



Trinity College Dublin Workshop

Tuesday 10th June 2014

'Housing after the famine'

James Pike Chairman, OMP Architects

Crisis? – Opportunity?

- Identifying demand – demographics – household types - location
- Affordability – build cost – land cost – other costs
- Type of tenure – ownership - rental
- Funding – Banks – Pension Funds

1. Identifying demand

Demographics –

37% families with children
(European norm 27%)
Dublin 66% of stock – family houses
waiting lists
Social affordable
45% single
30% single parent

Household types –

families with children
empty nesters
single people/couples
singles sharing/students

Location –

transport connections
shopping - services – schools etc.
within walking distance

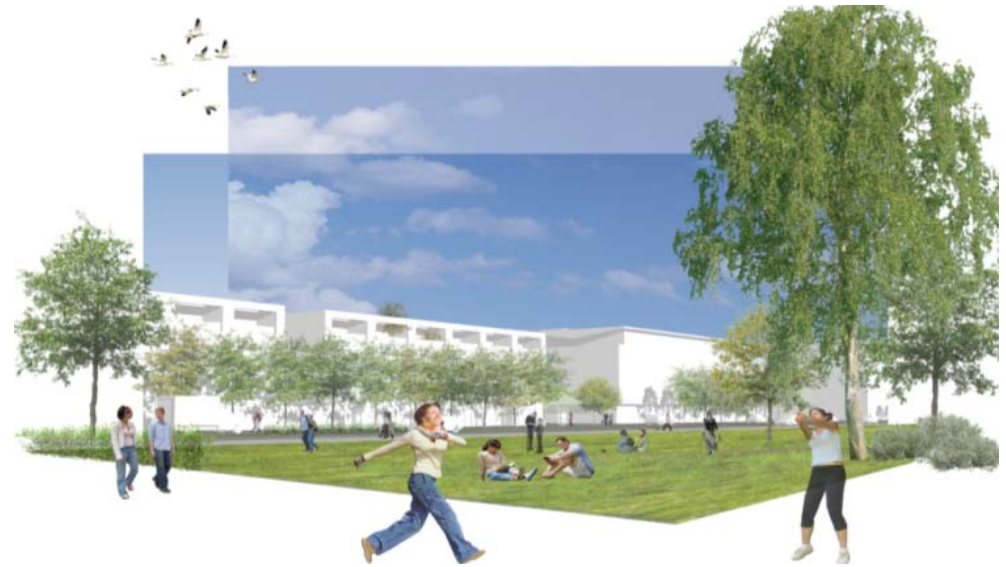
Who is the housing being provided for?

Across European cities, - 27% of households are families with Children.
In Ireland the figure is approximately 37%

High density housing can meet the needs of remaining 60% of the households



Sheltered housing, Gorey - Paul Keogh Architects



OMP Architects

Family Housing



Courtyard, Adamstown

what is family housing?

