

## **04: Space in the home: what is being built and is the customer happy?**

**Andrew Drury**  
**HATC Ltd.**

I am a project manager and my background is in affordable housing – I have worked for 25 years in the housing association sector and most of what we do at HATC continues to revolve around delivering products and programmes of affordable housing. The relevance of this is that my approach to dwelling space standards comes from the perspective of long term landlords who need dwellings to accommodate households in the long-term. If, after some time living in the property the occupants – often a growing family - wish to move somewhere else then the housing association has a decant problem. This is very different from the perspective of private house builders, for whom the important thing, of course, is whether the household finds the dwelling attractive at the point of sale. There is less built-in incentive for a private house builder to worry about whether that enthusiasm for the dwelling remains with the householder over the long term.

Our particular involvement in space standards research started ten years ago when we produced the National Housing Federation's *Guide to Standards and Quality*. This drew on Parker Morris and the BRE's Housing Design Guide at that time, but from the perspective of usability by residents. We also did a report for the GLA in 2006 titled *Housing Space Standards* and we have been updating the National Housing Federation's *Guide to Standards and Quality*.

I am going to report on two research projects which we are undertaking, commissioned by English Partnerships and CABE. The first looks at the sizes of a sample of dwellings being built in London and the South East. For this we obtained sales details from house builders - from their websites or by posing as purchasers and ringing up and getting marketing information. We then measured the plans in the sales details and identified the dwellings' Gross Internal Area and the Net Internal Area – in accordance with the definitions used by the RICS.

The second piece of research is into resident satisfaction with dwellings built in London and the South East since 2003. This was a postal survey that we commissioned Ipsos MORI to undertake for us. Its purpose is to find out what has been built and how much people like it. The map in illustration 1 shows the geographic area of both studies.

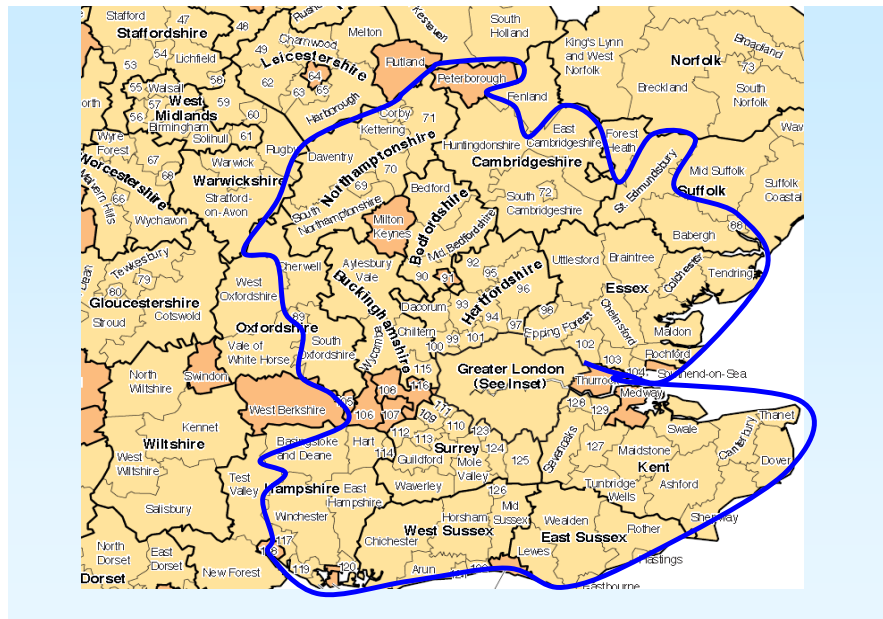


Illustration 1: geographic area of both studies

As I mentioned in the first study we measured the Gross Internal Area. This is (roughly) the area of the dwelling within the structure - the separating walls (no internal partitioning within the dwelling is included in the GIA), kitchens, corridors and so forth. The Net Internal Area excludes bathrooms and separately partitioned off corridors, stairs and landings. We also measured the kitchen area, storage, utility and notional corridors – areas of rooms which one cannot really live in or put a piece of furniture in because it is a necessary transit route. We have called the space that excludes partitions, bathrooms, storage, corridors etc “habitable area”.

You can see the average Gross Internal Area of what is being built in the graph in illustration 2.

