

Impact of Dublin City Council

Apartment Development Design Standards

on apartment viability



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This report was produced by the Society of Chartered Surveyors Ireland (SCSI) in conjunction with Walsh Associates



walshassociates



- Construction Cost Consultants
- Quantity Surveyors
- Project Management

Executive Summary

The purpose of this report is to examine the implications of the proposed amendments by Dublin City Council to the design standards for apartment developments, in particular, the requirement that 85% of apartments in a development are dual aspect.

For this study we took an existing scheme which obtained planning permission in 2006 under the current design proposals and redesigned it in line with the proposed amendments.

The dual aspect requirement fundamentally changed the apartment design with subsequent increases in costs, most

notably the increase in floor area, reduced number of units and the requirement for additional stair cores. The stair cores of an apartment complex are the access routes and the non-revenue earning parts of a development. The more cores in a development the more expensive the development. A core contains stairs, fire rated corridors, lifts, fire alarms, lighting and emergency lighting, smoke controls, access doors and controls. The increase in cores has a subsequent knock on effect on the running costs of the development after completion as it needs to be maintained and lighting provided for access at all times.

Key Findings

The development chosen for review has planning permission for 128 apartments over a basement car park. The 128 apartments were serviced off 6 access cores. Under the proposed amendments it was found that the number of apartments reduced from 128 to 105 and an additional staircase was required to access all the units. Other findings were as follows:

Increased cost per apartment	25.79%
Decrease in density	-17.97%
Increase in apartment size (incl circulation)	43.04%
Land value decreased	-17.97%
Loss in Part V units	4.60
Loss in financial contributions	€299,000

Set out is a comparative cost study of the 2 schemes. In summary, the superstructure of an apartment complex increases from €89,000 to €112,000 (25%) . In addition to the above there are a number of costs including basement car parking, site development works, preliminaries and insurance that will remain common for both schemes.

Apart from the building costs “Other Costs” have to be considered, these include, planning contributions, statutory fees and charges, Part V, legal and sales costs, land and finance costs. The average cost of an apartment following the “dual aspect proposal” is close to €300,000 per unit. Apartment costs have significantly increased in recent years with the implication of a number of revisions to the design standards including:

- Part L standards which require A rated apartments with renewable energy. It is very difficult to achieve these design standards
- Increase in size of “private open space” has significant structural design implications
- Social & Affordable provisions
- Increased flooding avoidance provisions
- BCAR which has significantly increased fees and administration costs

The scheme chosen for this example is not constructed as it is within an area where current sales for a 2 bedroom apartment are €175,000. This high density scheme or others like it are not going to be constructed for the foreseeable future without significant sales value increases. The implication of the dual aspect requirement is that costs will be pushed further beyond what is sustainable.

2.0 Summary of Costs

Project Details	Standards 2007 -2011			Standards 2011 -2017		
Number of Cores	6			7		
Gross Internal Floor Area	9,462			11,103		
Number of Apartments	128			105		
Elemental Breakdown	Total Cost	Cost/Apt	Cost/m ²	Total Cost	Cost/Apt	Cost/m ²
Superstructures						
External Walls & Finishes €	€705,759	€5,514	€75	€828,141	€7,887	€75
Internal Walls €	€823,386	€6,433	€87	€966,165	€9,202	€87
Floor Structure €	€705,759	€5,514	€75	€828,141	€7,887	€75
Stairs and Balustrades €	€195,000	€1,523	€21	€227,500	€2,167	€20
Concrete Frame €	€352,880	€2,757	€37	€414,071	€3,944	€37
Roof Structure €	€133,050	€1,039	€14	€157,433	€1,499	€14
External Wall Completions €	€600,395	€4,691	€63	€704,506	€6,710	€63
Internal Wall Completions €	€869,744	€6,795	€92	€713,462	€6,795	€64
External Balconies €	€492,308	€3,846	€52	€403,846	€3,846	€36
Roof Completions €	€60,000	€469	€6	€70,000	€667	€6
Internal Wall Finishes €	€1,117,452	€8,730	€118	€1,311,224	€12,488	€118
Floor Finishes €	€112,500	€879	€12	€131,250	€1,250	€12
Stairs Finishes €	€90,000	€703	€10	€105,000	€1,000	€9
Ceiling Finishes €	€352,880	€2,757	€37	€414,071	€3,944	€37
Roof Finishes €	€212,880	€1,663	€22	€251,892	€2,399	€23
Furniture & Fittings €	€984,615	€7,692	€104	€807,692	€7,692	€73
Sanitary Ware €	€410,256	€3,205	€43	€336,538	€3,205	€30
Mechanical Installations (incl CHP)						
Central Plant	€412,869	€3,226	€44	€484,463	€4,614	€44
Heating Distribution €	€351,000	€2,742	€37	€409,500	€3,900	€37
Heating Apartments €	€256,000	€2,000	€27	€210,000	€2,000	€19
Water Services Distribution €	€315,900	€2,468	€33	€368,550	€3,510	€33
Water Services Apartments €	€384,000	€3,000	€41	€315,000	€3,000	€28
Soils & Wastes €	€192,000	€1,500	€20	€157,500	€1,500	€14
Dry Risers €	€157,950	€1,234	€17	€184,275	€1,755	€17
Electrical Installations						
Main Board & Distribution €	€225,000	€1,758	€24	€262,500	€2,500	€24