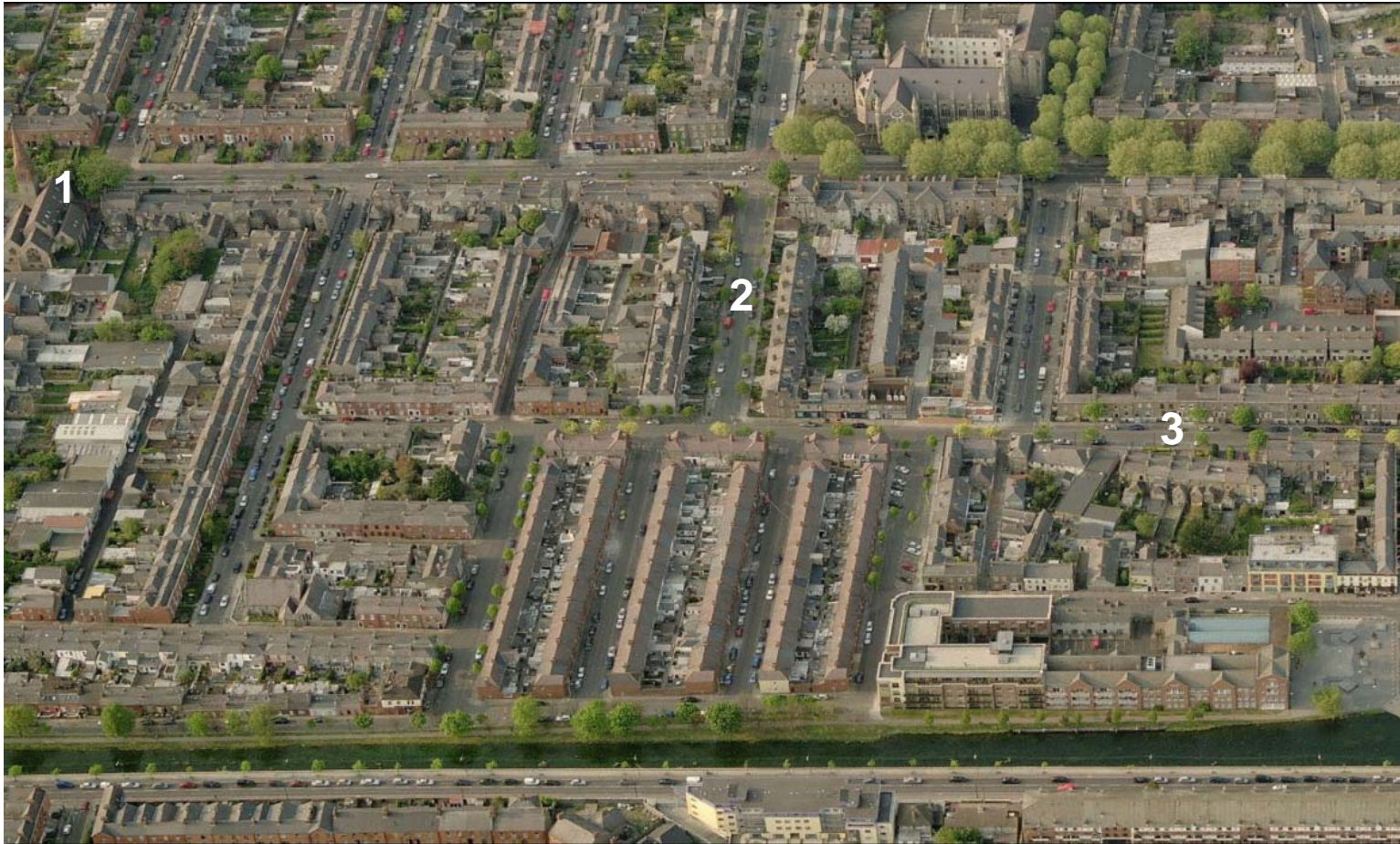
what constitutes 'higher density' ?

50 units per hectare examples

60 plus units per hectare

what are the challenges around delivering it?

What kind of unit is appropriate for family living?



1. Semi Detached – Deep Frontage



2. Terraced – Shallow Frontage



3. Terraced – no threshold to street

PORTOBELLO, DUBLIN – **CITY EDGE HOUSING**, Dublin
from semi-detached to terraced units

What kind of unit is appropriate for family living?



Two storey duplex units, with deck, by shared open space –
Is this family housing?

HANOVER QUAY, DOCKLANDS – CITY CENTRE HOUSING Dublin

What kind of unit is appropriate for family living?



Or is this the model ?

Challenges of Public perception

We will compare and contrast 3 schemes under the urban design criteria:



3 bed Traditional
Lucan Housing model



3 bed terraced housing model
South Dublin



3 bed UK Exemplar Housing
Street, Somerset

Challenges of Public perception

compare and contrast 3 schemes under the urban design criteria:

HOME SCALE	Traditional Lucan Housing model	Terraced housing Model - SDCC	UK Exemplar Housing – Street, Somerset
Size of unit	93 m ²	110 m²	79 m ²
Dimensions of living space	3.2 m x 4 m	3.8 m x 4 m	2.8 m x 5 m
Dimensions of kitchen	3 m x 6 m	3.2 m x 6 m	2.5 x 3.4 m
Living / kitchen area	30 m ²	35 m²	22 m ²
Flexible downstairs room	No	Yes	No
Utility Room	Sometimes	Yes	No
Parking provision	2.5	1.5	1.5
Private open space	+/- 80 m ²	60 m ²	60 m² + (roof deck) 14 m²
Separation distances	22 m	21 m	18 m
Storage	3 m ²	8 m²	No
Qualitative aspects of Envelope	< D BER rating	Target High	Equivalent A rating
Cost to buy of typical 3 bed	220 K Euro	Target 200 K	220 K Euro
Cost per m ²	2.36 €/ m ²	1.80 €/ m²	2.75 €/ m ²

