

Iconography of home
Crafting modern houses which
feel like home



In this chapter we explore the characteristics that make a house homely. Engendering a sense of belonging, an abundance of light, and spaces that suit 21st century living are essential characteristics in what we are calling the iconography of home.

What do we mean by the iconography of home?

The love affair with suburban life has generated a lexicon of recognisable symbols that act as signifiers of warmth, protection, privacy, safety, retreat, nurture, welcome, comfort and personal expression. Examples from the past are numerous – the arched front door, the hearth, the stoop, the porch, the lych-gate, the chimney breast, the bay window or the cat-slide roof. High garden walls, closed gates, privet hedges, the crunch of gravel on the garden path all hint at family life beyond and create layers of arrival and privacy. They embed the home in its setting.

Roofscapes often define the street, framing views with their silhouette or creating a sense of protective enclosure and often coming close to the ground to bring roofing materials within reach.

The recognisable motifs of our homes also extend within, revealed in details from celebratory staircases to decorative fire places and hearths, elaborate picture rails, ceiling roses and wood panelling. This iconography reaches through the home to the rear garden – a private oasis, a retreat or perhaps a productive landscape where food is grown and we reconnect with nature's seasons and cycles. The garden is a private opportunity to rehearse our relationship with the world around us.

The ubiquitous 'period feature' of the estate agents' blurb offer motifs that celebrate craft and artistry. Pioneers in suburban architecture such as Frank Lloyd Wright, Norman Shaw, Parker and Unwin all understood there should be an identifiable human touch in the expression and details of the home. The search for and co-ordination of these human details is what we call the 'iconography of home', or more simply we talk of designing 'house shaped houses for people shaped people'. The best modern neighbourhoods use and evolve these signifiers without resorting to pastiche.

In this chapter we will look at why the iconography of home is important in the 21st century and what lessons we can take from successful places. We then consider the contributing parts of a modern iconography of home through more recent examples.



A common trait of popular suburban architecture is that it has an identifiable human touch as shown in these homes, including Cane Hill Park, above and others below.



Frank Lloyd Wrights House and Studio in Chicago where the strong expression of the gable acts a signifier of the domestic life within



Front boundaries and tree planting are designed to harmonise the homes with their setting at Leithfield Park



The informal compositions of homes in Bedford Park bring together gables, bays, chimneys and traditional materials farmed by hedge boundaries



The informal arrangement of gables and roofscape at Leithfield Park echo the tree lined setting which frames the neighbourhood

Why do people prefer period homes?

Evidence suggests that when choosing a home these days we don't get a rich emotional response from new neighbourhoods. As the RIBA found in its 2011 publication, *Case for Space*, many purchasers don't even consider the option of a new build home, or at least not until all other options have been exhausted. There is a growing level of public disquiet at the quality of new developments – which is hampering much-needed housing delivery.

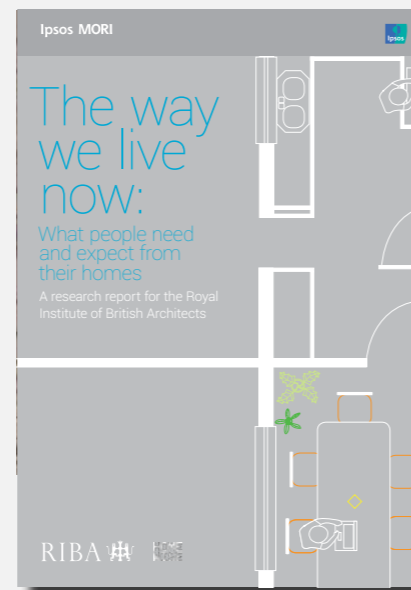
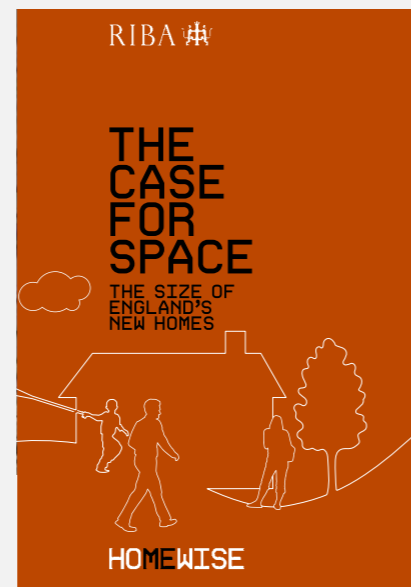
Working with communities across the country we repeatedly hear of an assumption that new homes will be smaller yet more expensive than the second-hand equivalent, and will be of poor quality. The loss of the human craft and artistry in building, regularly features in the national press and various political enquiries pointing to basic quality problems in many new build homes. The Home Builders Federation 2017 customer satisfaction survey found that 98 per cent of purchasers had reported snags and problems with their new homes since moving in – with 25 per cent reporting more than 16 faults, and 38 per cent experiencing more problems than expected.

