

## Part Five: Housing between the wars



*A 'typical' semi-detached (top image) and detached (bottom image) interwar house.*

The period between the end of the First World War and the beginning of the Second World War saw a surge in the construction of new houses and the development of new housing styles. In the immediate aftermath of the First World War, there was a great need for the provision of new houses. The problem was two-fold: one was that there was a housing shortage (which had been acknowledged as an issue before the war) and the other was the poor

state of much of the existing stock. This meant that a major house-building programme was necessary, and the urgency of this was underpinned by the idea that the soldiers returning from the trenches would require 'Homes fit for Heroes', a phrase that encapsulated a national sense of obligation to those who had fought in the war.

At the time the overwhelming majority of housing was (still) provided by the private rented sector. There was, however, a consensus that the number and type of houses required could not be provided by private enterprise alone, and that the government and local authorities would have to play a major role. This led to the development of a national housing strategy, which in turn led to the Housing and Planning Act of 1919 which gave local authorities a responsibility to determine housing need in their area and to provide low-rent housing. Housing Committees were set up and they were encouraged to build through the provision of generous subsidies. The subsidy arrangements shared the costs of this new housing between the tenants, local ratepayers and the Treasury. Councils in areas of high housing need could apply for these subsidies. The London County Council (the predecessor to the Greater London Council) also raised money through selling London housing bonds that promised investors a 6 percent return, and this raised £4 million during the 1920s. Subsidies were also available to private developers (through a subsequent Housing Act) but, in the immediate post-war period, most of the new houses built were local authority 'council houses' – what today we would call 'social housing'. Changes in governments in the next two decades meant that different emphasis and importance were given to either private or local authority provision, but, essentially, a pattern was set which meant a move away from the dominance of the private rented sector to one where private developers built houses for sale and local authorities built houses for (relatively) low-cost rent.

The most significant factor affecting the design and layout of local authority housing in this period was the *Tudor Walters Report* which was published by the Local Government Board at the end of the war. This report was heavily influenced by the Garden City Movement and the model village developments such as Port Sunlight, Bourneville, etc. (see Part Four). Experts contributing to the report included women's organisations that had a strong influence on the recommendations for design and internal layout. Architecturally it was heavily influenced by the Arts and Crafts Movement with its strong rural references (the type of design encouraged by the report is sometimes referred to as 'cottage-style vernacular' or 'garden-suburb vernacular').

Under the influence of the report, planners promoted the building of new suburban 'garden' estates, situated on the outskirts of cities. Mainly consisting of three-bedroom houses for families, the design of the estates aimed to create self-contained communities of low-density dwellings, often with no more than 12 houses per acre. Facilities, including churches, schools and shops, were provided; public houses (i.e. pubs!) were initially excluded from the plans. On most estates, the houses were provided with a generous-sized garden to encourage the tenants to grow their own vegetables. The interiors varied, but generally there were significant improvements compared to (lower-class) Victorian housing. There was more space generally but also there were more rooms and they had defined functions. The houses tended to have three rooms downstairs, three bedrooms, and usually a larder and a separate bathroom, as well as an indoor WC. For most tenants these new conditions were a huge improvement on their previous slum housing where they had experienced overcrowding and lack of even basic facilities. Due to rising costs, some of the high standards of local authority housing seen immediately after the war were scaled back in later years but overall the standards remained relatively high.

Architecturally, as mentioned, the idea was to create a garden village – or garden suburb – and so many 1920s council houses were built in a simple cottage style with gabled or hipped red-tiled roofs, brick walls combined sometimes with white render or pebbledash and horizontal casement windows. Houses were built in pairs or in short terraces (usually of up to about five houses).





*Above are two examples of local authority council houses built in semi-rural areas in the interwar period.*



*Two more examples of the type of house built in the immediate post world war one period. A semi-detached house with quite strong Arts and Crafts influences – the prominent gabled roofs for example (top). On the bottom a short terrace of houses with a hipped roof. These houses would have been built by the local authority i.e. they are examples of council housing.*





*The influence of the Art and Craft movement can also be seen in the design of this block of flats - in particular the entrance with its lovingly detailed brickwork. Unfortunately, considerable less thought and care was given to later work including the completely out of place fencing.*

Both the local authority and the private sector houses built in this period signalled a move away from the emphasis on narrow front and rear elevations and the back additions, which were common in a typical Victorian house. The houses of this period tended to be square in plan, or at least rectangular, in order to let in more daylight. This emphasis on the provision of daylight and sunlight was also to be seen in the way the housing of this period was laid out, with more external space provision and attention to orientation.

