

Workshop on Design Standards for Apartments

Feedback Report

18th April 2016

Table of Contents

Appendix 1 Presentations

1.	Introduction	3
2.	Minimum floor areas and associated design standards	4
3.	Design standards generally	7
4.	Flexibility / Catering for different user groups	9
5.	Planning issues	10
6.	Cost, affordability and financial viability	11
7.	General comments	12
8.	Conclusion / Steps forward	13

1. Introduction

The Housing Agency convened a workshop to examine the details of the implementation of the recently published Design Standards for New Apartments.

The purpose of the workshop was to examine certain aspects of the standards contained within the guidelines with the objective of giving a feedback report to the DECLG, on evidence from, and assessment by, practitioners of the guidelines and how best they might be implemented.

There was evidence of a shared consensus among participants on a number of items such as the importance of quality. Furthermore, it was agreed that evidence based research is essential, and that further workshops and guidance are desirable. There were, inevitably, a variety of responses to questions on specific aspects of the guidance. This report seeks to reflect the range of views expressed in the workshop and therefore does not provide a single consistent point of view on each issue discussed.

The report brings together the points made in both the presentations and the subsequent workshop discussions. In addition to recording the wide range of ideas and views expressed, the report makes recommendations for further work to address the key issues of quality and affordability in apartment design.

The Housing Agency is considering ways in which it can support the provision of high quality, affordable apartments that address the needs of users and provide long-term sustainability, and how it can facilitate the implementation of the suggestions contained in the final section of this report.

The Housing Agency wishes to acknowledge the contributions made by all those who attended workshop. A list of those who presented is provided as appendix to this report.

- 2. Minimum floor areas and associated design standards
- 2.1 Implementation of floor area standards contained in the recently published

 Design Standards for New Apartments (the 'guidelines')
- 2.1.1 It was noted that it is technically possible to design apartments to the space standards contained in the guidelines and will generally need to be slightly exceeded to comply with the guidelines. It was noted that generally apartments, if correctly designed, will exceed the minimum space standard requirements.
- 2.1.2 The guidance space standards do not differentiate between space requirements for a 2 bedroom, 3 person apartment and space requirements for a 2 bedroom, 4 person apartment.
- 2.1.3 Designing in adequate storage within the apartment with existing space standards requires careful attention. Guidance regarding the layout of storage areas and identifying exact storage requirements would be beneficial.
- 2.1.4 The point was made that studio apartments may work better than one bedroom apartments, particularly if they are well designed, and that they could have a wider application than that allowed for in the guidelines. It was queried whether studio apartments could have a floor area of less than 40m² and one bedroom apartments have a minimum floor area of 50m².
- 2.1.5 It was suggested that specific urban design requirements may result in requirement to construct larger units, especially at corners sites in medium density developments.
- 2.1.6 It was noted that minimum should be recognized as minimum and not be treated as a target or maximum standard.
- 2.1.7 It was queried whether guidelines on minimum sizes are required if designers are adhering to all existing design and regulatory requirements.

- 2.1.8 It was recommended that the guideline space standards are tested and building control compliant worked examples with compliant room sizes prepared to test the functionality of the guidelines.
- 2.1.9 It was suggested that comparative design proposals be developed and costed for independent review by experts and end users.
- 2.1.10 Studies presented of 1 and 2 bedroom apartments noted what could be achieved within the guideline space standards and the impact of omitting the internal lobby and of increasing the apartment size by 10% (refer to presentations for details).

2.2 U.K. and Swedish space standards and design approach

2.2.1 Sweden

- Specific minimum floor areas are not stipulated. The design dimensions that are suitable for the design of dwellings are derived from the space standards required to carry out particular activities, accommodate specific sizes of furniture, and accommodate wheelchair users.
- Swedish standards state that a dwelling with an internal floor area greater than 55 m² should always have space for a double bed in at least one room or a separable part of a room. A dwelling with an internal floor area less than 55 m² is not required to have space for a double bed in at least one room or a separable part of a room.
- Considerable attention is given to the details of everyday living and detailed guidance on items such as exposure to noise, waste management and storage of specific items, such as bicycles, is provided.

