or greater.



Typical section for any apartment block

## Lift and Stair Cores

All apartment blocks, A-B, C-D, E, F, G, H, I, and J will comprise no more than 12 units per level per core as stated in the design standards for new apartments.

All circulation cores will be within the permitted travel distances for fire escape from apartment entrance doors.

All the apartment blocks have been reviewed by the project fire consultant Michael Slattery & Associates and are in accordance with relevant statutory FSC requirements.



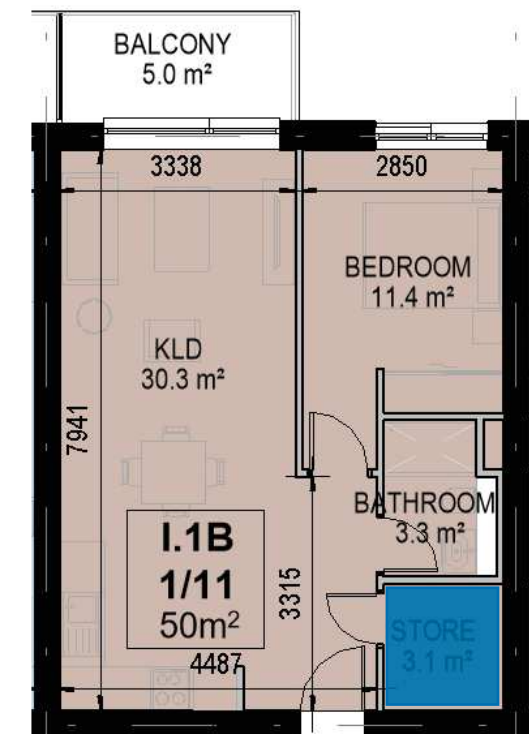
Typical floor level

## Internal Storage

Storage requirements are provided entirely within the apartments.

The storage provided is in addition to kitchen cupboards, bedroom furniture and to minimum aggregate living/dining/kitchen or bedroom floor areas. Individual storage rooms within an apartment do not exceed 3.5 square metres.

The scheme's amenity areas, located at ground floor level of Blocks E and I will have dedicated storage rooms for post and parcel delivery adjacent to the reception areas.



Stair/Lift Core.

Apt. Storage.

Typical 1 bedroom Unit - 50sqm (3sqm) Dedicated storage space highlighted in Blue.

## 3.0 Compliance with Sustainable Urban Housing: Design Standards for New Apartments

### Private Amenity Space

It is a policy requirement of the Design Standards for New Apartments 2020 and DCC Development Plan 2022-20228 that private open space in the form of gardens or patios/terraces for ground floor apartments and balconies and/or roof terraces at upper levels be provided.

*'Balconies should adjoin and have a functional relationship with the main living areas of the apartments. A minimum depth of 1.5m is required for balconies, in one usable length to meet the minimum floor area requirement'*

### Design Standards for New Apartments: BTR Developments

Specific Planning Policy Requirement 8 allows the following in proposals which qualify as specific BTR developments:

*'Flexibility shall apply in relation to the provision of a proportion of the storage and private amenity space associated with individual units as set out in Appendix 1 and in relation to the provision of all of the communal amenity space as set out in Appendix 1, on the basis of the provision of alternative, compensatory communal support facilities and amenities within the development'*

Appendix 1 sets out the following minimum floor areas for private amenity space:

- Studio: 4sqm
- One Bed Apartment: 5sqm
- Two Bed (3 person) Apartment: 6sqm
- Two Bed (4 person) Apartment: 7sqm
- Three Bed Apartment: 9sqm

### Proposal

The proposed scheme provides private amenity space through the use of private balconies and roof terraces in units on levels 1 and above.. Private patios will be provided for ground floor apartments in all instances. All private open spaces will achieve and/or exceed the prescribed minimum areas, adjoining the main living spaces of the apartments and will benefit from natural sun light for at least part of the day.



## 3.0 Compliance with Sustainable Urban Housing: Design Standards for New Apartments

### Security Considerations

Apartment design should provide occupants and their visitors with a sense of safety and security.

We have reviewed and integrated the requirements of 'secure by design' into the development. Passive supervision is key to ensure security on site. All apartment blocks have aspect in different directions including windows that will cover blind corners. Entrances will be well lit and access to the residential units will be controlled with electronic fob through a single point of access located centrally on each block.

The ground floor apartments will have fenced private open space (patios) that will protect them from public and communal areas.

Internal amenity space located at ground and first floor levels of Block E will provide passive surveillance to the public open space around Barrington Tower.

Internal amenity space located at ground and first floor levels of Block I will provide passive surveillance to the southern access of the development facing the Luas line.

### Proposed Boundary Treatment - Security

The treatment of the boundary between the public realm and the residents communal open space contained within the courtyard spaces has been considered carefully and fully integrated within the proposed landscape plan.

All communal open spaces will be fenced and controlled with electronic fob.

Please refer to Landscape Design Statement prepared by Murray & Associates.

### Boundary Treatments

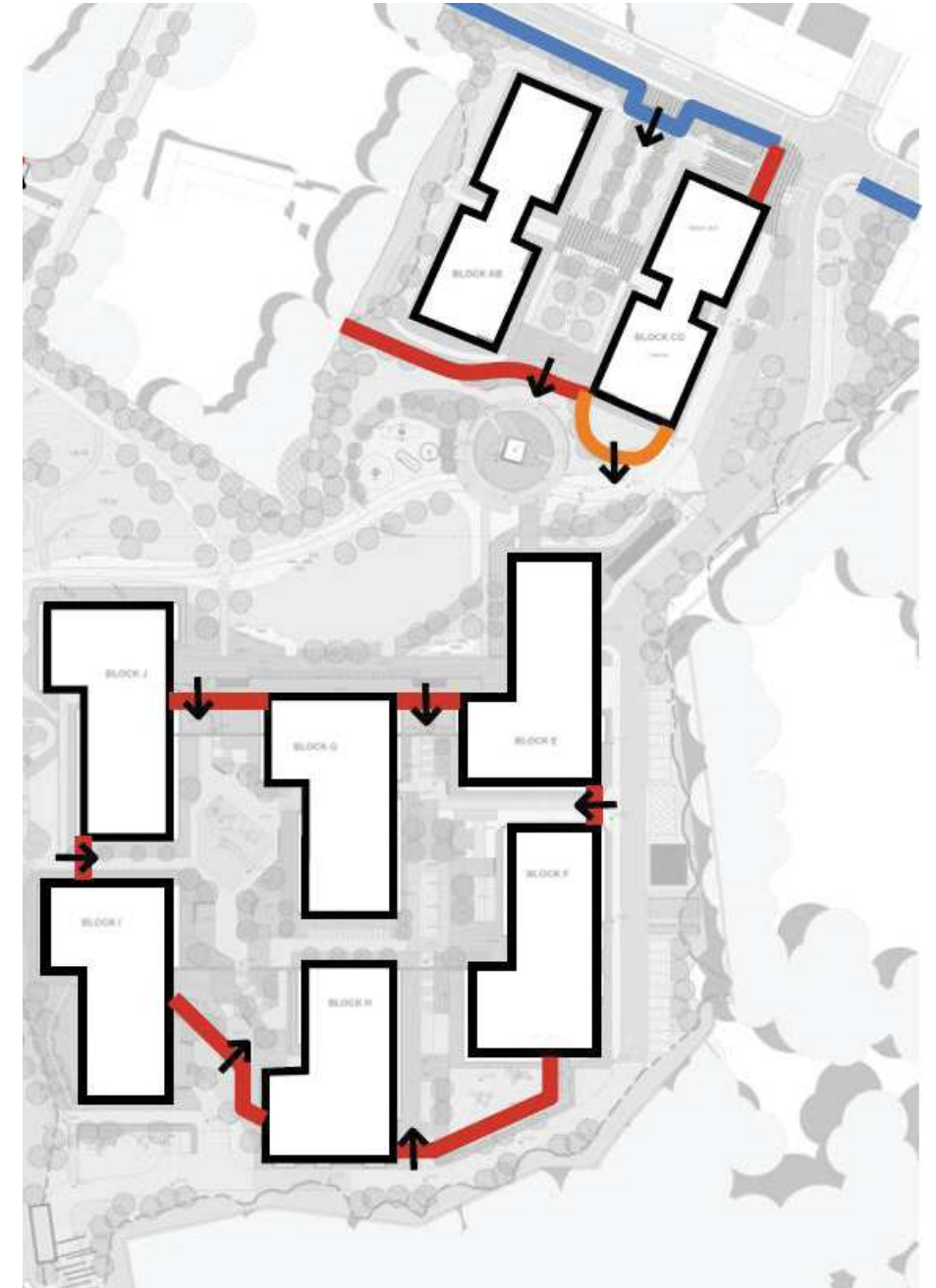


— Stone wall will lower gate to maintain views to the tower. Proposed height: 1.8m



— Railing softened with planting. Proposed height: 1.2m.

— Crèche garden fence softened with planting. Proposed height: 1.8m.



## 4.0 Compliance with Sustainable Urban Housing: Design Standards for New Apartments - Communal Facilities

### Communal Facilities in Apartments.

This section of the report assesses the communal amenity elements of the development against the provisions of the Sustainable Urban Housing Standards for New Apartments:

- Access and Services
- Communal Facilities
- Refuse Storage
- Communal Amenity Space
- Children's Play
- Bicycle Parking and Storage
- Car Parking



## 4.0 Compliance with Sustainable Urban Housing: Design Standards for New Apartments - Communal Facilities

### Access and Services

Pedestrian Access to all buildings will primarily be through the ground floor single point of entry to provide a single point of access control for residents, visitors and service providers.

No user will have to pass through a secondary entrance to access their apartment. A resident services manager will provide concierge and security services at the entrance of Blocks E and I throughout the day.

The primary access route for all residents will be usable by everyone, including children and people with disabilities. Within all the buildings, all levels are served by lifts and stairs suitable for ambulatory disabled users.

The vehicular and cyclist access to the underground parking is achieved by two different independent ramps. From both basements, lifts and stairs give access to the residential units on Blocks E, f, G, J and I. A short walk south of the lower basement will give level access to Block H. Block E's lifts and stairs will allow residents from Block AB and CD to reach their blocks through the external footpaths from both basements.

Corridors will be wide enough to allow two people pass as a minimum, with short lengths and widening at key locations for ease of use by those with wheelchairs or children's buggies.

Primary service risers will be located in common areas for ease of access.

Service rooms will be provided at the entrance point to each block to discreetly house the switch and meter ancillary rooms.

### Communal Facilities

Internal amenity space will be provided at ground and first floor levels of Blocks E and I.

Internal amenity space for block E will be facing the public open space around Barrington Tower in the heart of the proposed development

Internal amenity space for Block I will be addressing the Luas southern access of the site from the Luas Line.

These spaces will enhance the quality of living for occupants establishing a sense of community for the residents and will comprise multifunctional rooms for their exclusive use. This facility will include a concierge desk, secure postal storage, a small kitchen, dining and lounge room, games room, gym, cinema room and toilets. Lounge areas will have direct access to outdoor landscaped terraces.

As support facilities for the residents and the wider community, a retail unit (convenience store) and a crèche is proposed at ground floor level of Block C-D.

Communal amenity spaces and commercial facilities will encourage the use of the public open space, promoting a vibrant hub at the heart of the scheme.



Related images to communal facilities

## 4.0 Compliance with Sustainable Urban Housing: Design Standards for New Apartments - Communal Facilities

### Refuse Storage.

The operational Waste Management Plan for the development has been prepared by AWN Consulting Ltd. with regard to the domestic waste management objectives of Dun Laoghaire-Rathdown Development Plan 2022-2028.

The objective of the Operational Waste Management Plan is to maximise the quantity of waste recycled by providing residents with sufficient waste segregation at source infrastructure (3 bin system in kitchens), waste reduction initiatives, waste collection and waste management information.

Waste storage issues have been considered at the initial apartment design stage to ensure access for all (including people with disabilities) in a brightly lit, safe and well-signed area, spacious enough for easy manoeuvrability.