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Fire Alarm €	€90,000 €	€703 €	€10 €	€105,000 €	€1,000 €	€9
Emergency lighting €	€90,000 €	€703 €	€10 €	€105,000 €	€1,000 €	€9
CCTV €	€45,000 €	€352 €	€5 €	€52,500 €	€500 €	€5
Apartment Electrical €	€352,880 €	€2,757 €	€37 €	€289,472 €	€2,757 €	€26
Lift Installations €	€310,000 €	€2,422 €	€33 €	€150,000 €	€1,429 €	€14
Sub Total Superstructure €	€11,401,464 €	€89,074 €	€1,205 €	€11,764,692 €	€112,045 €	€1,060
<i>Increased Cost per apartment</i>					25.79%	
Other Costs						
Renewable Energy €	€256,000 €	€2,000 €	€27 €	€210,000 €	€2,000 €	€19
Basement €	€4,480,000 €	€35,000 €	€473 €	€4,480,000 €	€42,667 €	€404
Site Development Works €	€1,920,000 €	€15,000 €	€203 €	€1,920,000 €	€18,286 €	€173
Preliminaries and Insurance €	€1,536,000 €	€12,000 €	€162 €	€1,536,000 €	€14,629 €	€138
Project Contingency €	€200,000 €	€1,563 €	€21 €	€200,000 €	€1,905 €	€18
Professional Fees €	€1,583,477 €	€12,371 €	€167 €	€1,608,855 €	€15,322 €	€145
Investigation / testing etc €	€25,000 €	€195 €	€3 €	€25,000 €	€238 €	€2
Fire Cert & Planning Charges €	€15,000 €	€117 €	€2 €	€15,000 €	€143 €	€1
Planning Contributions €	€1,664,000 €	€13,000 €	€176 €	€1,365,000 €	€13,000 €	€123
Part V €	€640,000 €	€5,000 €	€68 €	€525,000 €	€5,000 €	€47
Finance €	€711,628 €	€5,000 €	€75 €	€709,486 €	€6,757 €	€64
Sales and Marketing €	€192,000 €	€1,500 €	€20 €	€157,500 €	€1,500 €	€14
Sales and legal costs €	€768,000 €	€6,000 €	€81 €	€630,000 €	€6,000 €	€57
Land Costs €	€3,200,000 €	€25,000 €	€338	€2,625,000 €	€25,000 €	€236
Profit Margin 15% €	€4,288,885 €	€33,507 €	€453 €	€4,165,730 €	€39,674 €	€375
Total Development Costs (Excl. VAT) €	€32,881,454 €	€256,886 €	€3,475 €	€31,937,263 €	€304,164 €	€2,876
Vat @13.5% €	€4,438,996 €	€34,680 €	€469 €	€4,311,531 €	€41,062 €	€388
Total Development Costs (incl. VAT) €	€37,320,451 €	€291,566 €	€3,944 €	€36,248,794 €	€345,227 €	€3,265