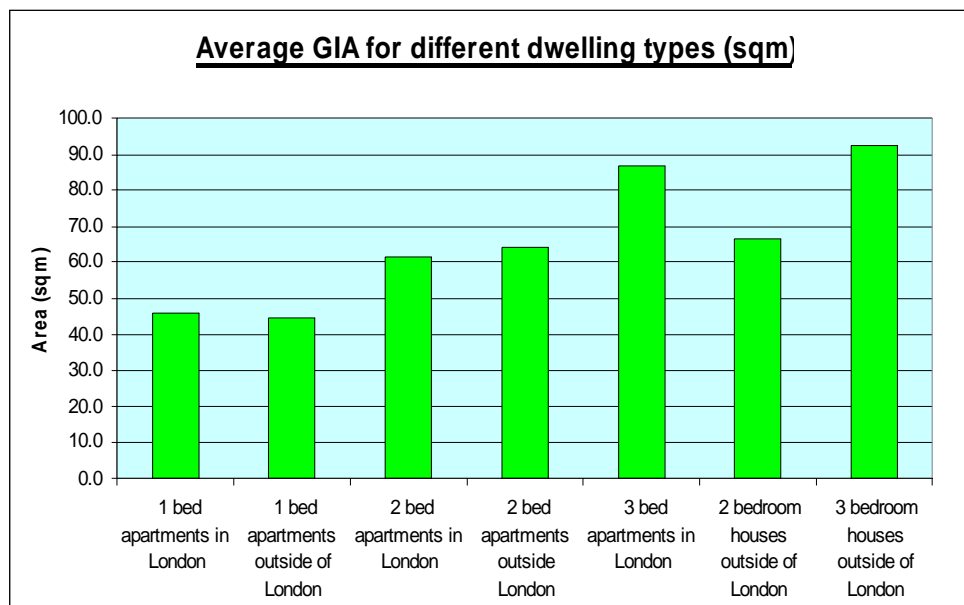


Illustration 2: average gross internal area for different dwelling types



We tried to avoid including the penthouses and the extremely large luxury detached dwellings in the survey, so we selected properties that were within council tax bands A to D. Roughly speaking, for inner London this was properties with a value of around £325,000. We used different price bands in different parts of that overall geographic area, but the idea was to select dwellings within council tax bands A to around the top end of council tax band D. There were very few three-bedroom houses, as you can imagine, inside London that fell within that price limitation. The one-bed apartments, inside and outside London, are approximately 45 square metres, the two-bed flats in and outside London are approximately 60 square metres, the two-bed houses outside of London are approximately 65 square metres and a three-bed flat at about 85 and three-bed houses – I think there were only three of those – at around about 90 square metres.

We consolidated the two bed flat areas within London and outside London into the pie chart in illustration 3 which shows the breakdown of the Gross Internal Area (which for the two-beds is around about 60 square metres). So the whole pie is 60 square metres and, of that, a bit less than a quarter is bathrooms and separately partitioned off corridors. A bit less than one-tenth, so a bit less than six square metres would be the kitchen. There is two per cent for storage (just over a square metre) and then one per cent for utility. If I say utility you might be thinking of a nice separate room next to the kitchen with space for a washing machine and things like that, but quite often it is a cupboard with a boiler in it or maybe a very small utility area. There is a notional corridor which would be about three per cent. 62 per cent, therefore, of the two-bedroom flats, less than two-thirds, is what one might call habitable area. A bit less than two-thirds of the gross internal area therefore is useable space where the residents can relax, entertain friends and do normal living activities.