Challenges of Public perception

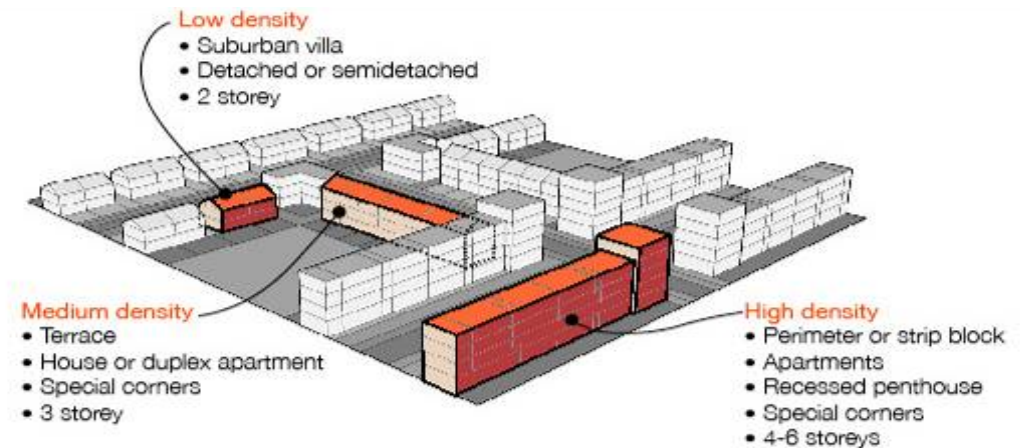
compare and contrast 3 schemes under the urban design criteria:

SITE SCALE	Traditional Lucan Housing model	Terraced housing Model - SDCC	UK Exemplar Housing – Street, Somerset
Efficiency Density	< 10 / acre	20 / acre	40 / acre + (including apartments)
Distinctiveness Sense of place	Poor	Good variety	Very good
Layout People friendly streets	Good	Very good	Very good
Public realm Safe, secure + enjoyable	Good	Good	Good
NEIGHBOURHOOD SCALE			
Connections to schools / parks / Shops	poor	Very good	Very good
Inclusivity How easily used by others?	Poor – one type of housing only	Good - variety typologies	Good
Variety Mix of uses	Poor	poor	poor

The challenges of Designing Higher density - at the 'Site' level

	TYPICAL LAYOUT
Roads	15%
Parking	5% raises the issue of undergrounding parking
Public Open space	10%
Private open space	over 30% (60 m2 back gardens)
TOTAL	60%

For densities to exceed
20 / acre or 50/ hectare,
This in turn necessitates
some duplexes + some apartments



'CRUST AND CORE'

The challenges of Designing Higher density - at the 'Home' level

60 Units per hectare = 80% houses 20% Apartments

House typologies - The terraced house:

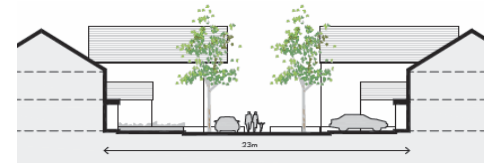
Variety of house types

Making a street – turning a corner

Variety of places



'Housing Studies' – O'Mahony Pike Architects
Adamstown Square Higher Density Study