We appreciate the deep emotional bond that people feel for their chosen home. We understand the layers of memory, culture and aspiration that come together to create this bond. Research by the RIBA from 2012, *The way we live now*, points to this connection being the overriding factor for many choosing a home, yet HSBC's 2012 survey of 2,000 home purchasers reported that couples spend longer choosing their summer holiday or the menu for a party than a new home.

While this might seem an extraordinary way to decide on the biggest investment that most people will make, perhaps this speed of decision making reflects an intuition for the combination of setting, appearance and layout of the home that we immediately respond to.

In short, we need new homes to appeal immediately; otherwise they will continue to find few home purchasers. We think this is best achieved through a modern iconography of home.

We can see from neighbourhoods featured in this report that a distinctive iconography of home can dramatically change the desirability of the homes. For example, at Hanham Hall, England's first large scale zero carbon housing development on the outskirts of Bristol, 96 per cent of the new residents never considered living in a new build home before and



had moved from period properties. Hanham Hall's unique iconography of home is a celebration of the relationship between the homes and the generous open spaces throughout the development along with more flexible internal layouts that meet modern modes of living.

This ability to inspire and encourage people to enter different parts of the housing market has never been more important. If we are to meet housing demand by increasing the supply of new homes, it must be because people positively want them, not because it is their only affordable option. Communities must be able to choose to build new neighbourhoods confident that they will leave a legacy for future generations that contributes to our rich heritage – and which are better than many of those which came before.

Learning from successful neighbourhoods

We think that fundamental to creating successful new housing is a harmonious and symbiotic relationship between the way we live, the setting and the home. In our most loved cities, towns and villages this relationship can be found in the wider composition of a neighbourhood's open spaces and streets, into the gardens and rooms of the homes, through to the smallest of details – window frames and door handles – and everything in between.

This continuity might be found in long-established rural settings. Equally, it may reside in the composed civic confidence of Georgian squares.

We are fortunate to enjoy a rich heritage of desirable neighbourhoods across the UK: so why can't we merely replicate them to meet today's housing needs?

Many desirable places to live have evolved over hundreds of years. This allows successful elements to endure, while the less harmonious fall away or are replaced. It is challenging to attempt to replicate this organic form of growth quickly through a much shorter design process.

The New Urbanist approach of replicating historic exemplars, almost as a stage set, ignores the fact that our lives have changed dramatically in the intervening centuries. Some buyers will pay a premium for period homes and then strip out and modernise the interior to suit a 21st century lifestyle. Changing demographics, shifting lifestyles, new technologies and increasing appreciation of our impact on our natural world: all these require new solutions, not copies of past ones. How we make reference to the past will be just one of many strands that come together in our modern-day iconography of home.



At Hanham Hall the homes enjoy first floor living rooms with large balconies and glazing that enjoy views onto open spaces



The gentle crescent of interconnected villas at Cane Hill Park draws on our Georgian heritage with townhouse living rooms overlooking the village green

Finding a modern iconography of home

There are four key challenges to creating new homes which are fit for today and better than those which came before: firstly, the fundamental qualities of light and space; secondly, the arrangement and adaptability of rooms for modern life; thirdly, embracing modern ways of crafting beautiful new homes that also refer back to our heritage; and finally, encouraging individual expression that will make a house feel like a home.