2.2.2 U.K. (Draft Interim Housing Supplementary Planning Guidance)

 Overall apartment minimum floor area standards are within 5% of those contained in the Irish guidelines, with the exception of the single bedroom apartment, where the UK guidelines require a minimum of 50 m² for a one bedroom unit.

- Storage provision standards in the Irish standards generally exceed those contained in the UK guidance.
- UK standards are less prescriptive in relation to minimum room widths.
- UK standards state that 10% of dwellings should be fully accessible. This is not addressed in the guidelines.

2.3 Internal apartment planning

- 2.3.1 Fire engineered solutions that mean that the internal lobby could be omitted, allow for greater flexibility, better use of available space and better distribution of natural light. These are generally permitted in the UK and Europe. It was noted that the cost of installing a sprinkler system may be a consideration. It was recommended that use of fire engineering solutions be considered for the Irish context.
- 2.3.2 It was suggested that consideration is given to having two different apartment typologies owner occupier, and built to rent. However the need for caution in having a 'lesser' standard in the rental model was noted.
- 2.3.3 It was noted that the layout of an apartment should be the result of considering specific user requirements.

3. Design standards – overview of considerations

3.1 General comment

It was agreed that the guidance provided on items such as dual aspect (50%), floor to ceiling heights, storage areas and number of apartments per core (8) should result in well-designed blocks of different configurations with efficient and affordable net to gross floor areas. Some areas that may require particular consideration are noted below.

3.2 Floor to ceiling heights

3.2.1 The point was made that design quality and creating a sense of delight may be more important than increased floor to ceiling heights;

- 3.2.2 It was suggested by some that a floor to ceiling heights of 2.7m is too high a standard. However, others considered it appropriate;
- 3.2.3 It was noted that a floor to ceiling height of 3m, to allow for commercial space, was often inappropriate. It was suggested that it should be required only in situations where the ground floor spaces are considered to be viable for commercial activity.
- 3.2.4 The point was made that higher floor to ceiling heights allows for more internal daylight.
- 3.2.5 Key issues noted by apartment dwellers were daylight, space, natural ventilation, noise, energy and resources, sunlight, outdoor space, car parking, waste, universal design, adaptability, outlook, landscape and entry and circulation.

3.3 Orientation

- 3.3.1 It was queried where the 50% figure for dual aspect apartments came from.
- 3.3.2 The 50% dual aspect ratio was considered too high and constraining by some.
 Regarding the restriction on north facing units, it was queried whether a decision to have north facing units should be market led.
- 3.3.3 It was noted that the closeness of an apartment block to an adjoining block has an important impact on light and that reflective sun is an important consideration in dense urban developments.
- 3.3.4 It was noted that 50% dual aspect with 8 units per core does create efficiencies generally, but has limited ability to impact on infill sites.
- 3.3.5 It was noted that the provision of a higher percentage of dual aspect may impose a greater cost back on the end user. It was suggested that people would rather good quality finishes as opposed to the higher cost resulting from the provision of dual aspect.
- 3.3.6 It was noted that natural light in kitchens is desirable.

- 3.3.7 The point was made that a pretense at dual aspect should not be acceptable.
- 3.3.8 It was queried as to whether dual aspect is necessary now that heat recovery ventilation is generally provided.

3.4 Number of units per core

- 3.4.1 Some felt that the quality of ventilation and light will be compromised while others felt 8 units to the core and permitting north aspect apartments provides an appropriate standard;
- 3.4.2 A number of presentations considered the impact of the standards, or variations on the standards, on the number of units that could be provided within a given floor plate. Standards considered included the number of units per core, percentage dual aspect and, in some, but not all cases, a reduction in apartment space standards. All indicated significant increases in the number of apartments that could be provided within a given floor plate. In one example that compared the number of units that could be provided in a six storey block under the current DCC Development Plan (2011-2017) to what could be provided by applying the standards in the Draft DCC Development Plan (2016-2022) plus two recommended additional changes, the number of units increased from 222 to 252 (refer to presentations for details).

