



To be a world-class business generating long-term value by creating successful, sustainable places where people aspire to live



# HOMES

DEVELOP INDIVIDUALLY DESIGNED, HIGH QUALITY HOMES WITH LOW ENVIRONMENTAL IMPACT



This report covers performance during 2012 - 2014 and sets out goals for 2014-2016.

# HOMES



DEVELOP INDIVIDUALLY DESIGNED, HIGH QUALITY HOMES WITH LOW ENVIRONMENTAL IMPACT



1st

private developer to commit to minimum space standards across its portfolio

91%

completed homes designed to the principles of the Lifetime Homes Standard

31%

completed homes with smart meters

98%

new homes to be certified to at least Level 3 of the Code of Sustainable Homes

58%

completed homes supplied with energy from low carbon or renewable technologies

Best London Home

awarded to 375 Kensington High Street at the London Evening Standard Awards 2014

18%

reduction in water consumption of completed homes compared to the building regulations

93%

completed homes with recycling facilities



## INTRODUCTION

This report sets out our approach in the business area of Homes. It provides performance information on the commitments that we had in place from 1 May 2012-30 April 2014 and outlines our goals for 2014-16.

## OUR APPROACH

Each of our homes and developments is bespoke and we use qualified architects to design each scheme. Attention to detail in design is paramount to ensure homes meet the needs of our customers and our specifications are planned to meet the varied needs of all types of homebuyers, from luxurious houses to key worker apartments.

The impact on the environment throughout the lifetime of the home is considered during its design with an aim to minimise impacts and provide home owners with the opportunity to live more sustainably.

The high quality finish which we demand in our new homes requires a skilled workforce and thorough checks before handover.

We believe in creating high quality homes and places together with also promoting design quality across the industry.

Standards Connectivity  
Design Attention to detail  
Innovation Develop skilled  
Performance Quality  
Homes Bespoke  
Spacious Specification  
Sustainability Flexible



## WHAT WE'VE DONE: 2012-2014 PERFORMANCE AT A GLANCE

Carry out post-occupancy monitoring of electricity, water and gas/heat consumption in order to measure the success of our designs and to influence the design of future schemes.



Monitor the indoor air quality of at least one completed home and use the findings to influence future design and specification choices.



Apply the Lifetime Homes principles in the design of all new homes.



Develop minimum design standards on all Berkeley homes including standards for sound insulation, space, storage and overheating.



Design all new homes to achieve at least Level 3 of the Code for Sustainable Homes.



Undertake R&D to understand the implications of the Government's proposed zero carbon standard on our future developments.



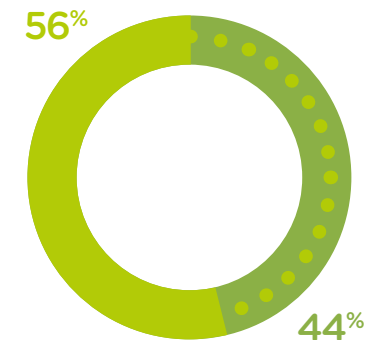
Design all new homes to achieve water use of 105 litres per person per day.



Provide recycling facilities for every home.



Work with an external organisation to promote resident recycling.



- Fully achieved
- Partially achieved
- Not achieved

Four of the nine commitments were not fully achieved during 2012-14. This was typically due to a small number of non-compliant developments, the details of which are outlined in the body of this report.

Key: Fully achieved Percentage achieved Not achieved



## WHAT'S NEXT? COMMITMENTS FOR 2014-2016

We have set three stretching commitments in the area of Homes to further improve our approach during 2014-2016. These are in addition to a number of business-as-usual actions, many of which are a continuation of or have evolved from the commitments we have had in place in previous years.

### ENABLE FIBRE BROADBAND ON ALL OUR NEW HOMES AND PROVIDE COMMUNITY WI-FI



The internet is now regarded as the fourth utility, with customers demanding better connected homes.

