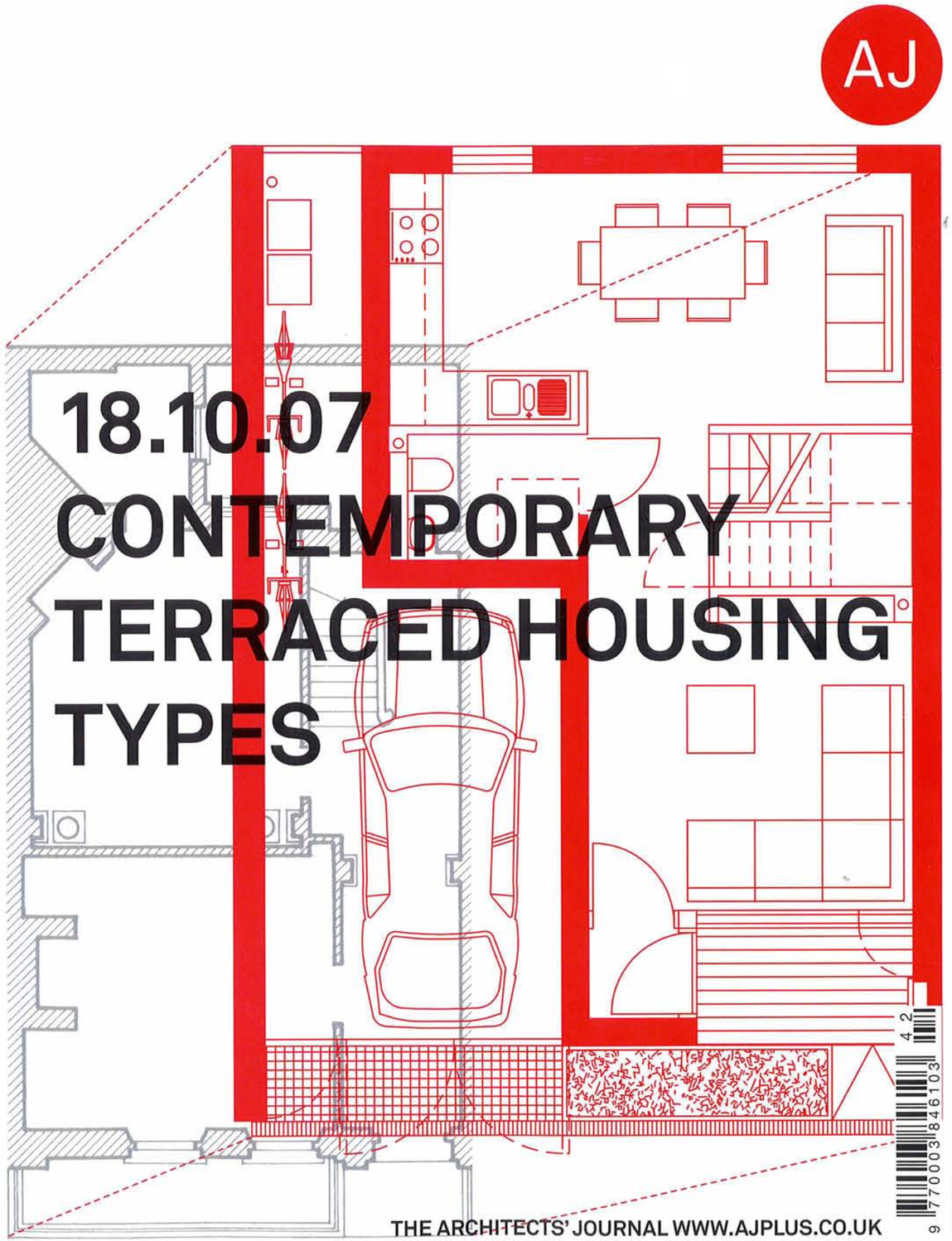


CONTEMPORARY TERRACED HOUSING TYPES

Produced by Andrew Mead

The terraced house flourished in the UK in the 18th and 19th centuries and is now enjoying a renaissance. Architects of modern terraced houses have to take into account a complex range of standards, and the AJ wanted to see the effect this was having on design. As the standards impinge most obviously on planning, we have focused on plans and sections – putting a range of schemes side-by-side, almost in the manner of a Georgian pattern book, to see how repetitive or individual they are.

The impact of Lifetime Homes standards and Secured by Design are obvious in many, for they tend to mean dwellings are larger on the ground floor than above. One distinguishing factor is the extent to which the schemes have been conceived in section, and some are quite ingenious in this respect. A historical prelude, presenting a typical Georgian plan and four 20th-century examples, puts the current projects in context.

On pages 22-26, Daniel Rosbottom of DRDH Architects explores the problems and possibilities in terraced house design. On page 41, Andy Jobling and Julia Park of Levitt Bernstein Associates spell out the current regulations.

Additional schemes are featured on the AJ website (`www.ajplus.co.uk`), where you are invited to post your own terraced-house projects – just in plan and section.