3.5 Swedish Standards

- 3.5.2 Swedish standards differentiate between daylight provision and direct sunlight requirements. Swedish standards require all apartments to have adequate access to daylight and for one room to have direct sunlight.
- 3.5.3 In Sweden 50% of rooms are required to be on the quiet side of a building.
- 3.5.4 In Sweden the number of units per core is determined by the fire codes the distance from the apartment entrance door to the escape core should be no greater than 15m and the number of people per floor should not exceed 30. This generally results in 8 units per core and, in exceptional cases 10 units per core. The apartment balcony must be large enough to enable a wheelchair to turn 360°.

4. Flexibility / Catering for different user groups

4.1 General points

- 4.1.1 It was suggested that design quality and meeting the needs of occupiers is more important than applying a strictly box-ticking approach to standards but it was also noted that having a basic minimum standards is appropriate.
- 4.1.2 It was noted that in England there is an emerging trend towards the provision of student type/shared living arrangements for adults. These arrangements are also emerging in Sweden and in Florida. It was noted that there is no allowance for this type of accommodation in the guidelines.
- 4.1.3 It was noted that there is a growing requirement for shared apartment accommodation and that this needs to be considered when designing apartments. Two bedroom apartments with two bathrooms were shown to address the requirements of this user group.
- 4.1.4 It was noted that, in Sweden, certain floors within apartment developments are designed specifically for senior citizens and that these include items such as common laundry facilities.
- 4.1.5 It was suggested that the user groups/ apartment mix needs to be determined by the local authorities and that focusing exclusively on one user group, such as the family unit, can decrease the ability to cater for the needs of other user groups. There is a requirement for local authorities to have up-to-date information on required housing mix and for this information to inform planning strategies and decisions.
- 4.1.6 The point was made that minimum standards will not cater for all user groups.
- 4.1.7 It was suggested that user requirements over the whole lifecycle and 'empty nesters' be taken into account. This may result in a requirement for larger apartments.
- 4.1.8 It was noted that the requirement for a 13m² second bedroom in two bed apartments limits flexibility.

5. Planning issues

5.1 Planning issues

- 5.1.1 It was suggested that some informed local discretion on apartment types and ratios is necessary to ensure appropriate requirements are included in development plans.
- 5.1.2 It was noted that it is a challenge to get the right balance between designer flexibility and setting usable minimum standards. There is a need to allow for recognition of good design that does not meet all the standards. There is a need for planners to have more training in what makes good design. There is also a need for design reviews by architects of planning applications. It was recommended that regional workshops for architects and planners are organized.
- 5.1.3 The need to increase density was highlighted and it was noted that this would increase delivery of Part V's.
- 5.1.4 A clear statement is required on the applicability of standards to applications lodged pre 2015 that do not meet all the guideline standards.
- 5.1.5 It was noted that existing urban and sub-urban areas need to be densified;
- 5.1.6 It was suggested that the provision of apartment dwellings in villages needs to be considered;
- 5.1.7 It was suggested that planners be given more authority when considering schemes in particular areas;
- 5.1.8 It was noted that planners need to understand how to apply the standards and that they will require training in that area.

6. Cost, affordability and financial viability

6.1 Affordability

- 6.1.1 It was noted that cost is key in formulating a supply led response.
- 6.1.2 It was noted that 82% of homes have less than €1,000 per month to pay for rent.
- 6.1.3 It was pointed out that the cap on affordable limits due to Central Bank rules for a couple on €72k per annum results in a purchase price of €288,000 (3.5 times income plus deposit of €36k).

6.2 Costs

- 6.2.1 The SCSI published a detailed analysis of cost implications of DCC 2008 Standards in Autumn 2015 that noted a 25%+ increase in cost over the 2007: DECLG Design Standards, a significant decrease in density, increase in management costs and reduced delivery of Part V's.
- 6.2.2 It was suggested that long term maintenance costs need to be considered at design stage.
- 6.2.3 It was recommended that a cost benefit analysis is carried out on the guidelines and that planning authorities carry out the same in relation to any objectives set out in development plans.
- 6.2.4 It was noted that there is a fine line between quality and economic viability.
- 6.2.5 The potential to achieve further efficiencies was highlighted.