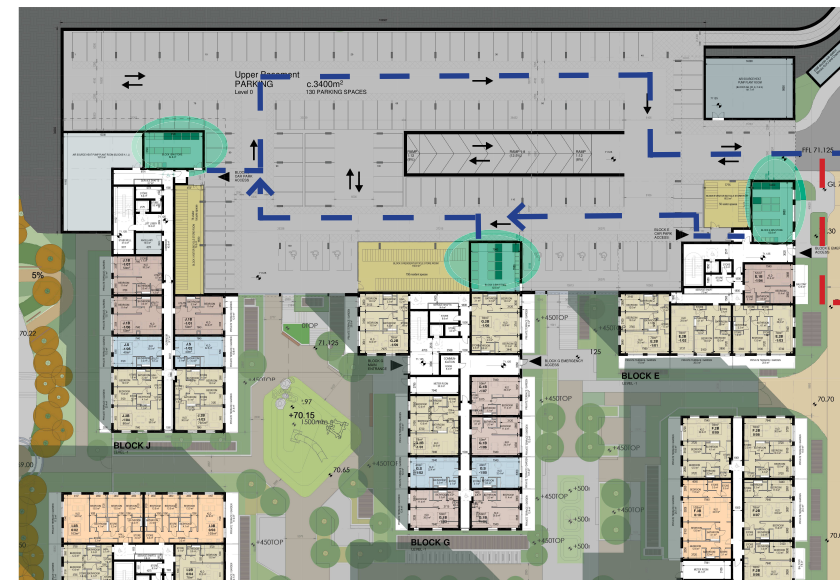
All communal waste storage areas will accommodate a 3-bin system and will include visible guidelines for residents on how to correctly segregate their wastes. The waste storage facility will be adequately ventilated so as to minimise odours and potential nuisance from vermin/flies. Suitable waste water drainage points will be installed in the receptacle bin storage area for cleaning and disinfecting purposes.

Each building will have access to their own respective bin stores, most of them located at basement level.

These storage areas will be easily accessed by residents, management staff and refuse collectors. Staff will bring the bins from the bin stores to staging designated areas in order to restrict disruption by waste trucks during collection. Sufficient access and egress will be provided to enable receptacles to be moved easily from the storage area to these collection points.

Commercial waste storage (convenient store and crèche) will have independent bins stores with sufficient waste segregation facilities

There will be a commercial refuse management plan implemented as part of the lease of the commercial units.



Refuse carried from upper basement bin store rooms to collection point

Floor Plan: Upper Basement Level



Refuse Store

Refuse carried from lower basement bin store rooms to collection point

Floor Plan: Lower Basement Level

## 4.0 Compliance with Sustainable Urban Housing: Design Standards for New Apartments - Communal Facilities

### Refuse Storage.





## 4.0 Compliance with Sustainable Urban Housing: Design Standards for New Apartments - Communal Facilities

### External Communal Amenity Space

External communal amenity spaces for use by the residents of the scheme will be provided in a number of locations throughout the development. They will include:

- Passive surveillance
- Enclosed fobbed areas
- Landscape treatment
- Framed views to the south (Dublin Mountains)
- Different activities for each courtyard



Site Plan: External Amenity Space: 4,200m<sup>2</sup>

### Public Open Space - Childrens Play Area

A children's playground will be contained within the public open space as indicated on the image to the right. It will be overlooked by the adjoining landscaped public space and will include seating areas. The space will be suitably lit in line with the overall site landscape strategy. Please see accompanying landscape report prepared by Murray and Associates for further detail.



Public Open Space: 9,370m<sup>2</sup>



Children's Play Space

## 4.0 Compliance with Sustainable Urban Housing: Design Standards for New Apartments - Communal Facilities

### Car Parking

The adjacency of the development to the existing Luas stop allows the provision of car parking to be minimised.

General residents car parking and bicycle parking will be located at two basement levels accessed via a vehicle/pedestrian ramp off the proposed access road to the east of the site.

There will be secure surface car parking spaces located along the access road, provided for use by the commercial areas, staff, visitors and general set down.

There will be 19 surface and 400 basement car parking.

Electrical car charging will be provided to 20% of car parking spaces (84 electrical charging points). In addition, ducting will be provided to all car parking spaces to allow for future EV charging points.

There will be 15 no disabled car parking at basement level conveniently located adjacent to the access cores.

Two additional accessible car parking spaces for higher vehicles will be located at surface level. east of Block F.

### Bicycle Parking

Covered and secure bicycle parking will be provided in two locations for residents:

- At basement levels via bicycle storage rooms containing double deck racks.
- At surface level to serve the commercial areas and visitors.

Please refer to traffic and mobility report prepared by Waterman Moylan Consulting Engineers.

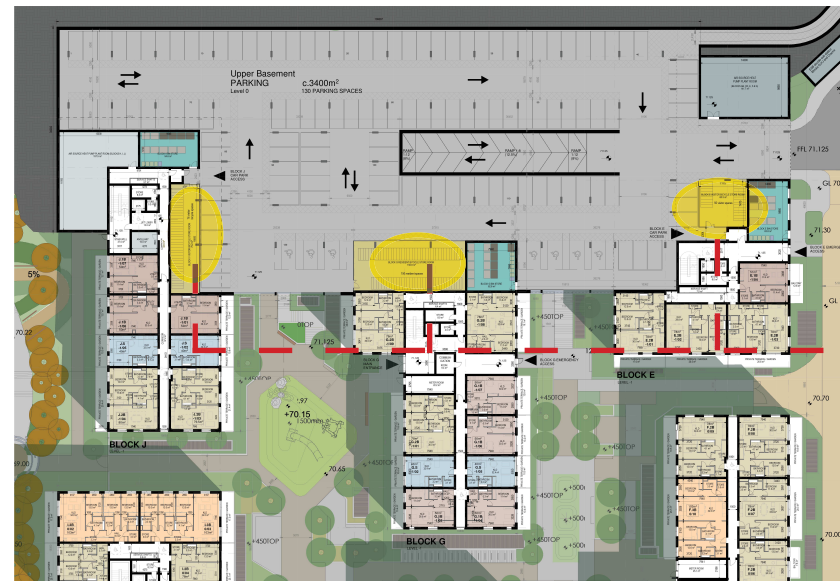


Proposed Site plan showing surface parking

# 4.0 Compliance with Sustainable Urban Housing: Design Standards for New Apartments - Communal Facilities

## Car Parking - Bicycle Parking

Proposed Upper Basement Plan

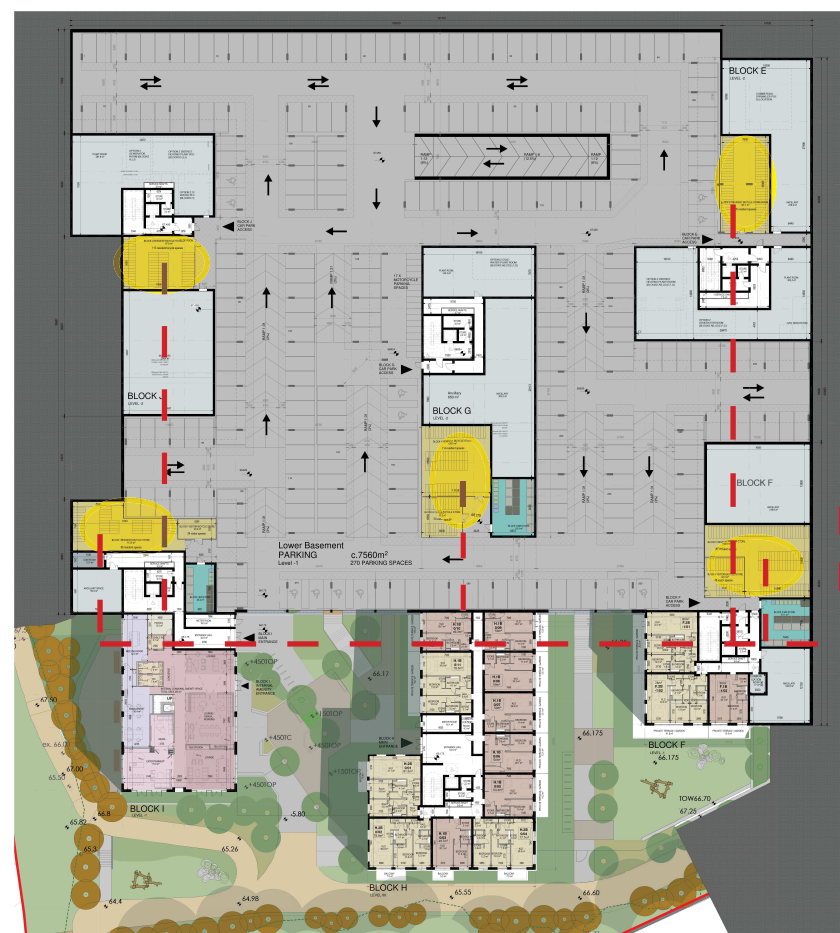


Bicycle storage



Sample caged bicycle storage

Proposed Lower Basement Plan



Bicycle storage



Sample covered double deck bicycle rack - for use in basement





# Appendix A. Housing Quality Assessment

Block	Unit No.	Description	Level	Total Units Per Level	Unit Area (m <sup>2</sup> )	Unit size required area (m <sup>2</sup> )	Individual Enlargement Ratio IRF(%)	Number of Bedrooms	Bed Spaces	Aggregated Living Area (m <sup>2</sup> )	Aggregated Living Area required (m <sup>2</sup> )	Aggregated Bedroom Area (m <sup>2</sup> )	Aggregated Bedroom Area required (m <sup>2</sup> )	Storage (m <sup>2</sup> )	Storage Required (m <sup>2</sup> )	Dual Aspect	Private (Terrace/Balcony) Space Provided (m <sup>2</sup> )	Private (Terrace/Balcony) Space Required (m <sup>2</sup> )
AB	0/01	2 BED	Ground Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6		7.3	7
AB	0/02	2 BED	Ground Floor		81.7	73	12%	2	4	33.5	30	25	24.4	6.6	6	YES	8	7
AB	0/03	2 BED	Ground Floor		83.2	73	14%	2	4	34.7	30	25	24.4	6.6	6	YES	7.3	7
AB	0/04	2 BED	Ground Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6		7.3	7
AB	0/05	2 BED	Ground Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6		7.3	7
AB	0/06	2 BED	Ground Floor		83.2	73	14%	2	4	34.7	30	25	24.4	6.6	6	YES	7.3	7
AB	0/07	2 BED	Ground Floor		82.5	73	13%	2	4	34.7	30	25	24.4	6.6	6	YES	7.3	7
AB	0/08	2 BED	Ground Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6	YES	7.3	7
				8	648.2													
AB	1/01	2 BED	First Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6		7.3	7
AB	1/02	2 BED	First Floor		81.7	73	12%	2	4	33.5	30	25	24.4	6.6	6	YES	8	7
AB	1/03	2 BED	First Floor		83.2	73	14%	2	4	34.7	30	25	24.4	6.6	6	YES	7.3	7
AB	1/04	2 BED	First Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6	YES	7.3	7
AB	1/05	2 BED	First Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6	YES	7.3	7
AB	1/06	2 BED	First Floor		83.2	73	14%	2	4	34.7	30	25	24.4	6.6	6	YES	7.3	7
AB	1/07	2 BED	First Floor		82.5	73	13%	2	4	34.7	30	25	24.4	6.6	6	YES	7.3	7
AB	1/08	2 BED	First Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6	YES	7.3	7
				8	648.2													
AB	2/01	2 BED	Second Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6		7.3	7
AB	2/02	2 BED	Second Floor		81.7	73	12%	2	4	33.5	30	25	24.4	6.6	6	YES	8	7
AB	2/03	2 BED	Second Floor		83.2	73	14%	2	4	34.7	30	25	24.4	6.6	6	YES	7.3	7
AB	2/04	2 BED	Second Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6	YES	7.3	7
AB	2/05	2 BED	Second Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6	YES	7.3	7
AB	2/06	2 BED	Second Floor		83.2	73	14%	2	4	34.7	30	25	24.4	6.6	6	YES	7.3	7
AB	2/07	2 BED	Second Floor		82.5	73	13%	2	4	34.7	30	25	24.4	6.6	6	YES	7.3	7
AB	2/08	2 BED	Second Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6	YES	7.3	7
				8	648.2													
AB	3/01	2 BED	Third Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6		7.3	7
AB	3/02	2 BED	Third Floor		81.7	73	12%	2	4	33.5	30	25	24.4	6.6	6	YES	8	7
AB	3/03	2 BED	Third Floor		83.2	73	14%	2	4	34.7	30	25	24.4	6.6	6	YES	7.3	7
AB	3/04	2 BED	Third Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6	YES	7.3	7
AB	3/05	2 BED	Third Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6	YES	7.3	7
AB	3/06	2 BED	Third Floor		83.2	73	14%	2	4	34.7	30	25	24.4	6.6	6	YES	7.3	7
AB	3/07	2 BED	Third Floor		82.5	73	13%	2	4	34.7	30	25	24.4	6.6	6	YES	7.3	7
AB	3/08	2 BED	Third Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6	YES	7.3	7
				8	648.2													