WE NOW HAVE AN OPPORTUNITY TO REFLECT UPON HOW TERRACED HOUSING CAN BE REINVIGORATED

By Daniel Rosbottom

The rehabilitation of the street as an idea has, in recent years, prefaced the return of the terraced house. It has become clear that providing high-density, small-scale apartments in existing town centres does not reflect the diversity of housing need. In our peripheral vision stands the family house, and beyond that suburbia. It is to these conditions, too long ignored by architects, that we need to turn our attention.

Minimum legislated densities, as specified in Planning Policy Statement 3, stand at 30 dwellings per hectare (dph) as the government struggles to create 240,000 new housing units per year, to meet goals set out in the recent Housing Green Paper, *Homes for the Future: More Affordable, More Sustainable* (AJ 20.09.07). For a large suburban housing masterplan in the West of England, which my practice DRDH is working on, both client and planners propose a density of between 50-60 dph. This mirrors our experience elsewhere and suggests, at least, that the codified rash of the Essex Design Guide, regarded as required reading for designers of low-density schemes, is destined for consignment to a particularly gloomy corner of our island's architectural history. As densities rise, it seems variations on the terrace are likely to dominate, muscling out the bungalows, semis and detached houses that have characterised suburbia for the last century.

Recently, polemical projects have emerged, investigating the terrace as a type. Chance Street, a small infill terrace of three houses in Tower Hamlets, East London, by Stephen Taylor Architects (see page 40), offers an interesting and perhaps extreme response to the current shift in attitudes to density. In a number of recent projects Taylor, like many of his contemporaries, has looked back past modernity to Georgian precedents for inspiration, and indeed the Chance Street project bears a marked affinity with those illustrated in Peter Guillery's excellent book *The Small House in Eighteenth Century London*. A flat brick frontage, punctured by generous windows, presents itself to the street, with metal gates against the pavement opening up to a relatively large threshold and a ground-floor room of flexible use. This belies the fact that the party walls stand at only 3.8m centres and that the outside space at the rear is the vertical shaft of a lightwell. In the face of such restriction these houses, in the hands of a skilful architect, still manage to offer attractive, well-designed and flexible interior spaces – even including an informal amenity space on the roof. However, the high density at Chance Street (96 dph) should be considered dangerous as a model.

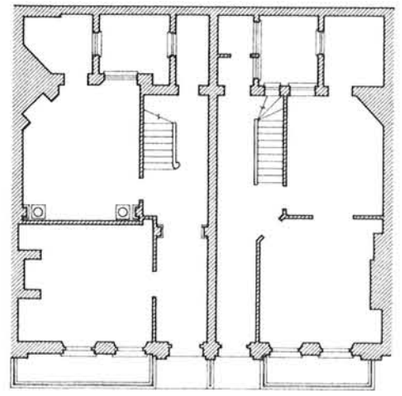
Mass housing typologies tend to reflect the legislative, economic and, one would hope, social demands of their time. Given the long-standing desire to escape from the terrace and the inner city to the freestanding house in its own garden plot, there seems a danger that this return to type is counter to the aspirations of the public. Across Northern cities such as Manchester and its surrounding conurbation, new estate developments by volume housebuilders, of a kind usually derided by architects, remain popular. This is in stark counterpoint to the swathes of decaying terraces in neighbouring Housing Market Regeneration (HMR) areas. There are of course many other issues at work here, but what generally characterises the latter in physical terms is the uniformity and homogeneity of the housing stock; basically, long lines of two-up, two-downs set directly on to the pavement on gridded streets. Although I must admit to an aesthetic affinity with those strong, hard geometries and surfaces of glimmering Accrington brick, which I recall from my own childhood, they have not endured in the affections of house-buyers.

In 2006 Mæ Architects, a practice that has concentrated on issues of housing and housing policy, undertook a study on such an area, Whitefields in Nelson, Lancashire, responding to a controversial proposal for mass demolition. Mæ's project included some selective demolition but primarily focused on adjustments to the existing houses. The practice suggested longitudinal and transverse conversions, creating more varied accommodation. Extensions to the rear contained the more highly serviced elements required by modern domesticity and offered private amenity spaces above. The project is interesting in that it reassesses and adapts, rather than simply rejecting an unloved typology. This approach is too often dismissed in the *tabula rasa* economics of modern housebuilding. Interestingly, Urban Splash's recent Chimney Pot Park development in Salford, designed by Shed KM, employs just such a model in relation to existing terraces, even if the retention of the original houses does not appear to go far beyond the facade.

Other historic examples of terraces have fared far better in the public consciousness. The aforementioned Georgian example being, in particular, a much sought after type. Whatever the period and however large the house, though, whether it be a Nash terrace on Regent's Park or workers' housing in the East End, the strength of the typology is derived from repetition rather than variegation; informing a collective urbanism where the identity and scale of individual homes is suppressed in relation to that of the street, neighbourhood or city. I recently met with Jonathan Sergison and Stephen Bates of Sergison Bates, a practice which has produced a number of interesting prototypes and variations on contemporary terraced housing. They suggested that this is a conception that sits uneasily in relation to a culture increasingly built around expressions of individuality.