7. General comments

7.1 Design Considerations

- 7.1.1 It was noted that it is inevitable that apartments will become the dominant housing form for Dublin and the question was asked as to how we make apartments sufficiently attractive that people will want to live in them.
- 7.1.2 It was noted that the quality of finishes and whether they finishes are fit for purpose is very important.
- 7.1.3 It was suggested that guidance on inclusion and design of ancillary facilities such as rooms to host family gatherings, visitor rooms, shared laundry and storage facilities be provided.
- 7.1.4 The issue of noise from internal and external sources was seen as a major concern by apartment dwellers. It was noted there are no regulations on acceptable external noise levels.
- 7.1.5 It was suggested that there is a need to look at how guidelines would impact on collective forms of living.
- 7.1.6 It was noted that research data is required in order to establish the appropriate mix of units in any development.
- 7.1.7 The need for evidence based research and better consultation in order to determine user needs was highlighted.
- 7.1.8 It was noted that mechanical & electrical equipment is becoming complicated, expensive and that there is inconsistency regarding standards.
- 7.1.9 It was suggested that Parker Morris approach to space standards be revisited.
- 7.1.10 It was suggested that the 'push' for passive standards by some local authorities needs to be addressed.

- 7.1.11 The importance of high quality landscaping was noted.
- 7.1.12 It was noted that space standards is not the only issue that needs to be reviewed, that there is a need to also consider items such as design and construction quality, the provision of compensating amenities, estate management issues, catering for diversity and the issue of affordability.

7.2 Guidance

- 7.2.1 It was recommended that further workshops that address particular aspects of apartment design be convened.
- 7.2.2 It was suggested that further design guidance is required in relation to the provision of good quality, sustainable apartment developments.
- 7.2.3 It was suggested that the guidelines be treated as a 'live' document and that they are subject to regular reviews. It was noted that the guidelines should focus on quality. It was also noted that it is important that guidance is not applied as a tick box exercise.

7.3 Other

7.3.1 The need to avoid unintended delays to the delivery of housing from the introduction of new measures was emphasized.

8. Conclusion / Steps forward

8.1 Recommendations

The following further actions are recommended as arising from the workshop:

- 8.1.1 Carry out regular reviews of the guidance document six monthly or annually.
- 8.1.2 Provide statement on applicability of standards to applications lodged pre 2015 that do not meet all the guideline standards.

- 8.1.3 Carry out evidence based research projects on all aspects of apartment living.
- 8.1.4 Develop comparative design proposals, costed, for independent review by experts and end users.
- 8.1.5 Deliver a best practice exemplar of apartment schemes to the current guideline standards to showcase the quality that can be achieved. A joint venture model could be adopted using land in public ownership.
- 8.1.6 Provide workshops on specific aspects of design, such as amenity space, design of cores, design for particular needs and exposure to noise.
- 8.1.7 Engage architects to test the guidelines and establish their functionality.
- 8.1.8 Provide good quality guidance / design manuals on apartment design.
- 8.1.9 Organize regional workshops in order to establish greater synergies between the architectural and planning processes.
- 8.1.10 Prepare cost benefit analyses and independent cost appraisals of comparative compliant design proposals.
- 8.1.11 Carry out a review of Part B of the Building Regulations in relation to apartments in order to ascertain whether fire engineering solutions could be accepted as an alternative to the provision of internal fire protected lobbies within apartments.
- 8.1.12 Establish mechanisms that leave scope for good design solutions that do not fully comply with the guidelines to be accepted.
- 8.1.13 Carry out architect-led design reviews of all apartment schemes submitted for planning.
- 8.1.14 Carry out urban design studies, including on the densification of sub-urban areas, the provision of apartments and other housing in towns and villages, and the development of brown-field urban sites.

Appendix 1

International Presentations by:

Jo McCafferty	Levitt Bernstein Architects.
Elizabeth Hatz	SAUL and KTH, Stockholm.
César Patin Lapausa	Strategist Arkitektur, Stockholm

Short Presentations by:

Niall Cussen	DECLG
Chris McGarry	NAMA
Deirdre Fox	Apartment Owners Network
John O'Mahony	O'Mahony Pike Architects
Paul Keogh	Paul Keogh Architects
Tony Reddy	Reddy Architecture & Urbanism
Michael Crowe	Crowe Kelly Architects & Urban Designers
Colin Cleary and Michael Mahon	SCSI
Ali Grehan	Dublin City Council
Kevin Maguire	CIF
John Spain	IPI
Ray Ryan	IPI