# Appendix A. Housing Quality Assessment

Block	Unit No.	Description	Level	Total Units Per Level	Unit Area (m <sup>2</sup> )	Unit size required area (m <sup>2</sup> )	Individual Enlargement Ratio IRF(%)	Number of Bedrooms	Bed Spaces	Aggregated Living Area (m <sup>2</sup> )	Aggregated Living Area required (m <sup>2</sup> )	Aggregated Bedroom Area (m <sup>2</sup> )	Aggregated Bedroom Area required (m <sup>2</sup> )	Storage (m <sup>2</sup> )	Storage Required (m <sup>2</sup> )	Dual Aspect	Private (Terrace/Balcony) Space Provided (m <sup>2</sup> )	Private (Terrace/Balcony) Space Required (m <sup>2</sup> )
AB	4/01	2 BED	Fourth Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6		7.3	7
AB	4/02	2 BED	Fourth Floor		81.7	73	12%	2	4	33.5	30	25	24.4	6.6	6	YES	8	7
AB	4/03	2 BED	Fourth Floor		83.2	73	14%	2	4	34.7	30	25	24.4	6.6	6	YES	7.3	7
AB	4/04	2 BED	Fourth Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6	YES	7.3	7
AB	4/05	2 BED	Fourth Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6	YES	7.3	7
AB	4/06	2 BED	Fourth Floor		83.2	73	14%	2	4	34.7	30	25	24.4	6.6	6	YES	7.3	7
AB	4/07	2 BED	Fourth Floor		82.5	73	13%	2	4	34.7	30	25	24.4	6.6	6	YES	7.3	7
AB	4/08	2 BED	Fourth Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6	YES	7.3	7
				8	648.2													
		STUDIO	0		0													
		1 BED	0		0													
		2 BED	40		3241													
		3 BED	0		0													
																Ratio		
																83%		
<b>AB TOTALS</b>				<b>40</b>	<b>3241</b>	<b>2920</b>		<b>80</b>	<b>160</b>	<b>1310</b>	<b>1200</b>	<b>1000</b>	<b>976</b>	<b>264</b>	<b>240</b>	<b>33</b>	<b>295.5</b>	<b>280</b>
CD	1/01	2 BED	First Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6	YES	7.3	7
CD	1/02	2 BED	First Floor		79.4	73	9%	2	4	34.7	30	25	24.4	6.6	6	YES	7.3	7
CD	1/03	2 BED	First Floor		81.7	73	12%	2	4	33.5	30	25	24.4	6.6	6	YES	8	7
CD	1/04	2 BED	First Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6		7.3	7
CD	1/05	2 BED	First Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6	YES	7.3	7
CD	1/06	2 BED	First Floor		82.5	73	13%	2	4	34.7	30	25	24.4	6.6	6	YES	7.3	7
CD	1/07	2 BED	First Floor		83.2	73	14%	2	4	34.7	30	25	24.4	6.6	6	YES	7.3	7
CD	1/08	2 BED	First Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6	YES	7.3	7
				8	644.4													
CD	2/01	2 BED	Second Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6	YES	7.3	7
CD	2/02	2 BED	Second Floor		79.4	73	9%	2	4	34.7	30	25	24.4	6.6	6	YES	7.3	7
CD	2/03	2 BED	Second Floor		81.7	73	12%	2	4	33.5	30	25	24.4	6.6	6	YES	8	7
CD	2/04	2 BED	Second Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6		7.3	7
CD	2/05	2 BED	Second Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6	YES	7.3	7
CD	2/06	2 BED	Second Floor		82.5	73	13%	2	4	34.7	30	25	24.4	6.6	6	YES	7.3	7
CD	2/07	2 BED	Second Floor		83.2	73	14%	2	4	34.7	30	25	24.4	6.6	6	YES	7.3	7
CD	2/08	2 BED	Second Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6	YES	7.3	7
				8	644.4													
CD	3/01	2 BED	Third Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6	YES	7.3	7
CD	3/02	2 BED	Third Floor		79.4	73	9%	2	4	34.7	30	25	24.4	6.6	6	YES	7.3	7
CD	3/03	2 BED	Third Floor		81.7	73	12%	2	4	33.5	30	25	24.4	6.6	6	YES	8	7
CD	3/04	2 BED	Third Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6		7.3	7
CD	3/05	2 BED	Third Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6	YES	7.3	7
CD	3/06	2 BED	Third Floor		82.5	73	13%	2	4	34.7	30	25	24.4	6.6	6	YES	7.3	7
CD	3/07	2 BED	Third Floor		83.2	73	14%	2	4	34.7	30	25	24.4	6.6	6	YES	7.3	7
CD	3/08	2 BED	Third Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6	YES	7.3	7
				8	644.4													
CD	4/01	2 BED	Fourth Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6	YES	7.3	7
CD	4/02	2 BED	Fourth Floor		79.4	73	9%	2	4	34.7	30	25	24.4	6.6	6	YES	7.3	7
CD	4/03	2 BED	Fourth Floor		81.7	73	12%	2	4	33.5	30	25	24.4	6.6	6	YES	8	7
CD	4/04	2 BED	Fourth Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6		7.3	7
CD	4/05	2 BED	Fourth Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6	YES	7.3	7
CD	4/06	2 BED	Fourth Floor		82.5	73	13%	2	4	34.7	30	25	24.4	6.6	6	YES	7.3	7



# Appendix A. Housing Quality Assessment

Block	Unit No.	Description	Level	Total Units Per Level	Unit Area (m <sup>2</sup> )	Unit size required area (m <sup>2</sup> )	Individual Enlargement Ratio IRF(%)	Number of Bedrooms	Bed Spaces	Aggregated Living Area (m <sup>2</sup> )	Aggregated Living Area required (m <sup>2</sup> )	Aggregated Bedroom Area (m <sup>2</sup> )	Aggregated Bedroom Area required (m <sup>2</sup> )	Storage (m <sup>2</sup> )	Storage Required (m <sup>2</sup> )	Dual Aspect	Private (Terrace/Balcony) Space Provided (m <sup>2</sup> )	Private (Terrace/Balcony) Space Required (m <sup>2</sup> )
CD	4/07	2 BED	Fourth Floor		83.2	73	14%	2	4	34.7	30	25	24.4	6.6	6	YES	7.3	7
CD	4/08	2 BED	Fourth Floor		79.4	73	9%	2	4	31.1	30	25	24.4	6.6	6	YES	7.3	7
				8	644.4													
		STUDIO		0	0													
		1 BED		0	0													
		2 BED		32	2577.6													
		3 BED		0	0											Ratio 88%		
<b>CD TOTALS</b>				<b>32</b>	<b>2577.6</b>	<b>2336</b>		<b>64</b>	<b>128</b>	<b>1048</b>	<b>960</b>	<b>800</b>	<b>780.8</b>	<b>211.2</b>	<b>192</b>	<b>28</b>	<b>236.4</b>	<b>224</b>
E	-1/01	2 BED	Lower GF		78	73	7%	2	4	30	30	25	24.4	6	6	YES	17	7
E	-1/02	2 BED	Lower GF		78.5	73	8%	2	4	30	30	25	24.4	6.3	6		20.5	7
E	-1/03	2 BED	Lower GF		78.5	73	8%	2	4	30	30	25	24.4	6	6	YES	20.6	5
E	-1/04	1 BED	Lower GF		51	45	13%	1	2	31.4	23	11.4	11.4	3.1	3		12.8	5
				4	286													
E	0/01	2 BED	Ground Floor		78.9	73	8%	2	4	30	30	25	24.4	6	6	YES	16.5	7
E	0/02	2 BED	Ground Floor		78	73	7%	2	4	30	30	25	24.4	6	6	YES	7.4	7
E	0/03	2 BED	Ground Floor		78.5	73	8%	2	4	30	30	25	24.4	6.3	6		7.4	7
E	0/04	2 BED	Ground Floor		78.5	73	8%	2	4	30	30	25	24.4	6	6	YES	7.4	7
E	0/05	2 BED	Ground Floor		77.7	73	6%	2	4	33	30	24.5	24.4	6.6	6		8	7
E	0/06	2 BED	Ground Floor		78.5	73	8%	2	4	33.8	30	24.5	24.4	6.5	6		8	7
				6	470.1													
E	1/01	2 BED	First Floor		78.9	73	8%	2	4	30	30	25	24.4	6	6	YES	7.4	7
E	1/02	2 BED	First Floor		78	73	7%	2	4	30	30	25	24.4	6	6	YES	7.4	7
E	1/03	2 BED	First Floor		78.5	73	8%	2	4	30	30	25	24.4	6.3	6		7.4	7
E	1/04	2 BED	First Floor		78.5	73	8%	2	4	30	30	25	24.4	6	6	YES	7.4	7
E	1/05	2 BED	First Floor		77.7	73	6%	2	4	33	30	24.5	24.4	6.6	6		8	7
E	1/06	2 BED	First Floor		78.5	73	8%	2	4	33.8	30	24.5	24.4	6.5	6		8	7
E	1/07	2 BED	First Floor		77.7	73	6%	2	4	33.2	30	24.5	24.4	6.3	6		8	7
				7	547.8													
E	2/01	2 BED	Second Floor		78.9	73	8%	2	4	30	30	25	24.4	6	6	YES	7.4	7
E	2/02	2 BED	Second Floor		78	73	7%	2	4	30	30	25	24.4	6	6	YES	7.4	7
E	2/03	2 BED	Second Floor		78.5	73	8%	2	4	30	30	25	24.4	6.3	6		7.4	7
E	2/04	2 BED	Second Floor		78.5	73	8%	2	4	30	30	25	24.4	6	6	YES	7.4	7
E	2/05	2 BED	Second Floor		77.7	73	6%	2	4	33	30	24.5	24.4	6.6	6		8	7
E	2/06	2 BED	Second Floor		78.5	73	8%	2	4	34	30	24.5	24.4	6.2	6		8	7
E	2/07	2 BED	Second Floor		78.5	73	8%	2	4	33.8	30	24.5	24.4	6.6	6		8	7
E	2/08	2 BED	Second Floor		78.4	73	7%	2	4	30	30	25	24.4	6.2	6	YES	7.4	7
E	2/09	2 BED	Second Floor		77.7	73	6%	2	4	30	30	25	24.4	6.2	6	YES	7.4	7
E	2/10	2 BED	Second Floor		78.5	73	8%	2	4	33.8	30	24.5	24.4	6.6	6		8	7
E	2/11	2 BED	Second Floor		78.5	73	8%	2	4	34	30	24.5	24.4	6.2	6		8	7
				11	861.7													
E	3/01	2 BED	Third Floor		78.9	73	8%	2	4	30	30	25	24.4	6	6	YES	7.4	7
E	3/02	2 BED	Third Floor		78	73	7%	2	4	30	30	25	24.4	6	6	YES	7.4	7
E	3/03	2 BED	Third Floor		78.5	73	8%	2	4	30	30	25	24.4	6.3	6		7.4	7
E	3/04	2 BED	Third Floor		78.5	73	8%	2	4	30	30	25	24.4	6	6	YES	7.4	7
E	3/05	2 BED	Third Floor		77.7	73	6%	2	4	33	30	24.5	24.4	6.6	6		8	7
E	3/06	2 BED	Third Floor		78.5	73	8%	2	4	34	30	24.5	24.4	6.2	6		8	7
E	3/07	2 BED	Third Floor		78.5	73	8%	2	4	33.8	30	24.5	24.4	6.6	6		8	7