Our commitment is to ensure that fibre optic infrastructure is enabled in our homes and, where possible, this should be ready to use on move-in day. We will also provide community Wi-Fi on large developments with commercial centres.

### GUARANTEE SPACE STANDARDS FOR ALL NEW HOMES



Lack of space is one of the most common reasons why customers choose not to buy new build homes.

In response, we are the first private developer to commit to minimum space standards across its portfolio. We are committed to ensuring three core aspects in every home we build, covering master bedroom size, floor-to-ceiling height and storage space.

### LAUNCH A NEW R&D PROGRAMME TO UTILISE CUSTOMER FEEDBACK AND DRIVE INNOVATION THROUGH IMPROVED DESIGN



The design of our homes is continuously evolving. To help this process we have committed to launching a new research and development programme.

Customer feedback will be key to informing our approach and will help drive innovation through improved design. We also intend to trial new processes, materials and products to further improve our homes.



## OUR VISION: FOCUS ON HOMES

### What kind of homes do we build?



At Berkeley we build homes for everyone. Over the last five years, we have delivered 15,750 new homes. These include private homes, student housing and affordable homes. Providing homes for the UK's growing number of elderly citizens is also part of our business.

The homes we create vary from new-build to refurbishment, from apartments to family homes.

### Our Vision: the plan for the business



Homes is one of the five focus areas within the Our Vision plan for the business alongside Customers, Places, Operations and Our People. As a residential-led developer, building high quality and well designed homes is fundamental to our business and is intrinsic to all the other areas of Our Vision. It is demanded of us by our customers and helps to set us apart from volume house builders.

Opportunities to improve our designs and layouts are identified from a number of sources, such as customer feedback, new materials and products, and research and development. In addition to the bespoke design we undertake for each new scheme, every two years we set new targets across the Group to improve our approach, with the ultimate aim of creating high quality homes. In April 2014 we held a materiality session with industry professionals and members of our supply chain which highlighted key issues we should try to address. This session highlighted that we should look at issues such as flexibility and connectivity.

### Focusing on homes throughout the development process



It is clear that to have a successful business, our focus has to be on the end product of the homes right from the outset. During the design of the development we consider the most appropriate layout and specifications and our construction teams build the homes to a high standard, with an attention to detail which sets us apart.

Ultimately, the number of homes we sell, the levels of repeat business and customer feedback is testament to the high standard of home we design and build.



## BESPOKE DESIGN

The design quality of our buildings is paramount and there is no generic Berkeley scheme. We use architects on every project, something which is uncommon within the industry, to ensure that each of our developments is bespoke, providing unique homes whilst linking to the local context. Our designers range from world-famous architects like Foster + Partners working on The Corniche on Albert Embankment, to smaller practices like BHP Harwood producing an intelligent design to restore a magnificent Grade II listed building at St Joseph's Gate in Mill Hill. We also use focus groups to influence future schemes by asking potential residents about the design features and level of specification they would require.

375 Kensington High Street was awarded 'Best London Home' at the London Evening Standard's New Homes Awards 2014. The accolade was selected on criteria including innovation, quality of design and utilisation of space and light.

We aim to promote good urban design across the industry and stimulate discussions around the topic. In summer 2013 we responded to the Farrell Review of Architecture and the Built Environment, and we sponsor events such as the London Festival of Architecture and Urban Design London.

We have a Technical Committee which meets six times a year to discuss items such as design, layout and specification and share best practice.

### CASE STUDY

## SPONSORING THE LONDON FESTIVAL OF ARCHITECTURE

## LONDON FESTIVAL OF ARCHITECTURE



Our Group Managing Director Rob Perrins, spoke at the opening of the London Festival of Architecture in June 2013, focusing on how architecture matters to the people of London.

A number of our sites were also opened up to the public, including Fulham Reach in Hammersmith. Attendees were asked to discuss the innovative architecture where modern design complements the more traditional warehouse aesthetic and how involving the community from the outset has helped direct the design to respect the surroundings at this sensitive riverside location.