First / Second / Third Floor Plans



Fifth Floor Plan



Ground Floor Plan



Fourth Floor Plan

apartment type - size - quantity				dual aspect	unit mix
TYPE	BED	m ²	qty.		
1A	1	46	23	N	36% 1-BED
1B	1	44	19	N	
1C	1	40	4	N	
	1		46		
2A	2	73	32	Y 25%	64% 2-BED
2B	2	67	26	Y 20%	
2C	2	68	9	N	
2D	2	58	9	N	
2E	2	58	6	Y 5%	
	2		82		
	3		0		0% 3-BED
128				total 50% dual aspect	

DEPARTMENT OF ENVIRONMENT	2007	1995
OVERALL MINIMUM SIZES		
1-BED	45	38
2-BED	73	55
3-BED	90	70

DUBLIN CITY COUNCIL DEVELOPMENT PLAN	2011-2017	2005-2011
OVERALL MINIMUM SIZES		
1-BED	55	45
2-BED	80 - 90	65
3-BED	100	80

BALCONY AREA MIN.		
1-BED	6	4
2-BED	8	4
3-BED	10	4

UNIT MIX REQUIREMENTS		
1-BED	20% max.	45% max.
2-BED	-	-
3-BED	15% min.	25% min.

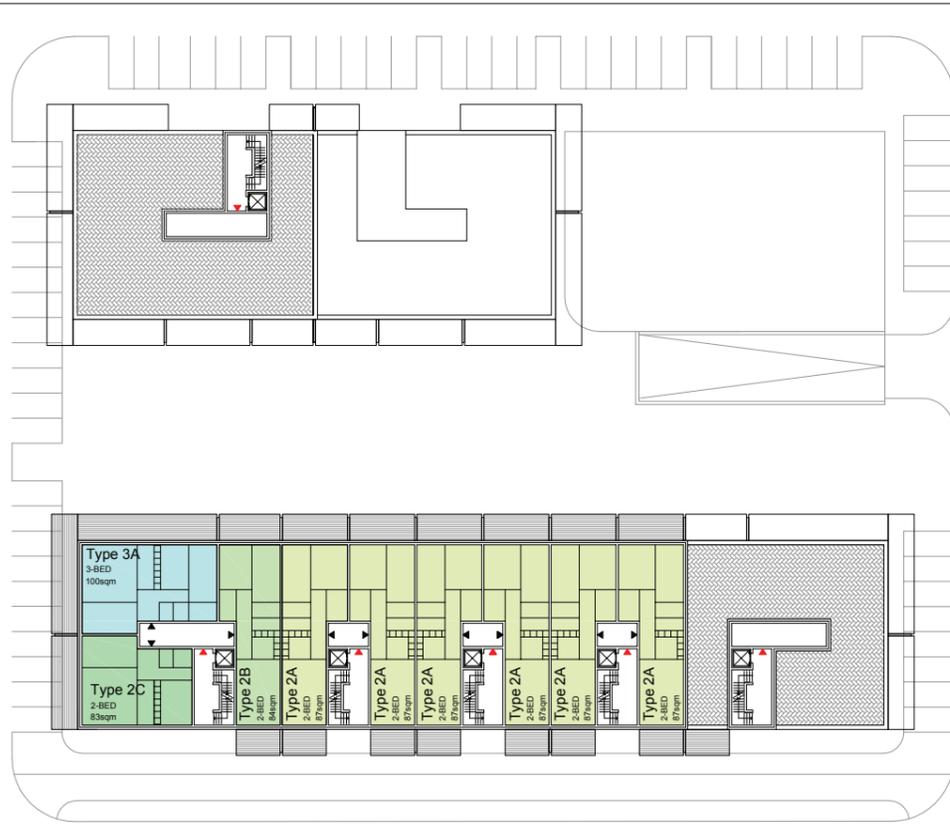
DUAL ASPECT REQUIREMENT		
	85% min.	'majority'

PRIVATE OPEN SPACE PER BEDSPACE		
balconies, terraces, roof gardens, communal landscaped areas		
Inner City / Docklands Prime Urban Centres Ballymun	5 - 8	5 - 8
Suburbs	12 - 15	12 - 15

