



No-where is space considered more of a premium than in London's inner city. An innovative partnership between Notting Hill Housing (NHH), Wilmott Dixon and PRP Architects is looking to address the issue of space and housing for young adults by creating a design for the UK's first airy and light 35m² apartments. PRP's project team, associate director Ziba Adrangi and architect Jordan Perlman, outlines this new and innovative approach to housing design

> ondon covers an area of 1,584km² and has a population of ■ 7.2 million people. It is also one of Europe's most densely populated areas, with a population density of 4,573km2. What many people may not realise however is that 47% of its population comprises people aged 16-44, 5% of which is made up entirely of students in higher education. Compounded by London's infamous housing prices, the city remains at risk of alienating the very population it is trying to retain and attract; the younger population that will drive the city's socio-economic growth forward. The pressure to find suitable housing for London's young adults ultimately rests on housing associations like Notting Hill Housing, who until today, have been struggling to find inner city housing solutions which younger people can afford.

Compact apartments have been around for years. But unfortunately most people's memory of them is based on the dismal and dank shoe box-sized studio flats of the 1960's. However, some classics prevail and it was from one particular historical project that NHH wanted to base a new creative design concept for housing London's younger population.

Ingrid Reynolds, Director of Development and New Business for NHH, said: "Location, space and cost are the key issues for people who are looking to live and work in inner cities. We wanted to find new ways to provide more housing which is

Small is beautiful

attractive and suitable for urban life. We took our inspiration from the Isokon flats which we now own and manage. The Isokon flats were designed as a 'machine for living' in the 1930s and have since become a

As part of its new campaign to make home ownership affordable to more people in London, NHH sought out architect, PRP, to research and develop a compact flat design, one which could be turned into a range of stylish apartments for first time buyers. The target audience would be graduates, keyworkers or individuals.

Adrangi and Perlman's early research led to the conclusion that the key to maximising the potential of prime London sites, in order to increase financial viability, was to minimise the frontage of the flats. The

challenge was to achieve a sense of generosity, space and light within these tight spatial constraints

"We set out to incorporate separate living and sleeping rooms within a frontage which would be considered wide enough for one room only in a conventional layout. Importantly, we have succeeded in achieving separate windows for both these rooms for natural light and

It was from the automotive industry that we found our inspiration. The SMART car, with its many incarnations on the same basic chassis, exemplifies how a compact and well designed product can offer choice, style and elegance.

The plan depth of the onebedroom flat is the common 'chassis' for the PRP range, which includes a

bedroom duplex, amongst others. We have explored a number of block layouts to suit different contexts and have developed strategies and options for creating different massing and elevation treatments. Specification and colour for external materials and

studio, a two-bedroom flat and a two-

further scope for variety and choice. The design concept has evolved around basic principles that include:

internal fittings and finishes provide

- · Narrow frontage to maximise use of limited land to increase affordability
- · Deep plan to maximise space availability per given frontage
- Integral balcony for every flat
- Flexible internal lay-out to create the feeling of space
- · Simple, attractive, integrated storage and furniture to maximise use of space
- Stylish and robust finishes

With environmental sustainability arguably one of today's greatest concerns, it was imperative that our proposals followed a holistic approach to energy use. The design therefore focuses on minimising the use of both embodied energy as well as energy in use. The external envelope is designed to ensure that little or no space heating is required, through measures including triple low E glazing and superinsulated walls, floors and roofs. A communal approach to heating would lead to low energy bills due to increased boiler efficiency and economies of scale, whilst leaving scope for future proofing. At key stages during the lifetime of the building the central plant can easily be changed, without disruption to the rest of the accommodation, to take advantage of the most sustainable sources of energy available at the time. The design incorporates the requirements of the GLA for 10% renewable energy and would consider bio fuels, solar thermal panels, micro turbines and photovoltaic

The modular nature of the design provides great scope for a range of modern methods of construction. The proposals include the use of bathroom pods and a specially designed range of kitchens. The building frame will be a proprietary light gauge steel system for buildings up to six-storeys high. Concrete or a mix of concrete and

steel frames will be used for taller buildings. The elevations will use off side manufactured panels and other standard window and door

This page: Despite a single aspect and narrow frontage, the concept demonstrates that a small space can be attractive. As can be seen from these images, the design of the flats provides separate living and sleeping rooms with generous windows

for natural light and ventilation

components, requiring minimal wet Compact modular shower rooms, kitchens and built-in furniture, specifically developed for the projects, will increase the apparent sense of generosity by using the available space very efficiently. Planning how small spaces can and should be used is critical to creating a successful compact flat. There is no reason why a small space can't be attractive, and above all, useable and enjoyable.

We have been able to demonstrate that flat blocks based on our compact one-bedroom apartment can generate up to about 40% more units on a given site than conventional

one-bedroom flats. This increase in yield is expected to contribute to reducing the cost per unit of the development. Standardisation would also lead to substantial cost savings through economy of scale and favourable deals with established supply chains, while maintaining a high quality of style and finishes."

The Notting Hill compact flat is designed to offer young first time buyers a fashionable and modern flat in vibrant central locations, NHH commissioned market research to assess the trade off between many issues including space standards, commuting time, access to shops, service, night life, parks, gardens and balconies. It concluded that good access to public transport and services is particularly vital to the viability of the proposals. The residents need to have easy access to transport links, which makes the flat concept a particularly viable design - it can be built above other uses including retail units and offices in accessible city centres and complements the more conventional flat types currently developed in these locations. It can also be built alongside family flats and duplexes, which will help contribute towards the vision of creating successful. sustainable mixed communities BER

With thanks to PRP Architects. www.prparchitects.co.uk







Top: View from above showing the flat's internal layout; Right: How a proposed block would look from the street; Below: The balcony which brings a little of the outside, in



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