## DESIGN STANDARDS



COMPLETED HOMES  
DESIGNED TO THE  
PRINCIPLES OF  
LIFETIME HOMES



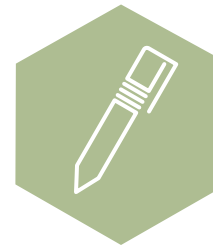
PRIVATE DEVELOPER  
TO COMMIT TO  
SPACE STANDARDS

We are proud to be the first private developer to commit to minimum space standards across our portfolio. These include aspects such as the master bedroom size, floor-to-ceiling height and storage space. Our Technical Committee has also compiled other internal standards which are used during design.

In 2012-14 we set a commitment to apply the principles of Lifetime Homes to the design of all new homes. For each scheme and dwelling we undertake an assessment of the application of the criteria to determine how the principles can be met, and incorporate those that are appropriate for the scheme. The principles were applied within the design of 91% of the developments during 2012-14; we will do further work to increase this percentage to our target of 100% in 2014-16. In 2013-14 37% of our completed homes met all 16 Lifetime Homes criteria.

## ATTENTION TO DETAIL

One of our company values is excellence through detail; this is applied at each stage of the project to create exceptional homes.



### DESIGN

We hold regular project design meetings to review the specification involving each relevant team at every level of the business.



### CONSTRUCTION

High standards of build quality require a skilled workforce and attention to detail. We use our marketing suites as the benchmark for build quality and finish in each individual home.



### HANDOVER

Each of our operating companies maintains a quality management system which includes procedures for checking quality and checklists for completion by various teams prior to handover.





## UNDERSTANDING PERFORMANCE

Our homes are designed to high standards with the aim of ensuring our customers can live in them comfortably and with minimal impact on the environment. Understanding if our buildings are performing as designed is vital.

Over the last two years we have sought to determine the in-use performance of the homes that we build in more detail by undertaking post-occupancy evaluation.

In recent years the indoor air quality (IAQ) of new, energy efficient homes has been the subject of academic research. Studies have highlighted that airtight homes can have a negative impact on IAQ, with overheating highlighted as a specific issue. We used monitoring equipment within an occupied south-facing apartment at Woodberry Down in Finsbury Park to capture real time data on factors such as carbon dioxide, humidity and temperature over a period of just under a year. Design calculations were compared against the actual readings and this led to the compilation of an overheating study with recommendations for enhanced design standards, above industry standard practice.

### CASE STUDY

## ASSESSING IN-USE ENERGY PERFORMANCE

The in-use energy performance of homes at The Warehouse, Royal Arsenal Riverside, Woolwich has been reviewed using meter readings and thermographic surveys of the building.

When comparing this information against the predicted heat use, it has been demonstrated that the building is performing well in relation to the design calculation.

The thermographic survey of the building indicates that there are no significant breaks in thermal insulation or variations in thermal performance of the façade. Indeed there is a remarkable consistency of minimal heat loss throughout, indicating a high level of workmanship and quality control during the build phase to ensure that the built product performs as it was designed.





## CONTINUOUS IMPROVEMENT

The design of our homes is a continuously evolving process as new technologies are developed, new building methods emerge and we improve the environmental performance of our buildings. To ensure the quality of our product moving forward we will build on the research we have already undertaken.

This is reflected in our new 2014-16 headline commitment to engage with customers and use their feedback to further improve our designs and specifications, whilst helping to address issues that have been encountered by the industry such as overheating and indoor air quality.



## ENVIRONMENTAL PERFORMANCE STANDARDS



NEW HOMES TO BE CERTIFIED  
TO AT LEAST CODE LEVEL 3

As a responsible business we believe that we should not only ensure good environmental performance in our own business activities but that we should also enable those who live in the homes we build to operate them efficiently.