Section through
Residential court

wide fronted houses

narrow fronted houses

corner houses

open space

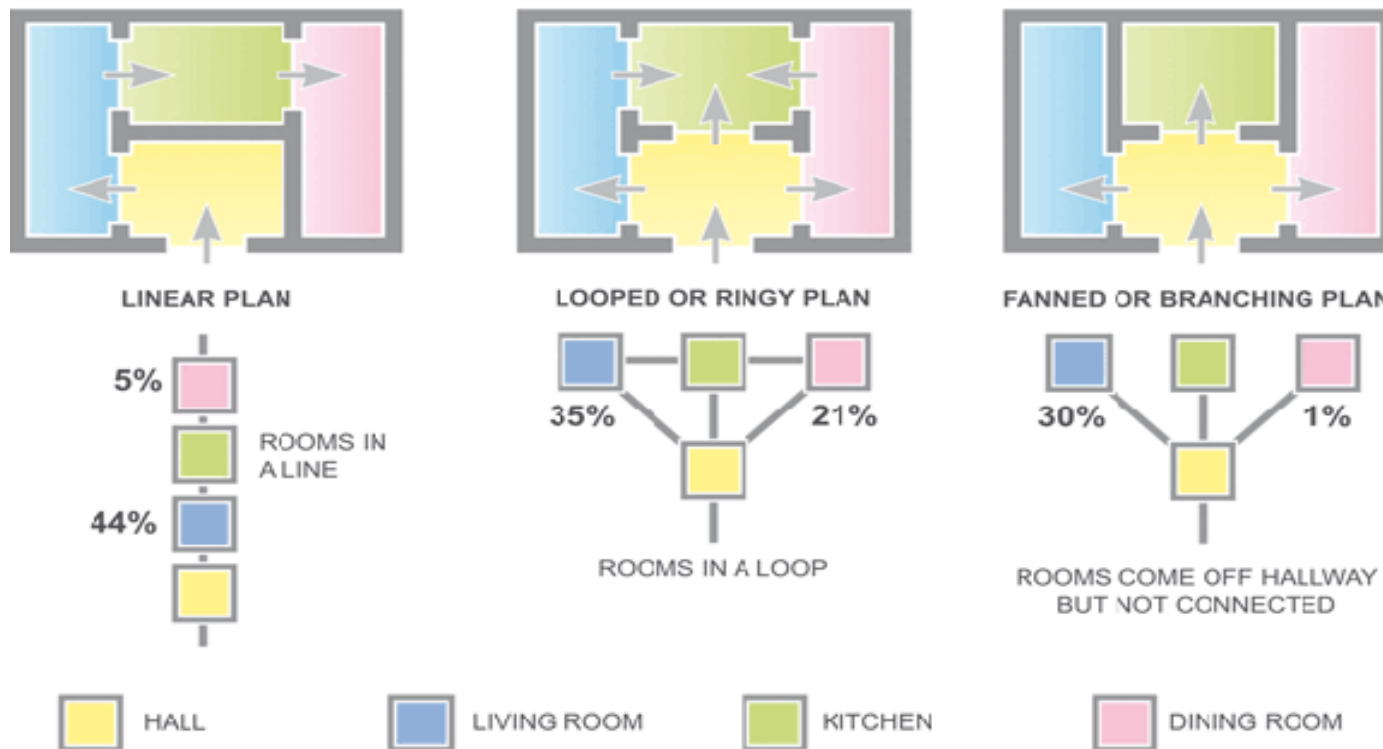


The challenges of Designing Higher density - at the 'Home' level
75 Units + per hectare = 50% houses 50% Apartments