After the initial burst of building activity targeted at reducing the post-war housing shortage, local councils began to tackle the problem of existing slum housing. The Housing Act of 1930 encouraged mass slum clearance and councils set to work to demolish poor-quality housing and replace it with new-build. Unlike the garden estates built directly after the First World War, much of the slum clearance in major cities was replaced with flats, mostly three to five/six storeys high. They were often modelled on schemes in continental Europe.



*The construction of flats (such as those on an estate shown in the image above) as a response to the housing shortage was aided by the developments in, and understanding of, concrete technology. This approach to housing was supported by architects from the Modern Movement who saw in flats an opportunity to work with the ethos of this architectural style and who were influenced by the approaches adopted in other parts of Europe, and in Vienna particularly. Gradually the idea of living in multi-storey accommodation began to gain acceptance and, in London, flat building exceeded house building for the first time in 1936.*

Although the Garden City Movement was influential, its proposals for estate layouts, with its emphasis on avoiding linear development and its encouragement of cul-de-sacs, were by no means the universal defining approach of the period. This was because the private sector was involved in significant amounts of house building alongside the new arterial roads that were spreading out from towns and cities in what became known later as 'ribbon development'. This expansion into the suburbs (effectively the creation of suburbs) was greatly aided by increases in bus and train provision that allowed people to commute to work much more easily. Although the building of houses by the local authorities was a dominant force just after the war, the development of building societies as sources of mortgage lending meant that private sector housing also grew substantially from the early 1920s onwards. This resulted in a significant increase in home-ownership in this period. By 1939, 1.1 million council houses had been built, but this figure was outstripped by the 2.8 million middle-class private homes built by speculative builders from 1923.





*This 1920s dwelling built by private developers has some Arts and Crafts influences notably the detailing of the brickwork, the use of render at first floor level and the steep pitched roof above the bay. The squared off bay rather than the splay common in Victorian houses is typical of the Arts and Crafts influence. Note that the windows are casement.*



*A pair of 1920s/1930s semi-detached houses. Note some of the defining features of houses of this period - the steep hipped roof with plain clay tiles and overhanging eaves, the detail in the brickwork, the use of render to the first floor level, the two storey bay with a pitched roof above, the use of casement windows rather than sliding sash and the oriel window at first floor level (above the entrance door – with its porch).*

The rate of building increased in the early 1930s, reaching a peak in 1936 when 370,000 houses were completed. The commonest house type was the three-bedroom semi-detached house (as in the image above) though developments often included detached houses and bungalows.



*An inter-war period bungalow. The bungalow came into its own between the wars. While some were built in pairs, the detached bungalow was common and this provided a more affordable way of achieving the goal of living in a detached home. They were also claimed to be less expensive to furnish and cheaper to run than a conventional house.*

### **Architectural styles**

Although as mentioned, much of (though not all) local authority housing was influenced by an Arts and Crafts aesthetic, private sector housing tended to develop a slightly different architectural style. Whilst some were clearly still influenced by Arts and Crafts styling others used different 'motifs' producing what we tend to refer to now as a '1930s semi' which has come to define what many would think of as the typical dwelling style of the period.





*Two examples of a 'typical 1930s semi'. They have hipped roofs with Roman tiles (originally clay), a double bay, brick solid walls, casement windows and, often, a porch. These suburban houses had front and rear gardens and a garage – for the, usually, newly acquired car.*



*Many detached houses of the period still made stylistic references back to the Arts and Crafts movement – the bottom image particularly so.*

In fact, of course, terraced houses continued to be built, though the terraces were shorter than the long terraces of the Victorian period. The 1930s house tended to be less ornate than previous styles partly because of the vogueish emphasis on functionalism. In this they reflected some of the ideas of the Modern Movement, without in any real sense embracing it, just as some Art Nouveau and Art Deco touches could also sometimes be discerned. But perhaps the overriding style of the typical 1930s semi can be seen to be a retrospective borrowing from traditional vernacular motifs. Perhaps the main significant feature of the 1930s semi-detached



house is that, apart from the relatively few houses built in local stone, it was difficult to discern any distinct regional patterns to the style.