# Appendix A. Housing Quality Assessment

Block	Unit No.	Description	Level	Total Units Per Level	Unit Area (m <sup>2</sup> )	Unit size required area (m <sup>2</sup> )	Individual Enlargement Ratio IRF(%)	Number of Bedrooms	Bed Spaces	Aggregated Living Area (m <sup>2</sup> )	Aggregated Living Area required (m <sup>2</sup> )	Aggregated Bedroom Area (m <sup>2</sup> )	Aggregated Bedroom Area required (m <sup>2</sup> )	Storage (m <sup>2</sup> )	Storage Required (m <sup>2</sup> )	Dual Aspect	Private (Terrace/Balcony) Space Provided (m <sup>2</sup> )	Private (Terrace/Balcony) Space Required (m <sup>2</sup> )
E	3/08	2 BED	Third Floor		78.4	73	7%	2	4	30	30	25	24.4	6.2	6	YES	7.4	7
E	3/09	2 BED	Third Floor		77.7	73	6%	2	4	30	30	25	24.4	6.2	6	YES	7.4	7
E	3/10	2 BED	Third Floor		78.5	73	8%	2	4	33.8	30	24.5	24.4	6.6	6		8	7
E	3/11	2 BED	Third Floor		78.5	73	8%	2	4	34	30	24.5	24.4	6.2	6		8	7
				11	861.7													
E	4/01	2 BED	Fourth Floor		78.9	73	8%	2	4	30	30	25	24.4	6	6	YES	7.4	7
E	4/02	2 BED	Fourth Floor		78	73	7%	2	4	30	30	25	24.4	6	6	YES	7.4	7
E	4/03	2 BED	Fourth Floor		78.5	73	8%	2	4	30	30	25	24.4	6.3	6		7.4	7
E	4/04	2 BED	Fourth Floor		78.5	73	8%	2	4	30	30	25	24.4	6	6	YES	7.4	7
E	4/05	2 BED	Fourth Floor		77.7	73	6%	2	4	33	30	24.5	24.4	6.6	6		8	7
E	4/06	2 BED	Fourth Floor		78.5	73	8%	2	4	34	30	24.5	24.4	6.2	6		8	7
E	4/07	2 BED	Fourth Floor		78.5	73	8%	2	4	33.8	30	24.5	24.4	6.6	6		8	7
E	4/08	2 BED	Fourth Floor		78.4	73	7%	2	4	30	30	25	24.4	6.2	6	YES	7.4	7
E	4/09	2 BED	Fourth Floor		77.7	73	6%	2	4	30	30	25	24.4	6.2	6	YES	7.4	7
E	4/10	2 BED	Fourth Floor		78.5	73	8%	2	4	33.8	30	24.5	24.4	6.6	6		8	7
E	4/11	2 BED	Fourth Floor		78.5	73	8%	2	4	34	30	24.5	24.4	6.2	6		8	7
				11	861.7													
E	5/01	2 BED	Fifth Floor		78.9	73	8%	2	4	30	30	25	24.4	6	6	YES	7.4	7
E	5/02	2 BED	Fifth Floor		78	73	7%	2	4	30	30	25	24.4	6	6	YES	7.4	7
E	5/03	2 BED	Fifth Floor		78.5	73	8%	2	4	30	30	25	24.4	6.3	6		7.4	7
E	5/04	2 BED	Fifth Floor		78.5	73	8%	2	4	30	30	25	24.4	6	6	YES	7.4	7
E	5/05	2 BED	Fifth Floor		77.7	73	6%	2	4	33	30	24.5	24.4	6.6	6		8	7
E	5/06	2 BED	Fifth Floor		78.5	73	8%	2	4	33.8	30	24.5	24.4	6.6	6		8	7
E	5/07	3 BED	Fifth Floor		118.8	90	32%	3	6	46.4	34	38.1	31.5	9	9	YES	12.6	9
E	5/08	3 BED	Fifth Floor		118.8	90	32%	3	6	44.2	34	39	31.5	9	9	YES	12.6	9
E	5/09	2 BED	Fifth Floor		78.5	73	8%	2	4	33.8	30	24.5	24.4	6.6	6		8	7
				9	786.2													
E	6/01	2 BED	Fifth Floor		78.9	73	8%	2	4	30	30	25	24.4	6	6	YES	7.4	7
E	6/02	2 BED	Fifth Floor		78	73	7%	2	4	30	30	25	24.4	6	6	YES	7.4	7
E	6/03	2 BED	Fifth Floor		78.5	73	8%	2	4	30	30	25	24.4	6.3	6		7.4	7
E	6/04	2 BED	Fifth Floor		78.5	73	8%	2	4	30	30	25	24.4	6	6	YES	7.4	7
E	6/05	2 BED	Fifth Floor		77.7	73	6%	2	4	33	30	24.5	24.4	6.6	6		8	7
E	6/06	1 BED	Sixth Floor		51	45	13%	1	2	31.4	23	11.4	11.4	3.1	3		5	5
E	6/07	2 BED	Sixth Floor		81.5	73	12%	2	4	32.7	30	25	24.4	6.4	6	YES	43.5	7
E	6/08	2 BED	Sixth Floor		80.8	73	11%	2	4	32.7	30	25	24.4	6.3	6	YES	43.5	7
E	6/09	1 BED	Sixth Floor		51	45	13%	1	2	31.4	23	11.4	11.4	3.1	3		5	5
				9	655.9													
		STUDIO		0	0													
		1 BED		3	153													
		2 BED		63	4940.5													
		3 BED		2	237.6													
																Ratio		
																49%		
<b>E TOTALS</b>				<b>68</b>	<b>5331.1</b>	<b>4914</b>		<b>135</b>	<b>270</b>	<b>2166.4</b>	<b>2027</b>	<b>1674.3</b>	<b>1634.4</b>	<b>421.1</b>	<b>405</b>	<b>33</b>	<b>645.8</b>	<b>472</b>
F	-1/01	2 BED	Lower GF		79.4	73	9%	2	4	30	30	25	24.4	6	6		20.6	7
F	-1/02	2 BED	Lower GF		77.8	73	7%	2	4	30	30	25	24.4	6	6	YES	41.8	7
F	-1/03	1 BED	Lower GF		49.7	45	10%	1	2	30.1	23	11.4	11.4	3.1	3		13	5
				3	206.9													
F	0/01	2 BED	Ground Floor		79.4	73	9%	2	4	30	30	25	24.4	6	6	YES	7.5	7

## Appendix A. Housing Quality Assessment

Block	Unit No.	Description	Level	Total Units Per Level	Unit Area (m <sup>2</sup> )	Unit size required area (m <sup>2</sup> )	Individual Enlargement Ratio IRF(%)	Number of Bedrooms	Bed Spaces	Aggregated Living Area (m <sup>2</sup> )	Aggregated Living Area required (m <sup>2</sup> )	Aggregated Bedroom Area (m <sup>2</sup> )	Aggregated Bedroom Area required (m <sup>2</sup> )	Storage (m <sup>2</sup> )	Storage Required (m <sup>2</sup> )	Dual Aspect	Private (Terrace/Balcony) Space Provided (m <sup>2</sup> )	Private (Terrace/Balcony) Space Required (m <sup>2</sup> )
F	0/02	2 BED	Ground Floor		77.8	73	7%	2	4	30	30	25	24.4	6	6	YES	7.1	7
F	0/03	1 BED	Ground Floor		49.7	45	10%	1	2	30.1	23	11.4	11.4	3.1	3		5	5
F	0/04	2 BED	Ground Floor		77.7	73	6%	2	4	30	30	25	24.4	6	6	YES	7.1	7
F	0/05	2 BED	Ground Floor		77.8	73	7%	2	4	33.1	30	24.5	24.4	6.6	6		7.5	7
F	0/06	2 BED	Ground Floor		78.6	73	8%	2	4	34.3	30	24.5	24.4	6	6		7.5	7
F	0/07	2 BED	Ground Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.6	6		20.3	7
F	0/08	2 BED	Ground Floor		78.4	73	7%	2	4	30	30	25	24.4	6	6	YES	19.9	7
F	0/09	2 BED	Ground Floor		77.7	73	6%	2	4	30	30	25	24.4	6	6	YES	19.5	7
F	0/10	3 BED	Ground Floor		103.4	90	15%	3	6	34	34	37.1	31.5	9.9	9		26.7	9
				10	779.1													
F	1/01	2 BED	First Floor		79.4	73	9%	2	4	30	30	25	24.4	6	6	YES	7.5	7
F	1/02	2 BED	First Floor		77.8	73	7%	2	4	30	30	25	24.4	6	6	YES	7.1	7
F	1/03	1 BED	First Floor		49.7	45	10%	1	2	30.1	23	11.4	11.4	3.1	3		5	5
F	1/04	2 BED	First Floor		77.7	73	6%	2	4	30	30	25	24.4	6	6	YES	7.1	7
F	1/05	2 BED	First Floor		77.8	73	7%	2	4	33.1	30	24.5	24.4	6.6	6		7.5	7
F	1/06	2 BED	First Floor		78.6	73	8%	2	4	34.3	30	24.5	24.4	6	6		7.5	7
F	1/07	2 BED	First Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.6	6		7.5	7
F	1/08	2 BED	First Floor		78.4	73	7%	2	4	30	30	25	24.4	6	6	YES	7.5	7
F	1/09	2 BED	First Floor		77.7	73	6%	2	4	30	30	25	24.4	6	6	YES	7.5	7
F	1/10	2 BED	First Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.6	6		7.5	7
F	1/11	2 BED	First Floor		78.6	73	8%	2	4	34.5	30	24.5	24.4	6	6		7.5	7
				11	832.9													
F	2/01	2 BED	Second Floor		79.4	73	9%	2	4	30	30	25	24.4	6	6	YES	7.5	7
F	2/02	2 BED	Second Floor		77.8	73	7%	2	4	30	30	25	24.4	6	6	YES	7.1	7
F	2/03	1 BED	Second Floor		49.7	45	10%	1	2	30.1	23	11.4	11.4	3.1	3		5	5
F	2/04	2 BED	Second Floor		77.7	73	6%	2	4	30	30	25	24.4	6	6	YES	7.1	7
F	2/05	2 BED	Second Floor		77.8	73	7%	2	4	33.1	30	24.5	24.4	6.6	6		7.5	7
F	2/06	2 BED	Second Floor		78.6	73	8%	2	4	34.3	30	24.5	24.4	6	6		7.5	7
F	2/07	2 BED	Second Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.6	6		7.5	7
F	2/08	2 BED	Second Floor		78.4	73	7%	2	4	30	30	25	24.4	6	6	YES	7.5	7
F	2/09	2 BED	Second Floor		77.7	73	6%	2	4	30	30	25	24.4	6	6	YES	7.5	7
F	2/10	2 BED	Second Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.6	6		7.5	7
F	2/11	2 BED	Second Floor		78.6	73	8%	2	4	34.5	30	24.5	24.4	6	6		7.5	7
				11	832.9													
F	3/01	2 BED	Third Floor		79.4	73	9%	2	4	30	30	25	24.4	6	6	YES	7.5	7
F	3/02	2 BED	Third Floor		77.8	73	7%	2	4	30	30	25	24.4	6	6	YES	7.1	7
F	3/03	1 BED	Third Floor		49.7	45	10%	1	2	30.1	23	11.4	11.4	3.1	3		5	5
F	3/04	2 BED	Third Floor		77.7	73	6%	2	4	30	30	25	24.4	6	6	YES	7.1	7
F	3/05	2 BED	Third Floor		77.8	73	7%	2	4	33.1	30	24.5	24.4	6.6	6		7.5	7
F	3/06	2 BED	Third Floor		78.6	73	8%	2	4	34.3	30	24.5	24.4	6	6		7.5	7
F	3/07	2 BED	Third Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.6	6		7.5	7
F	3/08	2 BED	Third Floor		78.4	73	7%	2	4	30	30	25	24.4	6	6	YES	7.5	7
F	3/09	2 BED	Third Floor		77.7	73	6%	2	4	30	30	25	24.4	6	6	YES	7.5	7
F	3/10	2 BED	Third Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.6	6		7.5	7
F	3/11	2 BED	Third Floor		78.6	73	8%	2	4	34.5	30	24.5	24.4	6	6		7.5	7
				11	832.9													
F	4/01	2 BED	Fourth Floor		79.4	73	9%	2	4	30	30	25	24.4	6	6	YES	7.5	7
F	4/02	2 BED	Fourth Floor		77.8	73	7%	2	4	30	30	25	24.4	6	6	YES	7.1	7
F	4/03	1 BED	Fourth Floor		49.7	45	10%	1	2	30.1	23	11.4	11.4	3.1	3		5	5