Light and space

It starts with light and space. In stark contrast to many new homes, popular period properties enjoy generous floor to ceiling heights and large windows, often in rooms with a dual or triple aspect. The most generous of second-hand homes will achieve daylight factors of 5 per cent in main living spaces and have ceiling heights reaching to 3 m or more. By comparison, ceilings in new build homes might be as low as 2.3 m and achieve daylight factors of less than 0.5 per cent. Yet historic properties are often difficult to heat, in part because of this combination of large windows and their greater volume. They were never designed with the benefit of modern materials or computer simulations, and heating costs are at least double those of contemporary homes.

Well-designed modern homes can provide both – the space and light of period properties and the sustainability credentials of contemporary housing. Some of the designs in this report feature spectacular vaulted living space extending to 4 m in height and delivering daylight levels in excess of 10 per cent – double those historic precedents. These can be achieved by opening up roof space and introducing roof lights, full-height glazed doors to balconies and further high-level windows.

A pair of new exemplar homes, the 'VELUX Carbonlight houses', achieved an average daylight factor across the whole house of 5 per cent while the main living space reached as high as 10 per cent. Again, at Hanham Hall first-floor living spaces rise up into vaulted ceilings of greater than 3 m with dual or triple aspects. The homes at Officers Field, in Portland, Dorset, have vaulted ceilings in the main bedrooms of even the smaller homes and many of these rooms enjoy great views over rooftops. These ideas were evolved in HTA's winning entries for the 'Home of the Future' and the 'Terrace of the Future' competitions, where split level living allows for triple aspect living spaces and floor-to-ceiling heights that extend up to 5 m.

Achieving high daylight factors requires generous glazing, but many new homes have small windows in order to achieve high thermal performance. This is a false economy. In the UK we spend an average of 96

per cent of our time indoors and there are demonstrable health risks associated with a low daylight environment. There are also significant comfort issues to consider when windows become too small.

The greater challenge with new homes is avoiding overheating. With well insulated walls and roofs, high efficiency windows and air tight construction, once heat gets inside a modern home there is nowhere for it to go unless a window is opened. Windows therefore need to be well shaded, big enough to create a high level of air movement and designed to maximise ventilation across and up through the home, and to provide comfortable and secure sleeping conditions at night. Upton Site C in Northampton has large south-facing windows protected by deep roof overhangs to allow ventilation through the space. Conversely, rooflights in the VELUX Carbonlight houses combine with automated openings within the staircase to form an atrium that helps ventilate the whole home.

Generous fenestration isn't just important to the experience of the interior, but it is also a key contributor to the character of the street, as we see for example with Victorian bay windows. Yet in many modern homes the main rooms face the rear garden and 'turn their backs' to the street. To create delightful streets, homes must have a public face of generous windows looking outwards and carefully designed to frame views of, say, a mature tree or distant spire.

A common mistake is to cluster small rooms on the street side of the house (for example, bathrooms and single bedrooms) and end up either with mean windows on the principal façade or windows which are over-sized for the room. A thoughtful internal layout will generate generous street elevations, so that each home contributes to the wider streetscape.

In summary, the first characteristics that we seek in our modern iconography of home are large windows alongside generous internal heights and volumes. Importantly, these will be located in the appropriate rooms, many of which will front the street and enjoy carefully considered and attractive out-facing views. The measure of their success will be in daylight factors of over 5 per cent for principal rooms and ceiling heights, which vary according to room use but reach to more than 2.5 m for principal rooms. Measurement of each room's volume alongside its floor area also allows a more sophisticated appreciation of a home's more complex characteristics. Main rooms will typically be dual aspect and positioned to maximise through ventilation both across and up through the home.



The interiors of the VELUX Carbonlight Houses are animated by daylight thanks to extensive roof windows and an open plan design



At Upton Site C the double height living spaces enjoy floor to ceiling glazing and roof windows shaded by a deep roof and balcony frame



The winning entry for the Barratt/AJ Home of the Future explored living spaces that stretched over two floors benefiting from vaulted ceilings and triple aspects



The winning entry for the British Home Awards 'Terrace of the Future' creates a generous double height living space facing a large square



At Trinity Square the rhythm of repetition of generous fenestration contributes to the overall streetscape and creates shared character

Modern homes for modern lives

Period properties with traditional construction can be adapted and extended in response to changes in lifestyle, but this is a difficult and expensive process.