The challenges of Designing Higher density - at the 'Home' level

It's not just about how much space is provided, but how it is laid out



The challenges of Designing Higher density - at the 'Home' level



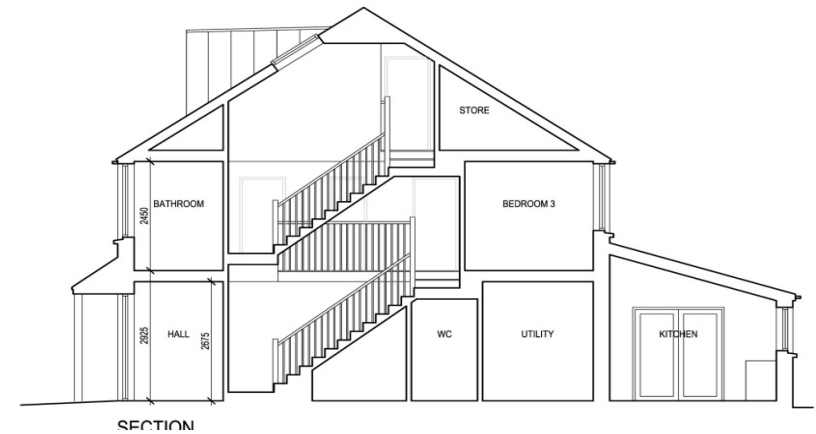
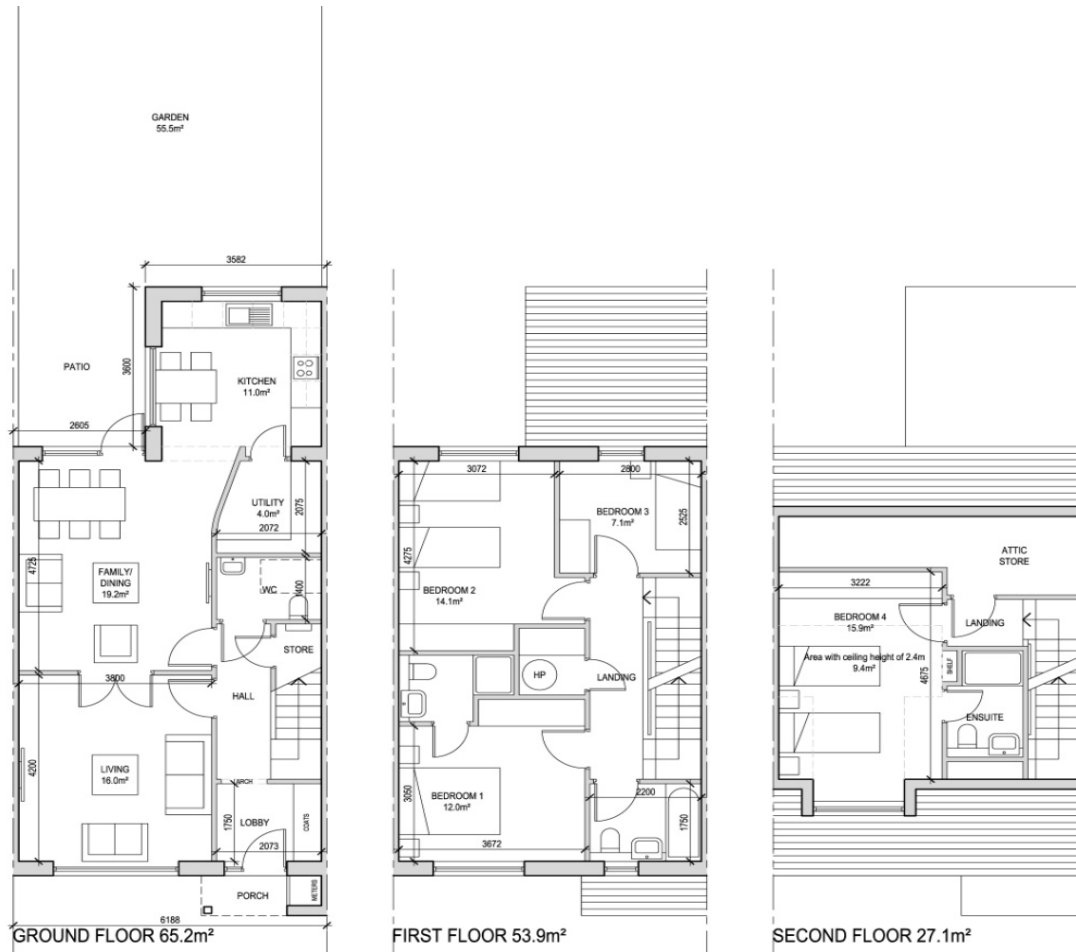
'Street', Somerset – Feilden Clegg Bradley Architects

Homezones - Detailing the public Realm

- Planting
 - Surface treatment
 - Visibility
 - Tight corners / obstacles
 - Provide difficulty for traffic
- = SAFETY

The challenges of Designing Higher density - at the 'Home' level

House typologies - Terraced



The challenges of Designing Higher density - at the 'Home' level

House typologies - The duplex unit and apartment :