# Appendix A. Housing Quality Assessment

Block	Unit No.	Description	Level	Total Units Per Level	Unit Area (m <sup>2</sup> )	Unit size required area (m <sup>2</sup> )	Individual Enlargement Ratio IRF(%)	Number of Bedrooms	Bed Spaces	Aggregated Living Area (m <sup>2</sup> )	Aggregated Living Area required (m <sup>2</sup> )	Aggregated Bedroom Area (m <sup>2</sup> )	Aggregated Bedroom Area required (m <sup>2</sup> )	Storage (m <sup>2</sup> )	Storage Required (m <sup>2</sup> )	Dual Aspect	Private (Terrace/Balcony) Space Provided (m <sup>2</sup> )	Private (Terrace/Balcony) Space Required (m <sup>2</sup> )
F	4/04	2 BED	Fourth Floor		77.7	73	6%	2	4	30	30	25	24.4	6	6	YES	7.1	7
F	4/05	2 BED	Fourth Floor		77.8	73	7%	2	4	33.1	30	24.5	24.4	6.6	6		7.5	7
F	4/06	2 BED	Fourth Floor		78.6	73	8%	2	4	34.3	30	24.5	24.4	6	6		7.5	7
F	4/07	2 BED	Fourth Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.6	6		7.5	7
F	4/08	2 BED	Fourth Floor		78.4	73	7%	2	4	30	30	25	24.4	6	6	YES	7.5	7
F	4/09	2 BED	Fourth Floor		77.7	73	6%	2	4	30	30	25	24.4	6	6	YES	7.5	7
F	4/10	2 BED	Fourth Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.6	6		7.5	7
F	4/11	2 BED	Fourth Floor		78.6	73	8%	2	4	34.5	30	24.5	24.4	6	6		7.5	7
				11	832.9													
F	5/01	2 BED	Fifth Floor		79.4	73	9%	2	4	30	30	25	24.4	6	6	YES	7.5	7
F	5/02	2 BED	Fifth Floor		77.8	73	7%	2	4	30	30	25	24.4	6	6	YES	7.1	7
F	5/03	1 BED	Fifth Floor		49.7	45	10%	1	2	30.1	23	11.4	11.4	3.1	3		5	5
F	5/04	2 BED	Fifth Floor		77.7	73	6%	2	4	30	30	25	24.4	6	6	YES	7.1	7
F	5/05	2 BED	Fifth Floor		77.8	73	7%	2	4	33.1	30	24.5	24.4	6.6	6		7.5	7
F	5/06	2 BED	Fifth Floor		78.6	73	8%	2	4	34.3	30	24.5	24.4	6	6		7.5	7
F	5/07	2 BED	Fifth Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.6	6		7.5	7
F	5/08	2 BED	Fifth Floor		78.4	73	7%	2	4	30	30	25	24.4	6	6	YES	7.5	7
F	5/09	2 BED	Fifth Floor		77.7	73	6%	2	4	30	30	25	24.4	6	6	YES	7.5	7
F	5/10	2 BED	Fifth Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.6	6		7.5	7
F	5/11	2 BED	Fifth Floor		78.6	73	8%	2	4	34.5	30	24.5	24.4	6	6		7.5	7
				11	832.9													
F	6/01	2 BED	Fifth Floor		79.4	73	9%	2	4	30	30	25	24.4	6	6	YES	7.5	7
F	6/02	2 BED	Fifth Floor		77.8	73	7%	2	4	30	30	25	24.4	6	6	YES	7.1	7
F	6/03	1 BED	Fifth Floor		49.7	45	10%	1	2	30.1	23	11.4	11.4	3.1	3		5	5
F	6/04	2 BED	Fifth Floor		77.7	73	6%	2	4	30	30	25	24.4	6	6	YES	7.1	7
F	6/05	2 BED	Fifth Floor		77.8	73	7%	2	4	33.1	30	24.5	24.4	6.6	6		7.5	7
F	6/06	2 BED	Fifth Floor		78.6	73	8%	2	4	34.3	30	24.5	24.4	6	6		7.5	7
F	6/07	2 BED	Fifth Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.6	6		7.5	7
F	6/08	2 BED	Fifth Floor		78.4	73	7%	2	4	30	30	25	24.4	6	6	YES	7.5	7
F	6/09	2 BED	Fifth Floor		77.7	73	6%	2	4	30	30	25	24.4	6	6	YES	7.5	7
F	6/10	2 BED	Fifth Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.6	6		7.5	7
F	6/11	2 BED	Fifth Floor		78.6	73	8%	2	4	34.5	30	24.5	24.4	6	6		7.5	7
				11	832.9													
F	7/01	2 BED	Fifth Floor		79.4	73	9%	2	4	30	30	25	24.4	6	6	YES	7.5	7
F	7/02	2 BED	Fifth Floor		77.8	73	7%	2	4	30	30	25	24.4	6	6	YES	7.1	7
F	7/03	1 BED	Fifth Floor		49.7	45	10%	1	2	30.1	23	11.4	11.4	3.1	3		5	5
F	7/04	2 BED	Fifth Floor		77.7	73	6%	2	4	30	30	25	24.4	6	6	YES	7.1	7
F	7/05	2 BED	Fifth Floor		77.8	73	7%	2	4	33.1	30	24.5	24.4	6.6	6		7.5	7
F	7/06	2 BED	Fifth Floor		78.6	73	8%	2	4	34.3	30	24.5	24.4	6	6		7.5	7
F	7/07	2 BED	Fifth Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.6	6		7.5	7
F	7/08	2 BED	Fifth Floor		78.4	73	7%	2	4	30	30	25	24.4	6	6	YES	7.5	7
F	7/09	2 BED	Fifth Floor		77.7	73	6%	2	4	30	30	25	24.4	6	6	YES	7.5	7
F	7/10	2 BED	Fifth Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.6	6		7.5	7
F	7/11	2 BED	Fifth Floor		78.6	73	8%	2	4	34.5	30	24.5	24.4	6	6		7.5	7
				11	832.9													
F	8/01	3 BED	Eighth Floor		112.9	90	25%	3	6	36.5	34	39.1	31.5	9.2	9	YES	49.2	9
F	8/02	3 BED	Eighth Floor		113.9	90	27%	3	6	36.8	34	39.5	31.5	9.2	9	YES	44.3	9
F	8/03	2 BED	Eighth Floor		79.7	73	9%	2	4	30	30	25	24.4	6	6		21.7	7
F	8/04	3 BED	Eighth Floor		110.3	90	23%	3	6	34.3	34	41.7	31.5	9	9	YES	43.3	9

## Appendix A. Housing Quality Assessment

Block	Unit No.	Description	Level	Total Units Per Level	Unit Area (m <sup>2</sup> )	Unit size required area (m <sup>2</sup> )	Individual Enlargement Ratio IRF(%)	Number of Bedrooms	Bed Spaces	Aggregated Living Area (m <sup>2</sup> )	Aggregated Living Area required (m <sup>2</sup> )	Aggregated Bedroom Area (m <sup>2</sup> )	Aggregated Bedroom Area required (m <sup>2</sup> )	Storage (m <sup>2</sup> )	Storage Required (m <sup>2</sup> )	Dual Aspect	Private (Terrace/Balcony) Space Provided (m <sup>2</sup> )	Private (Terrace/Balcony) Space Required (m <sup>2</sup> )
F	8/05	3 BED	Eighth Floor		116.2	90	29%	3	6	39.2	34	40.3	31.5	9.7	9	YES	44.9	9
F	8/06	1 BED	Eighth Floor		62.2	45	38%	1	2	31.5	23	16.4	11.4	3.3	3		14.2	5
				6	595.2													
		STUDIO		0	0													
		1 BED		10	509.5													
		2 BED		81	6345.3													
		3 BED		5	556.7											Ratio 47%		
<b>F TOTALS</b>				<b>96</b>	<b>7411.5</b>	<b>6813</b>		<b>187</b>	<b>374</b>	<b>3060.9</b>	<b>2830</b>	<b>2322.7</b>	<b>2247.9</b>	<b>578</b>	<b>474</b>	<b>45</b>	<b>975.5</b>	<b>662</b>
G	-1/01	2 BED	Lower GF		77.7	73	6%	2	4	30	30	25	24.4	6.4	6		19.6	7
G	-1/02	STUDIO	Lower GF		40	37	8%	0	2	32.4	30	n/a	n/a	3.1	3		10.6	4
G	-1/03	1 BED	Lower GF		49.8	45	11%	1	2	26.5	23	11.4	11.4	3.1	3	YES	13.4	5
G	-1/04	1 BED	Lower GF		49.2	45	9%	1	2	26.5	23	11.4	11.4	3	3	YES	13.4	5
G	-1/05	STUDIO	Lower GF		40	37	8%	0	2	32.4	30	n/a	n/a	3.1	3		10.5	4
G	-1/06	1 BED	Lower GF		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		13.2	5
G	-1/07	1 BED	Lower GF		50	45	11%	1	2	30.2	23	11.4	11.4	3	3		12.6	5
G	-1/08	2 BED	Lower GF		77.7	73	6%	2	4	32.8	30	24.5	24.4	6.6	6		19.1	7
G	-1/09	2 BED	Lower GF		78	73	7%	2	4	30	30	25	24.4	6	6	YES	20.8	7
				9	512.4													
G	0/01	2 BED	Ground Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.4	6		8	7
G	0/02	1 BED	Ground Floor		50	45	11%	1	2	30.2	23	11.4	11.4	3.1	3		5	5
G	0/03	STUDIO	Ground Floor		40	37	8%	0	2	32.4	30	n/a	n/a	3.1	3		4	4
G	0/04	1 BED	Ground Floor		49.8	45	11%	1	2	26.5	23	11.4	11.4	3.1	3	YES	5	5
G	0/05	1 BED	Ground Floor		49.2	45	9%	1	2	26.5	23	11.4	11.4	3	3	YES	5	5
G	0/06	STUDIO	Ground Floor		40	37	8%	0	2	32.4	30	n/a	n/a	3.1	3		4	4
G	0/07	1 BED	Ground Floor		50	45	11%	1	2	30.2	23	11.4	11.4	3.1	3		5	5
G	0/08	2 BED	Ground Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.4	6		8	7
G	0/09	2 BED	Ground Floor		77.7	73	6%	2	4	33	30	24.5	24.4	6.6	6		8	7
G	0/10	3 BED	Ground Floor		103.5	90	15%	3	6	34	34	40.3	31.5	9.8	9	YES	45.5	9
G	0/11	3 BED	Ground Floor		103.5	90	15%	3	6	34	34	40.3	31.5	9.8	9	YES	45.5	9
G	0/12	2 BED	Ground Floor		78	73	7%	2	4	30	30	25	24.4	6	6	YES	7.6	7
				12	798.9													
G	1/01	2 BED	First Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.4	6		8	7
G	1/02	1 BED	First Floor		50	45	11%	1	2	30.2	23	11.4	11.4	3.1	3		5	5
G	1/03	STUDIO	First Floor		40	37	8%	0	2	32.4	30	n/a	n/a	3.1	3		4	4
G	1/04	1 BED	First Floor		49.8	45	11%	1	2	26.5	23	11.4	11.4	3.1	3	YES	5	5
G	1/05	1 BED	First Floor		49.2	45	9%	1	2	26.5	23	11.4	11.4	3	3	YES	5	5
G	1/06	STUDIO	First Floor		40	37	8%	0	2	32.4	30	n/a	n/a	3.1	3		4	4
G	1/07	1 BED	First Floor		50	45	11%	1	2	30.2	23	11.4	11.4	3.1	3		5	5
G	1/08	2 BED	First Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.4	6		8	7
G	1/09	2 BED	First Floor		77.7	73	6%	2	4	33	30	24.5	24.4	6.6	6		8	7
G	1/10	3 BED	First Floor		103.5	90	15%	3	6	34	34	40.3	31.5	9.8	9	YES	9	9
G	1/11	3 BED	First Floor		103.5	90	15%	3	6	34	34	40.3	31.5	9.8	9	YES	9	9
G	1/12	2 BED	First Floor		78	73	7%	2	4	30	30	25	24.4	6	6	YES	7.6	7
				12	798.9													
G	2/01	2 BED	Second Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.4	6		8	7
G	2/02	1 BED	Second Floor		50	45	11%	1	2	30.2	23	11.4	11.4	3.1	3		5	5
G	2/03	STUDIO	Second Floor		40	37	8%	0	2	32.4	30	n/a	n/a	3.1	3		4	4