A dominant feature was the front bay-usually of two storeys - either tucked under deep projecting eaves or surmounted by a projecting gable, typically dressed with barge boards, and often fake timber framing in imitation of sixteenth- and seventeenth-century vernacular buildings. The bays were sometimes square-edged or set at an angle (canted) but curved bays were also popular. Another recognisable stylistic component of the privately built 1930s house was the round-arched, open porch leading to the front door.



*The timber details on the gable above the bay windows is a common occurrence in 1930s housing. Note that the 'sunrise' motif on the right hand side house is also quite common in lead light windows of the period.*



*In these larger semi-detached properties the bay is 'sheltered' by the overhanging eaves. Note that the bay is faced with bricks at ground floor level and clay tiles at first floor level.*



*The bay to these houses has a flat roof possibly covered in lead or zinc or possibly bitumen felt. (Note like many houses of this period the timber windows have been replaced with plastic versions).*





*The use of vertical timbers, often picked out in black and white, as seen in the two photographs above is a reference back to vernacular traditional timber frame building – this is often referred to as 'mock tudor'. The roofs 'sliding' down to the ground floor from the front gable area is a relatively common feature.*



True Modern Movement architecture which had such a significant impact in the rest of Europe, and which continues to this day to influence architectural thinking, had very little impact on mass housing in this country. Where Modern Movement houses were built, they tended to be single commissions for individual clients.



*The two images above are examples of houses built in the 'Modern Movement' Style. Internationally this was probably the most important architectural movement of the twentieth century. However, it was not popular in this country (unlike many other European countries and the United States). The box shape, the clean lines, the smooth rendered walls, the flat roof, and the large (metal) windows are all hallmarks of the style.*





*The houses in this image are also clearly modern movement inspired although the rounded windows provide an 'art deco' flourish.*

Like the council house, the typical privately built semi adopted a rectangular plan with a small kitchen- often called a 'kitchenette'. A serving hatch was another innovation of the time, linking the kitchen with the dining room, while the latter usually had 'French Windows' opening onto the back garden. Generally, the houses were low and wide and of just two storeys: the first floor contained three bedrooms and a bathroom with the WC (often located in a separate room).

An important innovative feature of the private sector 1930s semi was the provision of a garage for the motor-car – something that was not generally a feature of local authority housing.

## **Construction**

(Note: This section is intended to give just a brief overview of the construction of the period– the appropriate elemental chapter in the textbook should be consulted for more detail)

### **Roofs**

Houses of the period mainly had pitched roofs except for the relatively small number that adopted the Modern Movement style, which emphasised the use of flat roofs. For semi-detached houses (and the end houses of rows of terraces), hipped roofs were the dominant style. The roof structure was essentially based on the same principles as Victorian roofs but adapted for a different shape. They consisted of softwood rafters supported by purlins. In larger roofs the purlins would be strutted off load-bearing brick internal walls and in some cases trusses would be used.



*A 'typical' 1930s house with hipped roofs, a semi-circular bay and an entrance porch (which has subsequently been enclosed).*

### **Roof coverings**

These included slate and clay. The full range of clay tile profiles was used, with plain clay tiles continuing the renewed popularity that they had gained in the Edwardian period. Coloured tiles enjoyed some popularity, with green being a favoured colour.

### **Gutters and drainage**

These would be cast iron for the rainwater gutters, downpipes and for the soil and vent pipe.

### **External walls**

Brickwork tended to be the most common material for the construction of external walls at least for the 'typical' house. The use of cavity walls started to become more common throughout this period. These would be built with brickwork for both the inner and outer skin. The cavity wall ties used during the early part of the period could well be wrought iron or steel but later on galvanised (steel) ties would be commonly used. It is not possible to date a changeover from solid walls to cavity, partly because there was such a geographical difference in the way that cavity walls were adopted; for example, they were often seen first in areas exposed to high levels of driving rain.

The use of cement mortars gradually replaced lime mortars throughout the 1930s – though lime was still often added to the mix to improve workability.

A particular defining feature of houses of the inter-war period was the use of render. Often houses from the 1920s had the ground-floor external wall as exposed brickwork with the first floor rendered, but by the 1930s the tendency was to render the whole of the façade. The render was usually roughcast or pebble-dash. The exceptions tended to be those houses that were more influenced by a Modern Movement aesthetic where a smooth render would probably be used.