Balancing housing with elements of higher density – Mixed dwelling types

WIDE FRONTED
APARTMENTS

OVER

FAMILY DUPLEXES WITH
GARDENS



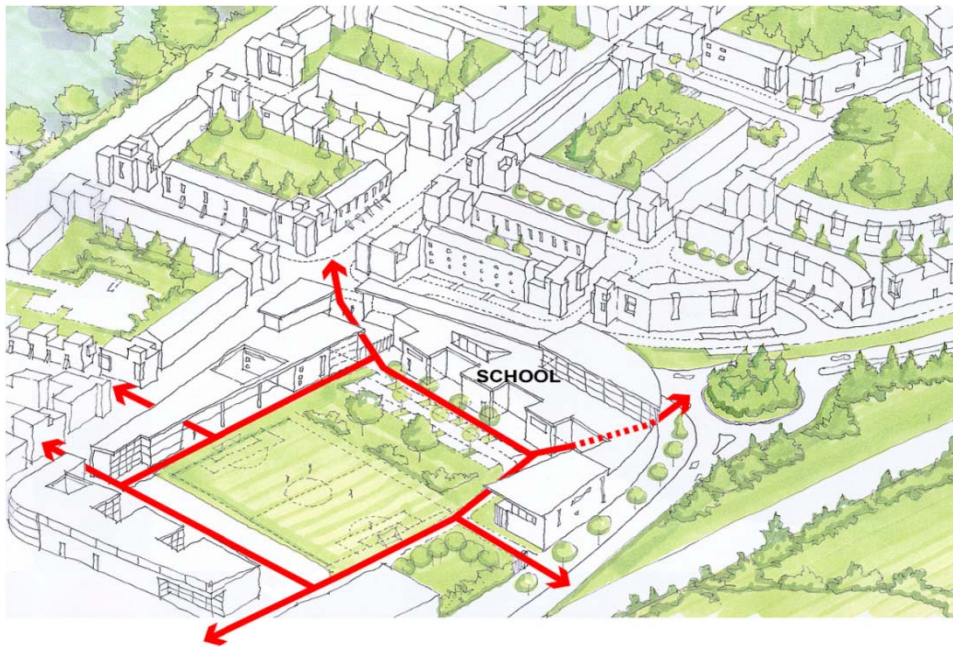
Adamstown Housing – OMP Architects

APARTMENTS TO ARTICULATE CORNERS



The challenges of Designing Higher density - at the 'Neighbourhood' level

Proximity to shops, schools, parks, public transport etc



*"A child should be able to walk down the street,
and see what it wants to do with the rest of it's life..."*

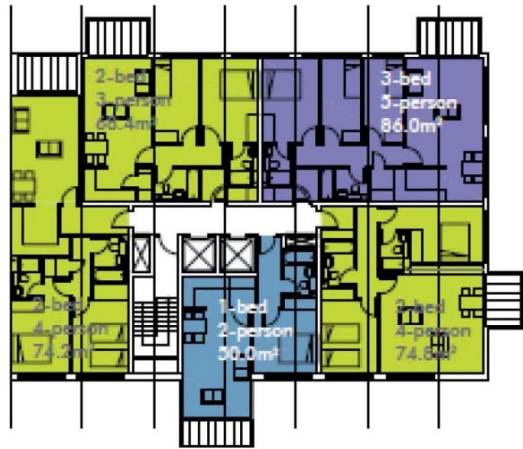
Rental Multi-Family Housing



- Well funded investors creating new rental model
- Well funded experienced private residential investors now in the market
- Creating of long term secure rental options
- Experience management skills
- Additional facilities – i.e. Concierge Suite, Gym, Games Room, Community Room, Cinema, Business Center.
- Durable specification
- Joint venture partners with traditional house builders to deliver higher density mixed tenure development
- Campus Design including office and residential development