# Appendix A. Housing Quality Assessment

Block	Unit No.	Description	Level	Total Units Per Level	Unit Area (m <sup>2</sup> )	Unit size required area (m <sup>2</sup> )	Individual Enlargement Ratio IRF(%)	Number of Bedrooms	Bed Spaces	Aggregated Living Area (m <sup>2</sup> )	Aggregated Living Area required (m <sup>2</sup> )	Aggregated Bedroom Area (m <sup>2</sup> )	Aggregated Bedroom Area required (m <sup>2</sup> )	Storage (m <sup>2</sup> )	Storage Required (m <sup>2</sup> )	Dual Aspect	Private (Terrace/Balcony) Space Provided (m <sup>2</sup> )	Private (Terrace/Balcony) Space Required (m <sup>2</sup> )
G	2/04	1 BED	Second Floor		49.8	45	11%	1	2	26.5	23	11.4	11.4	3.1	3	YES	5	5
G	2/05	1 BED	Second Floor		49.2	45	9%	1	2	26.5	23	11.4	11.4	3	3	YES	5	5
G	2/06	STUDIO	Second Floor		40	37	8%	0	2	32.4	30	n/a	n/a	3.1	3		4	4
G	2/07	1 BED	Second Floor		50	45	11%	1	2	30.2	23	11.4	11.4	3.1	3		5	5
G	2/08	2 BED	Second Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.4	6		8	7
G	2/09	2 BED	Second Floor		77.7	73	6%	2	4	33	30	24.5	24.4	6.6	6		8	7
G	2/10	3 BED	Second Floor		103.5	90	15%	3	6	34	34	40.3	31.5	9.8	9	YES	9	9
G	2/11	3 BED	Second Floor		103.5	90	15%	3	6	34	34	40.3	31.5	9.8	9	YES	9	9
G	2/12	2 BED	Second Floor		78	73	7%	2	4	30	30	25	24.4	6	6	YES	7.6	7
				12	798.9													
G	3/01	2 BED	Third Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.4	6		8	7
G	3/02	1 BED	Third Floor		50	45	11%	1	2	30.2	23	11.4	11.4	3.1	3		5	5
G	3/03	STUDIO	Third Floor		40	37	8%	0	2	32.4	30	n/a	n/a	3.1	3		4	4
G	3/04	1 BED	Third Floor		49.8	45	11%	1	2	26.5	23	11.4	11.4	3.1	3	YES	5	5
G	3/05	1 BED	Third Floor		49.2	45	9%	1	2	26.5	23	11.4	11.4	3	3	YES	5	5
G	3/06	STUDIO	Third Floor		40	37	8%	0	2	32.4	30	n/a	n/a	3.1	3		4	4
G	3/07	1 BED	Third Floor		50	45	11%	1	2	30.2	23	11.4	11.4	3.1	3		5	5
G	3/08	2 BED	Third Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.4	6		8	7
G	3/09	2 BED	Third Floor		77.7	73	6%	2	4	33	30	24.5	24.4	6.6	6		8	7
G	3/10	3 BED	Third Floor		103.5	90	15%	3	6	34	34	40.3	31.5	9.8	9	YES	9	9
G	3/11	3 BED	Third Floor		103.5	90	15%	3	6	34	34	40.3	31.5	9.8	9	YES	9	9
G	3/12	2 BED	Third Floor		78	73	7%	2	4	30	30	25	24.4	6	6	YES	7.6	7
				12	798.9													
G	4/01	2 BED	Fourth Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.4	6		8	7
G	4/02	1 BED	Fourth Floor		50	45	11%	1	2	30.2	23	11.4	11.4	3.1	3		5	5
G	4/03	STUDIO	Fourth Floor		40	37	8%	0	2	32.4	30	n/a	n/a	3.1	3		4	4
G	4/04	1 BED	Fourth Floor		49.8	45	11%	1	2	26.5	23	11.4	11.4	3.1	3	YES	5	5
G	4/05	1 BED	Fourth Floor		49.2	45	9%	1	2	26.5	23	11.4	11.4	3	3	YES	5	5
G	4/06	STUDIO	Fourth Floor		40	37	8%	0	2	32.4	30	n/a	n/a	3.1	3		4	4
G	4/07	1 BED	Fourth Floor		50	45	11%	1	2	30.2	23	11.4	11.4	3.1	3		5	5
G	4/08	2 BED	Fourth Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.4	6		8	7
G	4/09	2 BED	Fourth Floor		77.7	73	6%	2	4	33	30	24.5	24.4	6.6	6		8	7
G	4/10	3 BED	Fourth Floor		103.5	90	15%	3	6	34	34	40.3	31.5	9.8	9	YES	9	9
G	4/11	3 BED	Fourth Floor		103.5	90	15%	3	6	34	34	40.3	31.5	9.8	9	YES	9	9
G	4/12	2 BED	Fourth Floor		78	73	7%	2	4	30	30	25	24.4	6	6	YES	7.6	7
				12	798.9													
G	5/01	2 BED	Fifth Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.4	6		8	7
G	5/02	1 BED	Fifth Floor		50	45	11%	1	2	30.2	23	11.4	11.4	3.1	3		5	5
G	5/03	STUDIO	Fifth Floor		40	37	8%	0	2	32.4	30	n/a	n/a	3.1	3		4	4
G	5/04	1 BED	Fifth Floor		49.8	45	11%	1	2	26.5	23	11.4	11.4	3.1	3	YES	5	5
G	5/05	1 BED	Fifth Floor		49.2	45	9%	1	2	26.5	23	11.4	11.4	3	3	YES	5	5
G	5/06	STUDIO	Fifth Floor		40	37	8%	0	2	32.4	30	n/a	n/a	3.1	3		4	4
G	5/07	1 BED	Fifth Floor		50	45	11%	1	2	30.2	23	11.4	11.4	3.1	3		5	5
G	5/08	2 BED	Fifth Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.4	6		8	7
G	5/09	1 BED	Fifth Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		8	5
G	5/10	3 BED	Fifth Floor		131.2	90	46%	3	6	52.5	34	40.1	31.5	9.4	9	YES	9	9
G	5/11	3 BED	Fifth Floor		103.5	90	15%	3	6	34	34	40.3	31.5	9.8	9	YES	9	9
G	5/12	2 BED	Fifth Floor		78	73	7%	2	4	30	30	25	24.4	6	6	YES	7.6	7
				12	798.9													

## Appendix A. Housing Quality Assessment

Block	Unit No.	Description	Level	Total Units Per Level	Unit Area (m <sup>2</sup> )	Unit size required area (m <sup>2</sup> )	Individual Enlargement Ratio IRF(%)	Number of Bedrooms	Bed Spaces	Aggregated Living Area (m <sup>2</sup> )	Aggregated Living Area required (m <sup>2</sup> )	Aggregated Bedroom Area (m <sup>2</sup> )	Aggregated Bedroom Area required (m <sup>2</sup> )	Storage (m <sup>2</sup> )	Storage Required (m <sup>2</sup> )	Dual Aspect	Private (Terrace/Balcony) Space Provided (m <sup>2</sup> )	Private (Terrace/Balcony) Space Required (m <sup>2</sup> )
G	6/01	2 BED	Sixth Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.4	6		8	7
G	6/02	3 BED	Sixth Floor		114	90	27%	3	6	39.8	34	38	31.5	9.2	9	YES	16.5	9
G	6/03	3 BED	Sixth Floor		113.3	90	26%	3	6	39.8	34	38	31.5	9.2	9	YES	16.5	9
G	6/04	2 BED	Sixth Floor		78.6	73	8%	2	4	33.8	30	24.5	24.4	6.4	6		8	7
G	6/05	1 BED	Sixth Floor		49.8	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		8	5
G	6/06	3 BED	Sixth Floor		131.2	90	46%	3	6	52.5	34	40.1	31.5	9.4	9	YES	9	9
G	6/07	3 BED	Sixth Floor		103.5	90	15%	3	6	34	34	40.3	31.5	9.8	9	YES	9	9
G	6/08	2 BED	Sixth Floor		78	73	7%	2	4	30	30	25	24.4	6	6	YES	7.6	7
				8	747													
		STUDIO		14	560													
		1 BED		30	1492.8													
		2 BED		29	2268.3													
		3 BED		16	1731.7											Ratio		
																43%		
<b>G TOTALS</b>				<b>89</b>	<b>6052.8</b>	<b>5425</b>		<b>136</b>	<b>300</b>	<b>2841.7</b>	<b>2524</b>	<b>1696.8</b>	<b>1553.6</b>	<b>474</b>	<b>450</b>	<b>38</b>	<b>754.4</b>	<b>553</b>
H	0/01	2 BED	Ground Floor		81.5	73	12%	2	4	31.1	30	25	24.4	6.2	6	YES	7.5	7
H	0/02	2 BED	Ground Floor		78.8	73	8%	2	4	30	30	25	24.4	6	6	YES	7.5	7
H	0/03	1 BED	Ground Floor		49.7	45	10%	1	2	30.1	23	11.4	11.4	3.1	3		5	5
H	0/04	2 BED	Ground Floor		77.7	73	6%	2	4	30	30	25	24.4	6	6	YES	7.5	7
H	0/05	1 BED	Ground Floor		54.4	45	21%	1	2	34.7	23	11.4	11.4	3.1	3		14.2	5
H	0/06	1 BED	Ground Floor		50	45	11%	1	2	26.7	23	11.4	11.4	3.1	3		13.1	5
H	0/07	1 BED	Ground Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		13.1	5
H	0/08	1 BED	Ground Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		13.1	5
H	0/09	1 BED	Ground Floor		50	45	11%	1	2	26.7	23	11.4	11.4	3.1	3		13.6	5
H	0/10	1 BED	Ground Floor		49.3	45	10%	1	2	26.7	23	11.4	11.4	3	3		13.6	5
H	0/11	2 BED	Ground Floor		78.5	73	8%	2	4	30	30	25	24.4	6.4	6		19.7	7
				11	669.9													
H	1/01	2 BED	First Floor		81.5	73	12%	2	4	31.1	30	25	24.4	6.2	6	YES	7.5	7
H	1/02	2 BED	First Floor		78.8	73	8%	2	4	30	30	25	24.4	6	6	YES	7.5	7
H	1/03	1 BED	First Floor		49.7	45	10%	1	2	30.1	23	11.4	11.4	3.1	3		5	5
H	1/04	2 BED	First Floor		77.7	73	6%	2	4	30	30	25	24.4	6	6	YES	7.5	7
H	1/05	1 BED	First Floor		54.4	45	21%	1	2	34.7	23	11.4	11.4	3.1	3		5	5
H	1/06	1 BED	First Floor		50	45	11%	1	2	26.7	23	11.4	11.4	3.1	3		5	5
H	1/07	1 BED	First Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		5	5
H	1/08	1 BED	First Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		5	5
H	1/09	1 BED	First Floor		50	45	11%	1	2	26.7	23	11.4	11.4	3.1	3	YES	5	5
H	1/10	1 BED	First Floor		49.3	45	10%	1	2	26.7	23	11.4	11.4	3	3	YES	5	5
H	1/11	1 BED	First Floor		50	45	11%	1	2	30.2	23	11.4	11.4	3.1	3		5	5
H	1/12	2 BED	First Floor		78.5	73	8%	2	4	30	30	25	24.4	6.4	6		8	7
				12	719.9													
H	2/01	2 BED	Second Floor		81.5	73	12%	2	4	31.1	30	25	24.4	6.2	6	YES	7.5	7
H	2/02	2 BED	Second Floor		78.8	73	8%	2	4	30	30	25	24.4	6	6	YES	7.5	7
H	2/03	1 BED	Second Floor		49.7	45	10%	1	2	30.1	23	11.4	11.4	3.1	3		5	5
H	2/04	2 BED	Second Floor		77.7	73	6%	2	4	30	30	25	24.4	6	6	YES	7.5	7
H	2/05	1 BED	Second Floor		54.4	45	21%	1	2	34.7	23	11.4	11.4	3.1	3		5	5
H	2/06	1 BED	Second Floor		50	45	11%	1	2	26.7	23	11.4	11.4	3.1	3		5	5
H	2/07	1 BED	Second Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		5	5
H	2/08	1 BED	Second Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		5	5