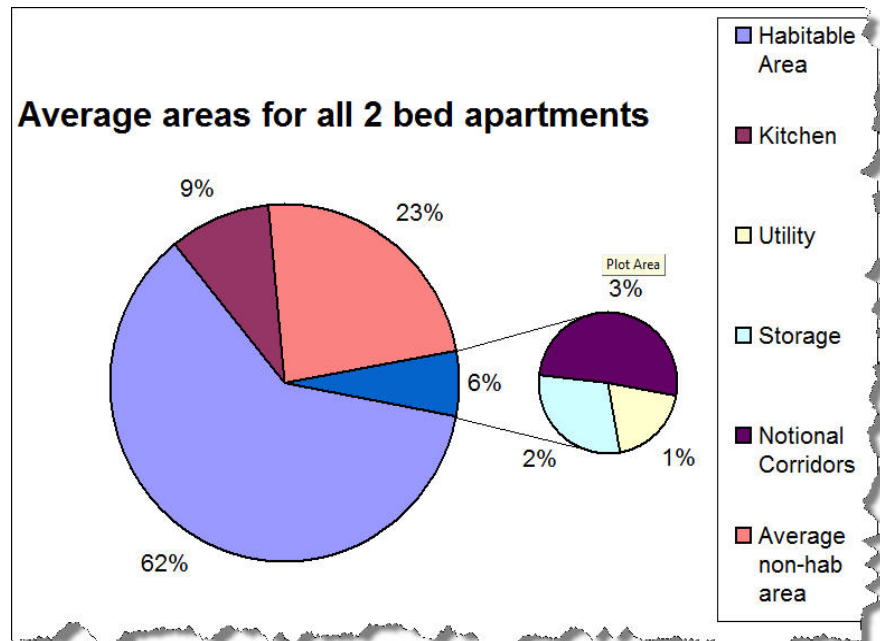
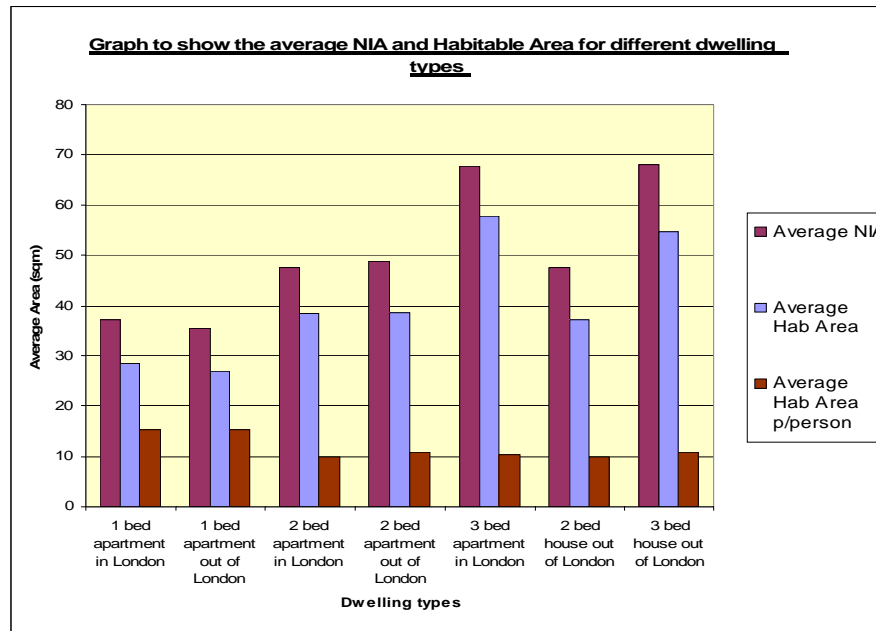


Illustration 3: Average areas for all two bedroom apartments

Two-bed houses had a similar arrangement but some different figures. These were 67 square metres on average and about nine per cent of that is kitchen. There is about

three per cent storage space in the houses. There is the small utility area again. But in the two bed houses only about 56 per cent of that 67 square metres is what we might call habitable space - just over half. There is less useable space because of the stairs and landings.



*Illustration 4: how the NIA is distributed*

The graph in illustration 4 sets out the Net Internal Area for the different dwelling types. For the one-bed flats in London and outside London we are looking at the mid 30s square metres, and high 40s for the two-bed houses outside London. The blue-purple lines are the average Habitable Areas (the living area, the bedrooms, the dining area). What we see from this is that for the one-bed flats there is less than 30 square metres, for the two-bed flats, less than 40 square metres.

We then investigated how much space that would be per person who is likely to be living in the dwelling. That meant we had to take a view on how many persons were supposed to be living in each of the dwellings that we were measuring. Fortunately in very many cases the marketing details from the house builders provided that information in the indicative furniture layout. We were able to see if the rooms had a single bed or a double bed and then just counted the number of bed spaces for the dwelling. We had to interpolate a few because some house builders do not provide indicative furniture layouts. Some of the house builders would give furniture layouts on some of their dwellings and not on others so we would judge what kind of threshold they would indicate going from a single bed to a double bed. We found that if a room is eight square metres or more it is generally counted as a double bedroom. Therefore if it is eight square metres or more then either because the house builder has told us they expect two people to be sleeping in that room, or because we interpreted that from comparables, we scored that as a two-person room. A single bedroom would be one which is smaller than that, and of course some of them were quite a lot smaller than that - I think 4.3 square metres was the smallest of the sample that we came across.