The 21st century life is different to the lives that Victorian and Georgian homes were designed for. Boundaries between home and work have continued to blur with over four million of us now working from home – an increase of 50 per cent in the last two decades. An aging population, with one in four of us projected to be over 65 by 2035, increases the pressure to look after ourselves or care for relatives at home. Housing affordability and the rising cost of higher education have resulted in the ‘boomerang’ generation who are returning to live at home after university. More than 3.4 million of 20–34-year olds now live with their parents, an increase of 40 per cent in the last two decades.

Day to day family life and entertaining our guests have shifted requirements away from homes subdivided into a number of smaller rooms towards larger, single space kitchen / family rooms. Home technology is evolving with smart door bells and robot vacuums. Entertainment has changed from one household television to many personal devices and blanket wifi coverage. Our lives evolve rapidly around changes in technology and health care.

Modern homes can offer adaptability in a number of ways. First, as discussed in the next chapter, Harmonious diversity (page 54 and Case study page 86), homes can now be configured at purchase to suit the lifestyles of their occupants and made in a factory for delivery to site.

Adaptability also needs to be planned into a neighbourhood through the variety of homes on offer catering to a diverse range of residents or through the flexible configuration of each home so that they can be used in a variety of ways. At Cane Hill Park in Coulsdon a range of different home layouts exists within a shared family of elevation treatments – offering choice of split-level living or ground-floor living with different price points (Case study page 86). Similarly, at Leithfield Park, near Godalming, Surrey, three different internal layouts could be selected within the same elevation.



The winning entry in the ‘Terrace of the Future’ offered two separate living spaces allowing families flexibility to enjoy separate activities at the same time



At Leithfield Park homes could be customised with three different layouts within the same elevation



At Cane Hill Park four different types of home all share the same basic proportions, materials and windows offering choice within a shared character

A number of the homes illustrated in this report benefit from a full-width family room at ground floor opening to the garden and connected to a first-floor living space that opens up to a vaulted ceiling. This split-level living design offers two generous and connected spaces that allow families to enjoy separate activities at the same time.

Good layouts will also accommodate varying configurations for home-working. At Upton Site C in Northampton the living spaces accommodate a mezzanine study and library space. This was replicated at Hanham Hall and, in more affordable format, as a ‘study platform’ in the vaulted ceiling of the ‘Terrace of the Future’ design for Ilke Homes. These study spaces can alternatively act as nurseries or dressing rooms positioned just off the master bedroom.

Another flexible element to consider is a ground-floor bedroom that can be accessed independently and enjoys an interconnecting ensuite shower room. This arrangement allows guests to come and go as they please, elderly relatives to avoid stairs and offers the boomerang generation a degree of independence from the rest of family life.

Rear gardens are a crucial consideration for many – 8 out of 10 purchasers are shunning homes without a rear garden. A garden adds a 10 per cent premium to sale prices and rents, yet on average, renters will spend only 12 hours a month in the garden. This presents an interesting contradiction: gardens maximise the value of a home, but are often underutilised in our hectic modern lives.



The homes at Upton Site C enjoy spectacular views and a mezzanine study space allowing an ideal home working arrangement



The winning entry in the ‘Terrace of the Future’ family room opens the full width of the home to the garden



The Kingspan Passivhaus in Bedfordshire enjoys a flowing open plan family room that wraps around the garden and brings light deep into the plan with a lightwell



21st century placemaking

The iconography of a modern home will be found in using the most appropriate materials and the technology available to us.

Our predecessors embraced the technologies of their time, and consequently their architecture is entwined with contemporary advances in construction. From the perfectly weighted Georgian sash window to the pattern book terracotta and brick details of our Victorian streets, we still enjoy the way these homes embraced innovation and we expect them to continue to appreciate in value.

We now live in a future where technology has transformed every industry and aspect of our lives – except much of the construction industry, which remains based in old technologies. Research by McKinsey in February 2017 reported no significant improvement in construction productivity over the past 20 years, while the rest of the UK economy has almost doubled. Yet the UK's architectural profession is the most successful architectural exporter in Europe and we have many of the most advanced engineering and manufacturing specialists in the world. Together these industries have the potential to combine innovative thinking to solve the dual challenges of housing delivery and affordability.