# Appendix A. Housing Quality Assessment

Block	Unit No.	Description	Level	Total Units Per Level	Unit Area (m <sup>2</sup> )	Unit size required area (m <sup>2</sup> )	Individual Enlargement Ratio IRF(%)	Number of Bedrooms	Bed Spaces	Aggregated Living Area (m <sup>2</sup> )	Aggregated Living Area (m <sup>2</sup> )	Aggregated Bedroom Area (m <sup>2</sup> )	Aggregated Bedroom Area required (m <sup>2</sup> )	Storage (m <sup>2</sup> )	Storage Required (m <sup>2</sup> )	Dual Aspect	Private (Terrace/Balcony) Space Provided (m <sup>2</sup> )	Private (Terrace/Balcony) Space Required (m <sup>2</sup> )
H	2/09	1 BED	Second Floor		50	45	11%	1	2	26.7	23	11.4	11.4	3.1	3	YES	5	5
H	2/10	1 BED	Second Floor		49.3	45	10%	1	2	26.7	23	11.4	11.4	3	3	YES	5	5
H	2/11	1 BED	Second Floor		50	45	11%	1	2	30.2	23	11.4	11.4	3.1	3		5	5
H	2/12	2 BED	Second Floor		78.5	73	8%	2	4	30	30	25	24.4	6.4	6		8	7
				12	719.9													
H	3/01	2 BED	Third Floor		81.5	73	12%	2	4	31.1	30	25	24.4	6.2	6	YES	7.5	7
H	3/02	2 BED	Third Floor		78.8	73	8%	2	4	30	30	25	24.4	6	6	YES	7.5	7
H	3/03	1 BED	Third Floor		49.7	45	10%	1	2	30.1	23	11.4	11.4	3.1	3		5	5
H	3/04	2 BED	Third Floor		77.7	73	6%	2	4	30	30	25	24.4	6	6	YES	7.5	7
H	3/05	1 BED	Third Floor		54.4	45	21%	1	2	34.7	23	11.4	11.4	3.1	3		5	5
H	3/06	1 BED	Third Floor		50	45	11%	1	2	26.7	23	11.4	11.4	3.1	3		5	5
H	3/07	1 BED	Third Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		5	5
H	3/08	1 BED	Third Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		5	5
H	3/09	1 BED	Third Floor		50	45	11%	1	2	26.7	23	11.4	11.4	3.1	3	YES	5	5
H	3/10	1 BED	Third Floor		49.3	45	10%	1	2	26.7	23	11.4	11.4	3	3	YES	5	5
H	3/11	1 BED	Third Floor		50	45	11%	1	2	30.2	23	11.4	11.4	3.1	3		5	5
H	3/12	2 BED	Third Floor		78.5	73	8%	2	4	30	30	25	24.4	6.4	6		8	7
				12	719.9													
H	4/01	2 BED	Fourth Floor		81.5	73	12%	2	4	31.1	30	25	24.4	6.2	6	YES	7.5	7
H	4/02	2 BED	Fourth Floor		78.8	73	8%	2	4	30	30	25	24.4	6	6	YES	7.5	7
H	4/03	1 BED	Fourth Floor		49.7	45	10%	1	2	30.1	23	11.4	11.4	3.1	3		5	5
H	4/04	2 BED	Fourth Floor		77.7	73	6%	2	4	30	30	25	24.4	6	6	YES	7.5	7
H	4/05	1 BED	Fourth Floor		54.4	45	21%	1	2	34.7	23	11.4	11.4	3.1	3		5	5
H	4/06	1 BED	Fourth Floor		50	45	11%	1	2	26.7	23	11.4	11.4	3.1	3		5	5
H	4/07	1 BED	Fourth Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		5	5
H	4/08	1 BED	Fourth Floor		50	45	11%	1	2	30	23	11.4	11.4	3.1	3		5	5
H	4/09	1 BED	Fourth Floor		50	45	11%	1	2	26.7	23	11.4	11.4	3.1	3	YES	5	5
H	4/10	1 BED	Fourth Floor		49.3	45	10%	1	2	26.7	23	11.4	11.4	3	3	YES	5	5
H	4/11	1 BED	Fourth Floor		50	45	11%	1	2	30.2	23	11.4	11.4	3.1	3		5	5
H	4/12	2 BED	Fourth Floor		78.5	73	8%	2	4	30	30	25	24.4	6.4	6		8	7
				12	719.9													
H	5/01	2 BED	Fifth Floor		81.5	73	12%	2	4	31.1	30	25	24.4	6.2	6	YES	7.5	7
H	5/02	2 BED	Fifth Floor		78.8	73	8%	2	4	30	30	25	24.4	6	6	YES	7.5	7
H	5/03	1 BED	Fifth Floor		49.7	45	10%	1	2	30.1	23	11.4	11.4	3.1	3		5	5
H	5/04	2 BED	Fifth Floor		77.7	73	6%	2	4	30	30	25	24.4	6	6	YES	7.5	7
H	5/05	1 BED	Fifth Floor		54.4	45	21%	1	2	34.7	23	11.4	11.4	3.1	3		5	5
H	5/06	1 BED	Fifth Floor		50	45	11%	1	2	26.7	23	11.4	11.4	3.1	3		5	5
H	5/07	1 BED	Fifth Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		5	5
H	5/08	1 BED	Fifth Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		5	5
H	5/09	1 BED	Fifth Floor		50	45	11%	1	2	26.7	23	11.4	11.4	3.1	3	YES	5	5
H	5/10	1 BED	Fifth Floor		49.3	45	10%	1	2	26.7	23	11.4	11.4	3	3	YES	5	5
H	5/11	1 BED	Fifth Floor		50	45	11%	1	2	30.2	23	11.4	11.4	3.1	3		5	5
H	5/12	2 BED	Fifth Floor		78.5	73	8%	2	4	30	30	25	24.4	6.4	6		8	7
				12	719.9													
H	6/01	2 BED	Sixth Floor		81.5	73	12%	2	4	31.1	30	25	24.4	6.2	6	YES	7.5	7
H	6/02	2 BED	Sixth Floor		78.8	73	8%	2	4	30	30	25	24.4	6	6	YES	7.5	7
H	6/03	3 BED	Sixth Floor		130	90	44%	3	6	50.8	34	42.8	31.5	9.1	9	YES	12.5	9
H	6/04	1 BED	Sixth Floor		54.4	45	21%	1	2	34.7	23	11.4	11.4	3.1	3		5	5
H	6/05	1 BED	Sixth Floor		50	45	11%	1	2	26.7	23	11.4	11.4	3.1	3		5	5



## Appendix A. Housing Quality Assessment

Block	Unit No.	Description	Level	Total Units Per Level	Unit Area (m <sup>2</sup> )	Unit size required area (m <sup>2</sup> )	Individual Enlargement Ratio IRF(%)	Number of Bedrooms	Bed Spaces	Aggregated Living Area (m <sup>2</sup> )	Aggregated Living Area required (m <sup>2</sup> )	Aggregated Bedroom Area (m <sup>2</sup> )	Aggregated Bedroom Area required (m <sup>2</sup> )	Storage (m <sup>2</sup> )	Storage Required (m <sup>2</sup> )	Dual Aspect	Private (Terrace/Balcony) Space Provided (m <sup>2</sup> )	Private (Terrace/Balcony) Space Required (m <sup>2</sup> )
H	6/06	1 BED	Sixth Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		5	5
H	6/07	1 BED	Sixth Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		5	5
H	6/08	1 BED	Sixth Floor		50	45	11%	1	2	26.7	23	11.4	11.4	3.1	3	YES	5	5
H	6/09	1 BED	Sixth Floor		49.3	45	10%	1	2	26.7	23	11.4	11.4	3	3	YES	5	5
H	6/10	1 BED	Sixth Floor		50	45	11%	1	2	30.2	23	11.4	11.4	3.1	3		5	5
H	6/11	2 BED	Sixth Floor		78.5	73	8%	2	4	30	30	25	24.4	6.4	6		8	7
				11	722.5													
H	7/01	2 BED	Seventh Floor		81.5	73	12%	2	4	31.1	30	25	24.4	6.2	6	YES	7.5	7
H	7/02	2 BED	Seventh Floor		78.8	73	8%	2	4	30	30	25	24.4	6	6	YES	7.5	7
H	7/03	3 BED	Seventh Floor		130	90	44%	3	6	50.8	34	42.8	31.5	9.1	9	YES	12.5	9
H	7/04	1 BED	Seventh Floor		54.4	45	21%	1	2	34.7	23	11.4	11.4	3.1	3		5	5
H	7/05	1 BED	Seventh Floor		50	45	11%	1	2	26.7	23	11.4	11.4	3.1	3		5	5
H	7/06	1 BED	Seventh Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		5	5
H	7/07	1 BED	Seventh Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		5	5
H	7/08	1 BED	Seventh Floor		50	45	11%	1	2	26.7	23	11.4	11.4	3.1	3	YES	5	5
H	7/09	1 BED	Seventh Floor		49.3	45	10%	1	2	26.7	23	11.4	11.4	3	3	YES	5	5
H	7/10	1 BED	Seventh Floor		50	45	11%	1	2	30.2	23	11.4	11.4	3.1	3		5	5
H	7/11	2 BED	Seventh Floor		78.5	73	8%	2	4	30	30	25	24.4	6.4	6		8	7
				11	722.5													
H	8/01	3 BED	Eighth Floor		113	90	26%	3	6	40.2	34	38.6	31.5	9	9	YES	54.9	9
H	8/02	3 BED	Eighth Floor		113.2	90	26%	3	6	39.3	34	38.6	31.5	10.2	9	YES	44.7	9
H	8/03	1 BED	Eighth Floor		50	45	11%	1	2	23.2	23	12.7	11.5	3.5	3		14.3	5
H	8/04	2 BED	Eighth Floor		80	73	10%	2	4	31.1	30	26.6	24.4	6.1	6	YES	42	7
H	8/05	2 BED	Eighth Floor		78.6	73	8%	2	4	31.8	30	25.2	24.4	6.3	6	YES	43.1	7
H	8/06	1 BED	Eighth Floor		50	45	11%	1	2	23.2	23	11.5	11.4	3.5	3		14.3	5
				6	484.8													
		STUDIO		0	0													
		1 BED		63	3177.8													
		2 BED		32	2535.2													
		3 BED		4	486.2											Ratio		
																42%		
<b>H TOTALS</b>				<b>99</b>	<b>6199.2</b>	<b>5531</b>		<b>139</b>	<b>278</b>	<b>2994.1</b>	<b>2545</b>	<b>1684.2</b>	<b>1625.1</b>	<b>429.9</b>	<b>417</b>	<b>42</b>	<b>834.7</b>	<b>575</b>
I	0/01	2 BED	Ground Floor		78	73	7%	2	4	30	30	25	24.4	6	6	YES	8	7
I	0/02	3 BED	Ground Floor		103.5	90	15%	3	6	34	34	39	31.5	9.5	9	YES	9	9
I	0/03	3 BED	Ground Floor		103.5	90	15%	3	6	34	34	39	31.5	9.5	9	YES	9	9
I	0/04	2 BED	Ground Floor		77.7	73	6%	2	4	33.2	30	24.5	24.4	6.6	6		7.5	7
				4	362.7													
I	1/01	2 BED	First Floor		78	73	7%	2	4	30	30	25	24.4	6	6	YES	8	7
I	1/02	3 BED	First Floor		103.5	90	15%	3	6	34	34	39	31.5	9.5	9	YES	9	9
I	1/03	3 BED	First Floor		103.5	90	15%	3	6	34	34	39	31.5	9.5	9	YES	9	9
I	1/04	2 BED	First Floor		77.7	73	6%	2	4	33.2	30	24.5	24.4	6.6	6		7.5	7
I	1/05	1 BED	First Floor		50	45	11%	1	2	26.8	23	11.4	11.4	3.1	3		5	5
I	1/06	1 BED	First Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3	3		5	5
I	1/07	STUDIO	First Floor		40	37	8%	0	2	32.4	30	n/a	n/a	3.1	3		4	4
I	1/08	2 BED	First Floor		77.7	73	6%	2	4	30	30	25	24.4	6.2	6	YES	7.5	7
I	1/09	2 BED	First Floor		78.5	73	8%	2	4	30	30	25	24.4	6.2	6	YES	7.5	7
I	1/10	STUDIO	First Floor		40	37	8%	0	2	32.4	30	n/a	n/a	3.1	3		4	4
I	1/11	1 BED	First Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		5	5