Key Worker Accommodation



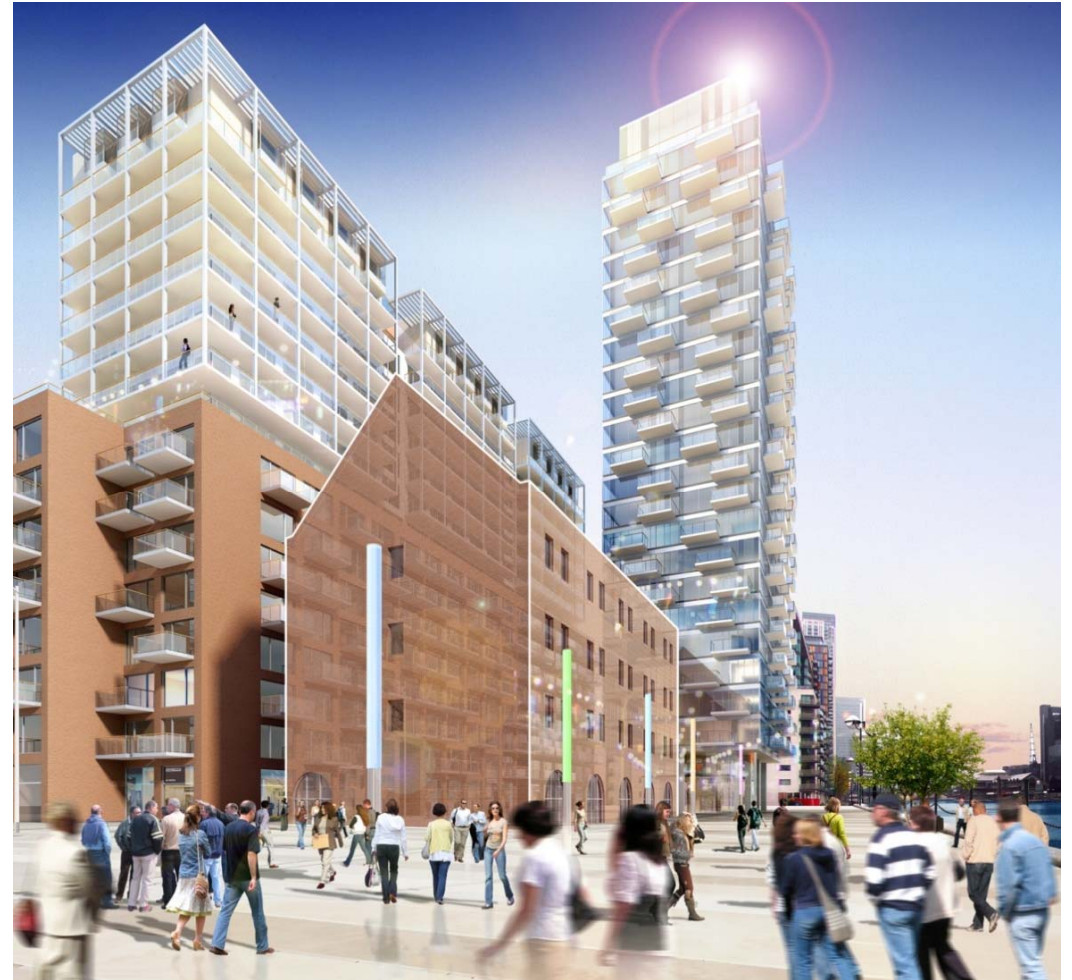
Sector not developed in Ireland

Key Worker Accommodation

UK examples

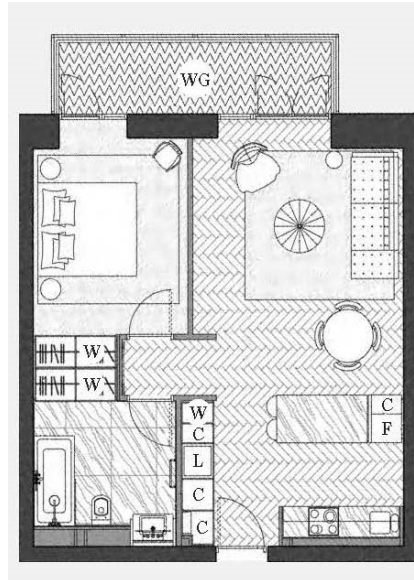
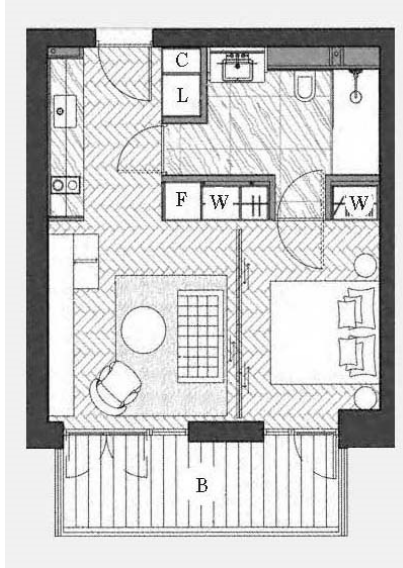
Tower Hamlets mix

50% 1 bed Units and 50% 3 bed Units



Flexible High density Accommodation

Typical Plan types



Good Example – Ballymore Properties

Large floor areas

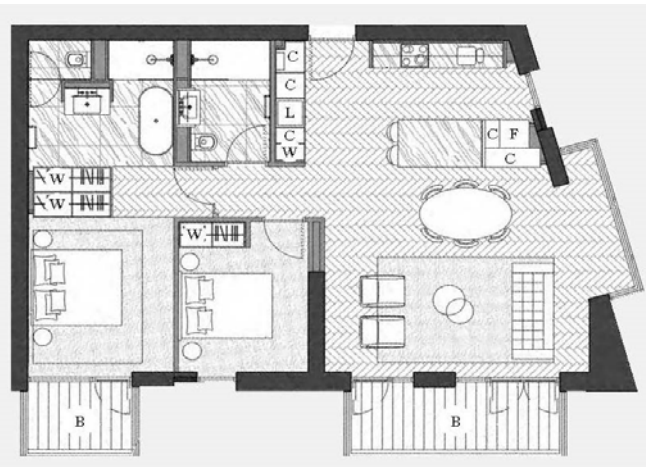
of Corridors /Sprinklers

Maximising Wall Storage

Bigger Bathrooms

Flexible bedroom spaces

Studio accommodation / answer to Bedsit.