Using that assessment of the numbers of people per dwelling we found that the one bedroom dwellings are about 15 square metres per person. What I found interesting was that once you get above a one-bed dwelling, then whether it is a two-bed flat, a

two-bed house, a three-bed flat or indeed a three-bed house, there is an average of 10 square metres of habitable area per person, very consistently across all the different dwelling types.

So that was an extract of what is being built.

The resident satisfaction survey is a postal survey by Ipsos MORI with just less than 2,500 responses. It was targeted on Greater London and the South East – dwellings within one hour's travel distance from the middle of London. This stemmed from the concern of the clients that space standards appear to be shrinking, particularly in the high pressure housing bubble environment of the London and South East area.

Therefore the idea was to investigate in what might be the most vulnerable parts of the market to see if there are particular pressures being experienced there. If not, then the rest of the country is probably managing quite happily, so that was the geographic area we looked at.

Just over half of the respondents are in flats and a bit less than half are living in houses and bungalows (but I think we only had about two or three bungalows). Ninety per cent were under-occupied, only ten per cent were fully occupied. By fully occupied we mean that the number of people who are either adults or ten years or older – what we call big people, and many ten-year olds can be really quite large – equates to the number of bed spaces in the dwelling. About a third were rented, about two-thirds were owned. Interestingly enough, if you look at just the full occupiers, that percentage is roughly reversed - here 60 per cent are rented and 40 per cent are owned. 86 per cent were one-person or two-person households – picking up the point which Mike was alluding to earlier on (Symposium paper 03) about the changing demographics. 78 per cent were in the smaller properties A to D.

The questionnaire had 13 questions about household and dwelling, 23 questions about satisfaction. If you want to undertake a satisfaction survey of people's homes and ask them a question such as "Would you prefer it if you had more space in your home?" we probably know what the answer would be. To try and avoid the pitfall of asking such unhelpful questions we spent some time with Ipsos MORI trying to craft questions which were not just asking the blindingly obvious. The questions that we asked were things like: "If someone else is watching television or playing music in the living area, is there somewhere else you can go that is suitable and quiet?" "Does the amount of space in the corridors and stairs within your home make it difficult or easy to move the furniture around?" "Is the total storage space available in your home sufficient to accommodate everything you need?" So we tried to be as specific and objective as possible about how the dwelling could be used by the residents, rather than asking subjective or aspirational questions.

We are still crunching these numbers, I am afraid, so I cannot give you any detail, but I can give you a flavour of what I really do need to badge as provisional findings.

We ranked the areas of dissatisfaction. The area of most dissatisfaction was – and this surprised us all, I think – is that there really is not enough space for two or three small indoor recycling bins in the kitchen. You may wonder why on earth we were asking

whether or not there is space for recycling bins in the kitchen – as I am sure you know, it is a requirement of the Code for Sustainable Homes.

The next area of dissatisfaction was having insufficient space for small children to play safely in the kitchen while a member of the household is preparing food. If there is

not enough space for a child to do that safely in the kitchen (which is of course a dangerous area) then the child is somewhere else, possibly out of sight and therefore not being supervised and doing something possibly just as dangerous.

Next was lack of storage space within the home – that is an old chestnut, I think everyone knows that there have been lots of grumbles about that for decades.

In fourth place was having no choice on furniture layout: you can get your furniture in but there is only one way of positioning it; you cannot put the sofa or bed in a different position. There was a general issue of not having enough space for all the furniture and the decorative objects that one would wish to have.

Just to give you an idea of the range of dissatisfaction, there was a ratio of 73 per cent to 20 per cent of those who expressed a view who said there was not enough space for recycling bins. For the issue of not having enough space for all of one's furniture and decorative objects we had more balance between dissatisfaction and satisfaction at 46 per cent to 42 per cent.

The main areas of dissatisfaction which seem to be emerging are to do with kitchens, to do with storage space, to do with general space and to do with privacy. One of the main concerns being is there enough space in the bedrooms for your kids to entertain friends privately. The high level of dissatisfaction about this issue suggests that in many cases there isn't enough space, which means that the teenage kids have a choice of entertaining their friends near the dreaded parent, or maybe going out and meeting their friends outside – and doing what?