## Appendix A. Housing Quality Assessment

Block	Unit No.	Description	Level	Total Units Per Level	Unit Area (m <sup>2</sup> )	Unit size required area (m <sup>2</sup> )	Individual Enlargement Ratio IRF(%)	Number of Bedrooms	Bed Spaces	Aggregated Living Area (m <sup>2</sup> )	Aggregated Living Area required (m <sup>2</sup> )	Aggregated Bedroom Area (m <sup>2</sup> )	Aggregated Bedroom Area required (m <sup>2</sup> )	Storage (m <sup>2</sup> )	Storage Required (m <sup>2</sup> )	Dual Aspect	Private (Terrace/Balcony) Space Provided (m <sup>2</sup> )	Private (Terrace/Balcony) Space Required (m <sup>2</sup> )
I	1/12	1 BED	First Floor		50	45	11%	1	2	26.8	23	11.4	11.4	3.1	3		5	5
				12	798.9													
I	2/01	2 BED	Second Floor		78	73	7%	2	4	30	30	25	24.4	6	6	YES	8	7
I	2/02	3 BED	Second Floor		103.5	90	15%	3	6	34	34	39	31.5	9.5	9	YES	9	9
I	2/03	3 BED	Second Floor		103.5	90	15%	3	6	34	34	39	31.5	9.5	9	YES	9	9
I	2/04	2 BED	Second Floor		77.7	73	6%	2	4	33.2	30	24.5	24.4	6.6	6		7.5	7
I	2/05	1 BED	Second Floor		50	45	11%	1	2	26.8	23	11.4	11.4	3.1	3		5	5
I	2/06	1 BED	Second Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3	3		5	5
I	2/07	STUDIO	Second Floor		40	37	8%	0	2	32.4	30	n/a	n/a	3.1	3		4	4
I	2/08	2 BED	Second Floor		77.7	73	6%	2	4	30	30	25	24.4	6.2	6	YES	7.5	7
I	2/09	2 BED	Second Floor		78.5	73	8%	2	4	30	30	25	24.4	6.2	6	YES	7.5	7
I	2/10	STUDIO	Second Floor		40	37	8%	0	2	32.4	30	n/a	n/a	3.1	3		4	4
I	2/11	1 BED	Second Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		5	5
I	2/12	1 BED	Second Floor		50	45	11%	1	2	26.8	23	11.4	11.4	3.1	3		5	5
				12	798.9													
I	3/01	2 BED	Third Floor		78	73	7%	2	4	30	30	25	24.4	6	6	YES	8	7
I	3/02	3 BED	Third Floor		103.5	90	15%	3	6	34	34	39	31.5	9.5	9	YES	9	9
I	3/03	3 BED	Third Floor		131	90	46%	3	6	53.5	34	40.8	31.5	9	9	YES	9	9
I	3/04	1 BED	Third Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		7.5	5
I	3/05	1 BED	Third Floor		50	45	11%	1	2	26.8	23	11.4	11.4	3.1	3		5	5
I	3/06	1 BED	Third Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3	3		5	5
I	3/07	STUDIO	Third Floor		40	37	8%	0	2	32.4	30	n/a	n/a	3.1	3		4	4
I	3/08	2 BED	Third Floor		77.7	73	6%	2	4	30	30	25	24.4	6.2	6	YES	7.5	7
I	3/09	2 BED	Third Floor		78.5	73	8%	2	4	30	30	25	24.4	6.2	6	YES	7.5	7
I	3/10	STUDIO	Third Floor		40	37	8%	0	2	32.4	30	n/a	n/a	3.1	3		4	4
I	3/11	1 BED	Third Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		5	5
I	3/12	1 BED	Third Floor		50	45	11%	1	2	26.8	23	11.4	11.4	3.1	3		5	5
				12	798.7													
I	4/01	2 BED	Fourth Floor		78	73	7%	2	4	30	30	25	24.4	6	6	YES	8	7
I	4/02	3 BED	Fourth Floor		103.5	90	15%	3	6	34	34	39	31.5	9.5	9	YES	9	9
I	4/03	3 BED	Fourth Floor		131	90	46%	3	6	53.5	34	40.8	31.5	9	9	YES	9	9
I	4/04	1 BED	Fourth Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		7.5	5
I	4/05	1 BED	Fourth Floor		50	45	11%	1	2	30.5	23	11.4	11.4	3.1	3		5	5
I	4/06	3 BED	Fourth Floor		115.3	90	28%	3	6	41.8	34	38	31.5	9.5	9	YES	37.5	9
I	4/07	3 BED	Fourth Floor		116	90	29%	3	6	41.8	34	38	31.5	9.7	9	YES	37.5	9
I	4/08	1 BED	Fourth Floor		50	45	11%	1	2	30.5	23	11.4	11.4	3.1	3		5	5
				8	693.8													
		STUDIO		6	240													
		1 BED		16	800													
		2 BED		14	1091.7													
		3 BED		12	1321.3													
																Ratio		
																48%		
<b>I TOTALS</b>				<b>48</b>	<b>3453</b>	<b>3044</b>		<b>80</b>	<b>172</b>	<b>1550.8</b>	<b>1376</b>	<b>1000.5</b>	<b>902</b>	<b>268.1</b>	<b>258</b>	<b>23</b>	<b>381.5</b>	<b>310</b>
J	-1/01	1 BED	Lower GF		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		12.9	5
J	-1/02	STUDIO	Lower GF		40	37	8%	0	2	32.5	30	n/a	n/a	3.1	3		10.8	4
J	-1/03	2 BED	Lower GF		79.5	73	9%	2	4	30	30	25	24.4	6.1	6	YES	21.4	5
J	-1/04	2 BED	Lower GF		80.2	73	10%	2	4	30	30	25	24.4	6.5	6	YES	20.4	7
J	-1/05	STUDIO	Lower GF		40	37	8%	0	2	32.5	30	n/a	n/a	3.1	3		10.3	4

## Appendix A. Housing Quality Assessment

Block	Unit No.	Description	Level	Total Units Per Level	Unit Area (m <sup>2</sup> )	Unit size required area (m <sup>2</sup> )	Individual Enlargement Ratio IRF(%)	Number of Bedrooms	Bed Spaces	Aggregated Living Area (m <sup>2</sup> )	Aggregated Living Area required (m <sup>2</sup> )	Aggregated Bedroom Area (m <sup>2</sup> )	Aggregated Bedroom Area required (m <sup>2</sup> )	Storage (m <sup>2</sup> )	Storage Required (m <sup>2</sup> )	Dual Aspect	Private (Terrace/Balcony) Space Provided (m <sup>2</sup> )	Private (Terrace/Balcony) Space Required (m <sup>2</sup> )
J	-1/06	1 BED	Lower GF		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		12.7	5
J	-1/07	1 BED	Lower GF		50	45	11%	1	2	30.2	23	11.4	11.4	3	3		12.1	5
				7	389.7													
J	0/01	2 BED	Ground Floor		80.2	73	10%	2	4	31.2	30	24.8	24.4	6	6		20.3	7
J	0/02	1 BED	Ground Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		5.3	5
J	0/03	STUDIO	Ground Floor		40	37	8%	0	2	32.5	30	n/a	n/a	3.1	3		4.2	4
J	0/04	2 BED	Ground Floor		79.5	73	9%	2	4	30	30	25	24.4	6.1	6	YES	7.3	7
J	0/05	2 BED	Ground Floor		80.2	73	10%	2	4	30	30	25	24.4	6.5	6	YES	7.3	7
J	0/06	STUDIO	Ground Floor		40	37	8%	0	2	32.5	30	n/a	n/a	3.1	3		4.2	4
J	0/07	1 BED	Ground Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		5.3	5
J	0/08	2 BED	Ground Floor		80.2	73	10%	2	4	31.2	30	24.8	24.4	6	6		8.2	7
J	0/09	2 BED	Ground Floor		80.5	73	10%	2	4	30	30	25	24.4	6.5	6	YES	21.1	7
J	0/10	3 BED	Ground Floor		103.7	90	15%	3	6	34	34	40.2	31.5	9.9	9	YES	16.9	9
J	0/11	3 BED	Ground Floor		103.7	90	15%	3	6	34	34	40.2	31.5	9.9	9	YES	16.9	9
				11	788													
J	1/01	2 BED	First Floor		80.2	73	10%	2	4	31.2	30	24.8	24.4	6	6		7.9	7
J	1/02	1 BED	First Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		5.3	5
J	1/03	STUDIO	First Floor		40	37	8%	0	2	32.5	30	n/a	n/a	3.1	3		4.2	4
J	1/04	2 BED	First Floor		79.5	73	9%	2	4	30	30	25	24.4	6.1	6	YES	7.3	7
J	1/05	2 BED	First Floor		80.2	73	10%	2	4	30	30	25	24.4	6.5	6	YES	7.3	7
J	1/06	STUDIO	First Floor		40	37	8%	0	2	32.5	30	n/a	n/a	3.1	3		4.2	4
J	1/07	1 BED	First Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		5.3	5
J	1/08	2 BED	First Floor		80.2	73	10%	2	4	31.2	30	24.8	24.4	6	6		8.2	7
J	1/09	2 BED	First Floor		80.5	73	10%	2	4	30	30	25	24.4	6.5	6	YES	7.5	7
J	1/10	3 BED	First Floor		103.7	90	15%	3	6	34	34	40.2	31.5	9.9	9	YES	9.3	9
J	1/11	3 BED	First Floor		103.7	90	15%	3	6	34	34	40.2	31.5	9.9	9	YES	9.3	9
J	1/12	2 BED	First Floor		80.2	73	10%	2	4	31.5	30	27	24.4	6.4	6		8.2	7
				12	868.2													
J	2/01	2 BED	Second Floor		80.2	73	10%	2	4	31.2	30	24.8	24.4	6	6		7.9	7
J	2/02	1 BED	Second Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		5.3	5
J	2/03	STUDIO	Second Floor		40	37	8%	0	2	32.5	30	n/a	n/a	3.1	3		4.2	4
J	2/04	2 BED	Second Floor		79.5	73	9%	2	4	30	30	25	24.4	6.1	6	YES	7.3	7
J	2/05	2 BED	Second Floor		80.2	73	10%	2	4	30	30	25	24.4	6.5	6	YES	7.3	7
J	2/06	STUDIO	Second Floor		40	37	8%	0	2	32.5	30	n/a	n/a	3.1	3		4.2	4
J	2/07	1 BED	Second Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		5.3	5
J	2/08	2 BED	Second Floor		80.2	73	10%	2	4	31.2	30	24.8	24.4	6	6		8.2	7
J	2/09	2 BED	Second Floor		80.5	73	10%	2	4	30	30	25	24.4	6.5	6	YES	7.5	7
J	2/10	3 BED	Second Floor		103.7	90	15%	3	6	34	34	40.2	31.5	9.9	9	YES	9.3	9
J	2/11	3 BED	Second Floor		103.7	90	15%	3	6	34	34	40.2	31.5	9.9	9	YES	9.3	9
J	2/12	2 BED	Second Floor		80.2	73	10%	2	4	31.5	30	27	24.4	6.4	6		8.2	7
				12	868.2													
J	3/01	2 BED	Third Floor		80.2	73	10%	2	4	31.2	30	24.8	24.4	6	6		7.9	7
J	3/02	1 BED	Third Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		5.3	5
J	3/03	STUDIO	Third Floor		40	37	8%	0	2	32.5	30	n/a	n/a	3.1	3		4.2	4
J	3/04	2 BED	Third Floor		79.5	73	9%	2	4	30	30	25	24.4	6.1	6	YES	7.3	7
J	3/05	2 BED	Third Floor		80.2	73	10%	2	4	30	30	25	24.4	6.5	6	YES	7.3	7
J	3/06	STUDIO	Third Floor		40	37	8%	0	2	32.5	30	n/a	n/a	3.1	3		4.2	4
J	3/07	1 BED	Third Floor		50	45	11%	1	2	30.3	23	11.4	11.4	3.1	3		5.3	5
J	3/08	2 BED	Third Floor		80.2	73	10%	2	4	31.2	30	24.8	24.4	6	6		8.2	7

## Appendix A. Housing Quality Assessment

Block	Unit No.	Description	Level	Total Units Per Level	Unit Area (m <sup>2</sup> )	Unit size required area (m <sup>2</sup> )	Individual Enlargement Ratio IRF(%)	Number of Bedrooms	Bed Spaces	Aggregated Living Area (m <sup>2</sup> )	Aggregated Living Area required (m <sup>2</sup> )	Aggregated Bedroom Area (m <sup>2</sup> )	Aggregated Bedroom Area required (m <sup>2</sup> )	Storage (m <sup>2</sup> )	Storage Required (m <sup>2</sup> )	Dual Aspect	Private (Terrace/Balcony) Space Provided (m <sup>2</sup> )	Private (Terrace/Balcony) Space Required (m <sup>2</sup> )
J	3/09	2 BED	Third Floor		80.5	73	10%	2	4	30	30	25	24.4	6.5	6	YES	7.5	7
J	3/10	3 BED	Third Floor		103.7	90	15%	3	6	34	34	40.2	31.5	9.9	9	YES	9.3	9
J	3/11	3 BED	Third Floor		134	90	49%	3	6	53.3	34	42.7	31.5	9.1	9	YES	9.3	9
J	3/12	1 BED	Third Floor		50	45	11%	1	2	30.5	23	11.4	11.4	3.1	3		8.2	5
				12	868.3													
J	4/01	2 BED	Fourth Floor		80.2	73	10%	2	4	31.2	30	24.8	24.4	6	6		7.9	7
J	4/02	3 BED	Fourth Floor		114	90	27%	3	6	40.5	34	38.5	31.5	9.1	9	YES	52.7	9
J	4/03	3 BED	Fourth Floor		114.7	90	27%	3	6	40.5	34	38	31.5	9.7	9	YES	52.7	9
J	4/04	2 BED	Fourth Floor		80.2	73	10%	2	4	31.2	30	24.8	24.4	6	6		8.2	7
J	4/05	2 BED	Fourth Floor		80.5	73	10%	2	4	30	30	25	24.4	6	6	YES	7.5	7
J	4/06	3 BED	Fourth Floor		103.7	90	15%	3	6	34	34	40.2	31.5	9.9	9	YES	9.3	9
J	4/07	3 BED	Fourth Floor		134	90	49%	3	6	53.3	34	42.7	31.5	9.1	9	YES	9.3	9
J	4/08	1 BED	Fourth Floor		50	45	11%	1	2	30.5	23	11.4	11.4	3.1	3		8.2	5
				8	757.3													
		STUDIO		10	400													
		1 BED		13	650													
		2 BED		27	2163.4													
		3 BED		12	1326.3													
																Ratio		
																44%		
<b>J TOTALS</b>				<b>62</b>	<b>4539.7</b>	<b>3423</b>		<b>91</b>	<b>196</b>	<b>1664</b>	<b>1515</b>	<b>1163.3</b>	<b>1041.8</b>	<b>308.9</b>	<b>294</b>	<b>27</b>	<b>487.7</b>	<b>342</b>
																Ratio		
																50.4%		
<b>GRAND TOTALS</b>				<b>534</b>	<b>38805.9</b>	<b>34406</b>		<b>912</b>	<b>1878</b>	<b>16635.9</b>	<b>14977</b>	<b>11341.8</b>	<b>10761.6</b>	<b>2955.2</b>	<b>2730</b>	<b>269</b>	<b>4611.5</b>	<b>3418</b>

STUDIO	30	1200
1 BED	135	6783.1
2 BED	318	25163
3 BED	51	5659.8
	<b>534</b>	<b>38805.9</b>