We are awaiting the implementation of significant changes arising from the Government's Housing Standards Review, particularly in areas such as energy and water efficiency. Berkeley supports the intention to simplify the large and complex range of local and national standards, rules and codes that housebuilders face and responded to the Government's consultation to this effect. We also provided a response to the Government's Allowable Solutions Consultation in October 2013.

Whilst we await the outcomes of the above consultations we continue to commit to certifying all new homes to Level 3 or above of the Code for Sustainable Homes standard. Of the homes we submitted to planning during 2012-14, 98% will be certified to at least Code Level 3. One planning application did not include our commitment to Code Level 3; this was for a site of 65 homes which was ultimately not purchased or built out.



## ENVIRONMENTAL FEATURES

The environmental impact of our homes is considered at every stage, from the way we design the homes to ensure they are efficient to the features that we include in the homes once they are built. We aim to help our customers in improving environmental efficiencies by installing features such as energy and water efficient appliances, smart meters and low carbon or renewable energy technology.

In 2012-14 we set a commitment for every new home to provide recycling facilities. 98% of all our developments submitted to planning met this commitment but it was not fully achieved as one site of 65 homes was never purchased or built out.

To encourage water efficiency of our homes we set a commitment to design all new homes to achieve water use of 105 litres per person per day. This commitment was applied to 96% of our homes and was not fully achieved due to two sites, one which was never purchased or built out and one development that consisted of just six homes. We will continue to work with our project teams to ensure that we provide such facilities on all developments regardless of size.

### CASE STUDY



## PROMOTING RECYCLING

At Napier Square in Acton, we worked with the local council to encourage resident recycling.

We commissioned Waste Watch to deliver a door-knocking and engagement campaign, with the aim of encouraging the residents to participate in recycling, to gather feedback on the waste and recycling services, and to provide a half-day training session for the estate site staff. During the door-knocking campaign of 833 properties, 365 residents were successfully engaged.

The development became the first in the borough to introduce council food waste recycling collections. All residents have received a kitchen food waste caddy, a six-month supply of compostable caddy liners and information about the service.

At Woodberry Down in Finsbury Park, in addition to facilities for typical waste streams a permanent unwanted clothes facility has been put in place; this helps residents reduce waste whilst at the same time supporting Shelter's work with the homeless.

# HOMES



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## DATA APPENDIX

	2010	2011	2012	2013	2014
Percentage of new homes designed to the principles of the Lifetime Homes standard	-	-	-	86%	<b>83%</b>
Percentage of completed homes designed to the principles of the Lifetime Homes standard	-	29%	44%	52%	<b>91%</b>
Percentage of new homes to be certified to at least Code Level 3	-	-	-	95%	<b>100%</b>
Percentage of completed homes certified using the EcoHomes methodology	46%	30%	19%	13%	<b>14%</b>
Percentage of completed homes certified using the Code for Sustainable Homes methodology	18%	35%	62%	63%	<b>54%</b>
Average SAP rating for completed homes built to pre-2002 Building Regulations	72.7	71.9	66.2	44.6	<b>29.5</b>
Average SAP rating for completed homes built to 2002 Building Regulations	82.0	78.9	86.9	76.3	<b>78.2</b>
Average SAP rating for completed homes built to 2006 Building Regulations	80.3	81.5	81.0	80.2	<b>80.0</b>
Average SAP rating for completed homes built to 2010 Building Regulations	-	-	82.5	83.1	<b>82.8</b>
Percentage of completed homes provided with energy from low carbon or renewable technology	-	50%	56%	63%	<b>58%</b>
Percentage of new homes designed to have a maximum water usage of 105 l/p/day or less	-	-	-	91%	<b>100%</b>
Average water efficiency of completed homes (l/p/day)	-	100.2	99.9	101.8	<b>102.3</b>
Percentage of new homes that will be provided with recycling facilities	-	-	-	95%	<b>100%</b>
Percentage of completed homes with recycling facilities	-	85%	90%	93%	<b>93%</b>