*These semi-detached houses have clay roman tiles to the main (hipped) roof and plain clay tiles to the gable roof above the bay. Rendering the whole of the external wall was a common approach in the 1930s.*



*These two houses are part of a terrace of 1930s houses. The one on the left has a smooth render whilst the one on the right has a 'pebble-dash' render. Pebble-dash render, like mock tudor embellishments, is one of the defining stylistic motifs of the era*

### **Bays**

As mentioned bay windows were a more dominant feature of houses of the period. The ground floor of the bay was usually brick but the first floor would often be constructed in a timber framework. The bay would typically be rendered or covered in plain tile-hanging.



*Bays were usually rendered or covered, as here, in plain tiles. Note the timber casement windows with leaded lights.*

### **Internal walls**

It was usual to build load-bearing and non-load-bearing internal walls in a single skin of common brickwork, or sometimes clinker blocks.

### **Damp-proof course (DPC)**

A variety of DPCs were used, including slate and engineering bricks in the 1920s, but it was quite common, particularly in the 1930s, to use bitumen impregnated felt. The bitumen felt DPC had the advantage of being relatively flexible at first but over time they tended to become embrittled and therefore susceptible to damage through building movement.

### **Upper floors**

These were constructed with softwood timber joists, with herringbone strutting which tended to be more favoured than solid strutting. The floorboards were usually square-edged softwood or, sometimes, tongued and grooved. There was a general awareness of the fire issues associated with building joists into party walls and so joist hangers or steel corbels were sometimes used.

### **Ground floors**

Although ground-bearing in-situ concrete floors were used in the 1930s, ground floors in the period were more typically still of the timber suspended variety. From the 1920s onwards there were improvements in the design of timber suspended ground floors, particularly in relation to protection against damp and its associated



problems (i.e. wood-rotting fungi). The floors would typically be softwood timber joists supported on brick sleeper walls, laid usually in a honeycomb pattern (which produced gaps through which air could flow). The rectangular shape of typical 1930s housing, the lack of a back addition that might block through airflow, and the general use of honeycombed sleeper walls all meant that cross-ventilation tended to be more efficient than it was in many Victorian houses. The sleeper walls usually had a damp-proof course to protect the joists against rising damp. Where solid external walls were used, the joists would often rest on a sleeper wall built close to that wall so that the joists were not built into it. Where a cavity wall was used, then the floor joists would be built into the inner skin. In both cases, this, and the use of DPCs, helped protect the timber against rising and penetrating damp.

The floorboards might be square-edged but tongued and grooved was quite common. Also, parquet block flooring was popular and quite often found in entrance areas and hallways.

### **Foundations**

There was a general requirement in model by-laws for concrete foundations with stepped brick footings above. By the end of the period it was often sufficient just to have the concrete strip (though brick footings were still acceptable).

### **Windows, doors and joinery**

Although sash windows were still quite common in the early part of the period, casement windows with top opening lights grew in popularity and became the dominant style, particularly for the 1930s semi. Timber was still a significant material although steel windows gained in popularity. Initially these were in plain mild steel but later they were galvanised.



*Casement windows were the norm throughout the period. The leaded windows shown here are another reference back to tudor times. Oriel windows such as those above the front door were quite common*



*Steel windows gained popularity particularly with dwellings that had some form of modern movement or art deco references.*



*A circular or squared porch leading to the front door was common in the period. The front door here has a coloured leaded glass insert – again quite a common addition.*



### **Services**

Space heating throughout the inter-war period was provided by solid fuel appliances, mostly in the form of coal fires. Hot water supply to the bathroom became a more common provision. Early in the period there were still examples of hot water coppers being used, with the water heated by a fire, and circulated by a pump. The most common approach that developed through the period, however, was water being heated by a back boiler (situated at the rear of one of the fireplaces) and feeding a (direct) water tank of galvanised steel. An alternative to this, usually later in the period, was a gas-fired hot water geyser located in the bathroom. Electric immersion heaters were also available at the latter end of the period. Pipework was usually formed in lead.

Although some new houses in the immediate period after the First World War were still being built with gas lighting, electric lighting quickly became the universal means of artificial lighting provision.

### **New technology**

Although the typical house construction described above can be seen as the continued use or the development of existing materials and forms of construction, there were some examples of relatively radical developments in technology being used during this period. The impetus for this was the problems of material and skilled labour shortages which led the government, in the early 1920s, to encourage experiments in approaches to construction. This included the development and use of what we would now refer to as system-built housing. These systems included timber frame, steel frame, concrete frame/slab and in-situ concrete wall slabs.