Many of the homes featured in this report take their inspiration from their surroundings. Yet their appearance is not rooted in imitation; rather they celebrate our modern ways of making and the digital crafts.

At Officers Field in Portland, Dorset, the use of a cheaper 'roach' Portland Stone in an undressed finish of varying courses created an affordable use of a very local material with a rich heritage, and allowed it to be used widely across the site. At Hanham Hall the rendered façade of the Grade II-listed hall informed the materials of much of the surrounding site. It was complemented by an advanced timber cladding treated to maintain its appearance, while reducing the carbon footprint of the materials and minimising maintenance.

Brick is the material we most often associate with home, and it is the principal material for many of the places featured in this report, which celebrate the historic craft of bricklaying while exploring creative opportunities for continued invention. At Barnet and Southgate College in North London, the architects and bricklayers worked together to agree a palette which reuses historic details in creative new ways. Diverse approaches incorporate glazed brick, corbelling, polychromatic patterns, cut and rotated bricks. They turn this historic material into a visible expression of the handmade quality and human effort invested in creating a new home.



Precision factory made homes can enjoy character through the benefits of new digital fabrication technologies



At Trinity Square the rich variation of brick details within a simple palette of two bricks brings a handmade quality to the homes



At Officers Field the use of local Portland stone influenced the shades of render that was used to create a shared colour palette that reflected the local vernacular



At Hanham Hall the use of timber cladding reflected the sustainable ambitions of the project offering while modern manufacturing created a low maintenance and long lasting finish

Beneath the materials which dress our homes, the underlying structure is crucial to defining the shape and identity of a home. Decisions around the roof form and silhouette are fundamental to defining the way a home frames the street and relates to its context.

Modern precision-engineered and factory-based technologies can speed up the housebuilding process, with significantly reduced environmental impact, site waste and vehicles on the road. Construction workers can build in safe factory environments that support a more diverse and inclusive workforce. This in turn encourages more talent into the industry. With these changes and advances there is also the opportunity for personalisation and bespoke detailing. Three-dimensional printed relief in stone window surrounds, intricately carved CNC wood panelling and laser cut metalwork balustrades are the modern equivalent of period features.



At Leithfield Park the roof of the larger homes is given a domestic scale through the shallow plan and varying ridge line



At Cane Hill Park gabled forms step around retained trees and topography to frame views over the landscape

One of the most important opportunities for modern technology is in the design of the entrance to the home.

Cars, refuse and recycling collections all place significant demands on our streets, and with the exponential increase in internet deliveries create additional pressures on the entrance. The emerging demand for electric car charging and potential of future drone deliveries, alongside the growing popularity of cycling, all place further demands on the front of the home.

The threshold must offer shelter, identity and welcome, as well as accommodating practical requirements, like post and deliveries, utility meters and rubbish storage and collection. It might accommodate boots and bikes, lighting to welcome you home at night and a provide you with a sense of security. Our case studies celebrate this experience of arrival and departure – from the veranda-inspired timber shading at Hanham Hall to the deep stone recesses that protect the seaside homes at Officers Field.



At Hanham Hall SIPs panels were used to accelerate delivery, enhance performance and create the overhang for the entrance veranda

Concluding remarks

The iconography of home plays a crucial part in distinctive and locally responsive neighbourhoods. The comfort, practicality, appearance and image of modern homes must be embedded in a relationship with the site and setting. They should be light-filled and spacious, springing from an appreciation of modern needs and aspirations. Above all, if we are to expect people to welcome new homes to their neighbourhood, they must be better than those that have come before and must create a lasting legacy of which everyone can be proud.

Recommendations for crafting modern houses that feel like home

- **Create homes that ‘feel like home’** – the moment they cross the threshold people should imagine themselves happily living in a new home.
- **Maximise light and space** – emulate the best of popular period properties with generous floor to ceiling heights and large windows, combined with modern comfort and energy efficiency.
- **Design for flexible living** – layouts should reflect 21st century lifestyles and accommodate changing demographics including the boomerang generation, home-working and caring for the elderly.
- **Embrace modernity while learning from the past** – new homes should adopt modern ways of making and digital crafts, while taking cues from our collective memory of ‘home’: so, traditional materials, domestic roof forms and a welcoming threshold.