Empty Nesters



Villa Plan

Unit Sizes

The Target Average Floor Area across a scheme shall be 85sq.m and the minimum floor areas for different unit types shall be:

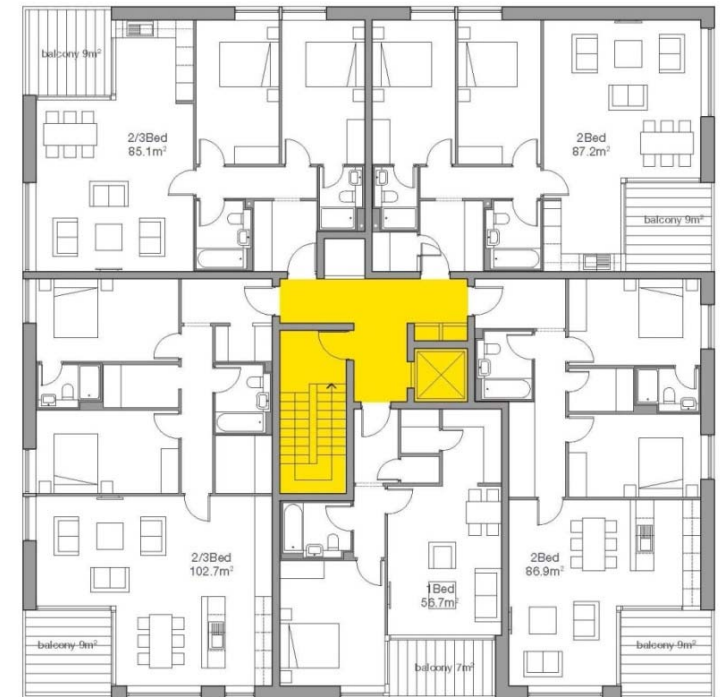
- 1 bedroom unit: 55sq.m
- 2 bedroom unit: a range from 80sq.m to 90sq.m
- 3 bedroom unit or equivalent: 100sq.m

Minimum provision of 15% 3bedrooms units

Note that 50% of kitchens must have windows.

Private Open Space

The minimum combined private / communal open space requirement for apartments shall be 12-15sqm per bedspace



Empty Nesters – Flexible arrangements

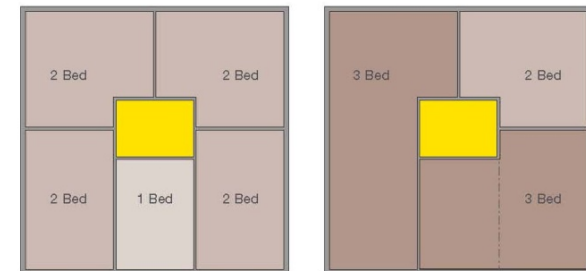


Villa building

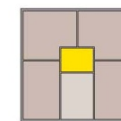
The typical villa or pavillion building is set out about a very efficient central core, which maximizes the use of external wall area for orientation, views, dual aspect and balcony / wintergarden space (87% efficiency).

Each typical floor is arranged about a central core and can achieve up to 5No. apartments in a "pin wheel" arrangement.

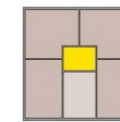
This configuration is flexible enough to allow alternative layouts, by combining units, creating larger apartments either horizontally or vertically. The additional adaptability of the villa form is that each building could have a different apartment type - owner occupier in one, rental in another - in a market responsive way.



villa building - layout and mix adaptability

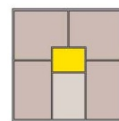


building 1



building 1

villa typology



building 1

Empty Nesters



2. Affordability

Build Cost –

Wages up to 40% above U.K. level

Land costs –

European norm 10 - 15% of build cost
Ireland at peak of boom - 50%

Additional costs –

Part V – levies – stamp duty – V.A.T.
Certification
Potential of L.V.T.

3. Regulations

Planning Restrictions –

Densities – Building Heights
Dual Aspect – Atria
Limits on access corridors
Ban on Studios

Building Regulations –

Universal Access

4. Types of Tenure

Freehold –

Mortgage

Rental –

Buy to let – small scale investors
Owned and managed by Company / REIT
Equity Partnership – Rent to buy

5. Funding

Role of Banks

Role of Pension or other investment funds