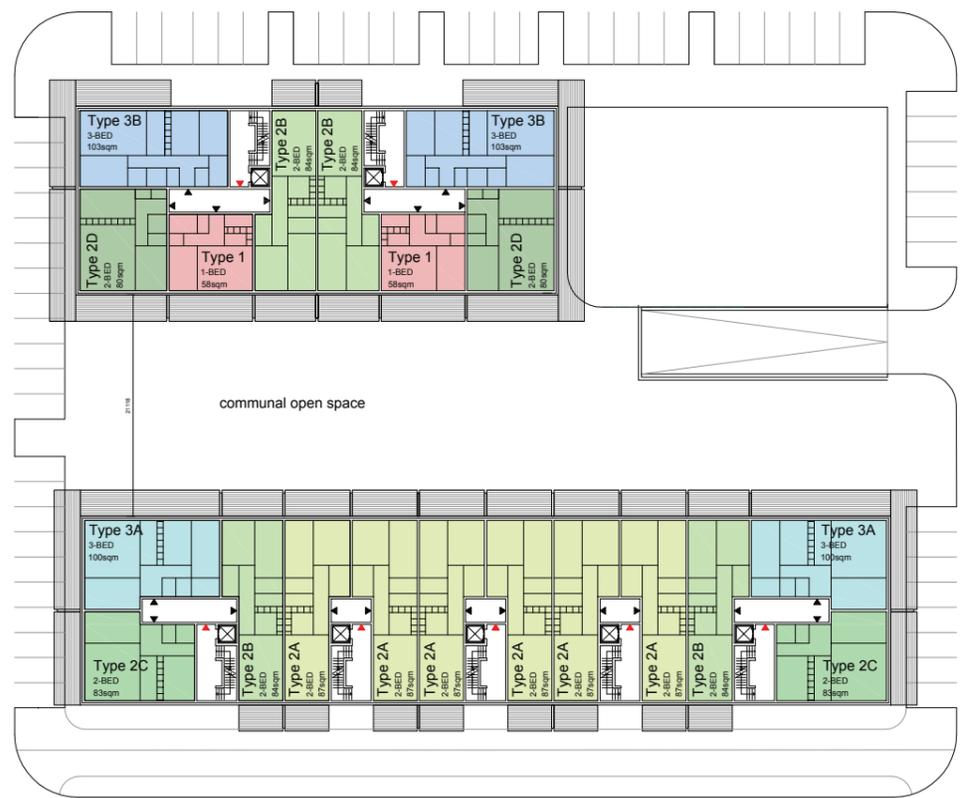
CLIENT MICHAEL WALSH ASSOCIATES
 PROJECT DCC DEVELOPMENT STANDARDS TYPICAL APARTMENT BUILDING STUDY
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 STATUS FEASIBILITY



First / Second / Third Floor Plans



Fifth Floor Plan



Ground Floor Plan



Fourth Floor Plan

Apartment type - size - quantity				dual aspect	unit mix
TYPE	BED	m ²	no.		
1	1	58	9	N	8.5% 1-BED
	1		9		
2A	2	87	36	Y 34%	72.5% 2-BED
2B	2	84	20	Y 19%	
2C	2	83	11	Y 10.5%	
2D	2	80	9	Y 8.5%	
	2		76		
3A	3	100	11	Y 10.5%	19% 3-BED
3B	3	103	9	Y 8.5%	
	3		20		
105				total 91% dual aspect	

DEPARTMENT OF ENVIRONMENT	2007	1995
OVERALL MINIMUM SIZES		
1-BED	45	38
2-BED	73	55
3-BED	90	70

DUBLIN CITY COUNCIL DEVELOPMENT PLAN	2011-2017	2005-2011
OVERALL MINIMUM SIZES		
1-BED	55	45
2-BED	80 - 90	65
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BALCONY AREA MIN.		
1-BED	6	4
2-BED	8	4
3-BED	10	4

UNIT MIX REQUIREMENTS		
1-BED	20% max.	45% max.
2-BED	-	-
3-BED	15% min.	25% min.

DUAL ASPECT REQUIREMENT		
	85% min.	'majority'

PRIVATE OPEN SPACE PER BEDSPACE		
balconies, terraces, roof gardens, communal landscaped areas		
Inner City / Docklands	5 - 8	5 - 8
Prime Urban Centres		
Ballymun		
Suburbs	12 - 15	12 - 15

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Society of Chartered
Surveyors Ireland

38 Merrion Square,
Dublin 2, Ireland

Tel: + 353 (0)1 644 5500

Email: info@scsi.ie

www.scsi.ie