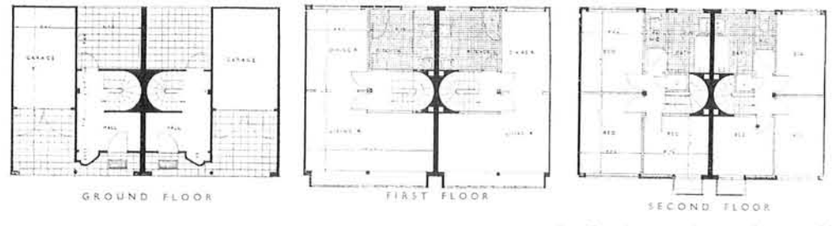
It is tempting to ask why we cannot simply reiterate a successful prototype, such as the Georgian terraced street; but if the terrace has stood still at a cultural level, it is now undergoing a process of rapid transformation at the level of legislation. Frustratingly, this is a process where, as architects, we largely appear to be occupying the role of passive recipients; making it work, rather than setting the agenda. Nonetheless, from a plethora of codes, new patterns are emerging: parking; refuse and recycling; means of escape and access; security; acoustic separation; relationships to private external amenity space; and of course issues of energy use and sustainable construction are all shifting the typology.

A current project in my own office, for a mix of terraced house conditions within a much larger suburban masterplan,



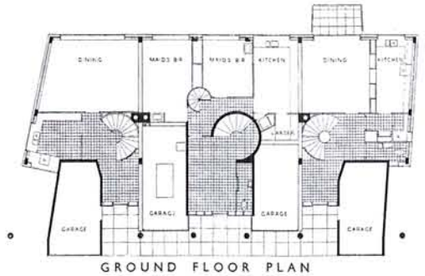
18TH CENTURY

- Two adjacent houses in Soho, central London: cited in Isaac Ware's *A Complete Body of Architecture* (1756) as a typical urban Georgian type.
- Georgian densities were 70-90 dph (dwellings per hectare) on 4.5-6m wide plots.

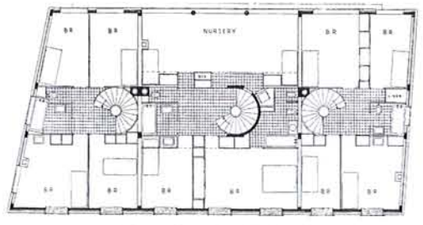


1934

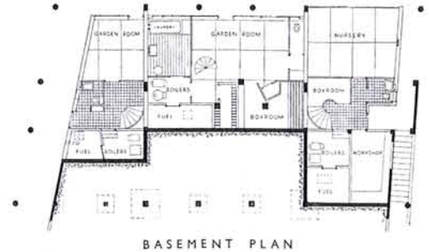
- Houses at Plumstead, South London, by Lubetkin and Pilichowski.



GROUND FLOOR PLAN



SECOND FLOOR PLAN



BASEMENT PLAN

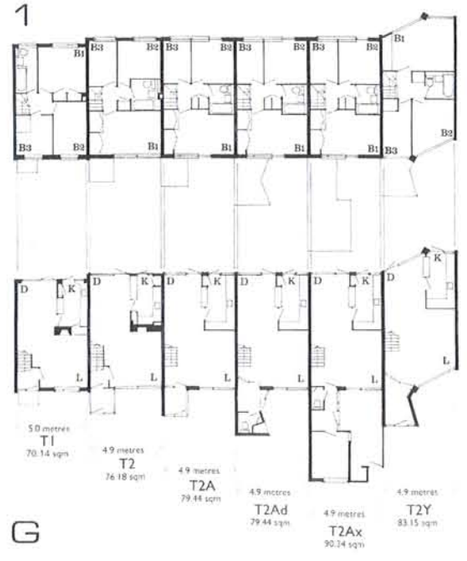
FIRST FLOOR PLAN

1939

- Terrace of three houses at Willow Road, Hampstead, north London, by Ernö Goldfinger.

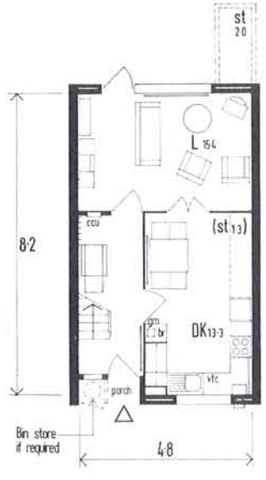
1952 – 1965

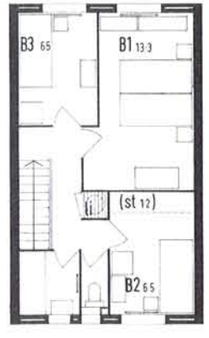
- Development of T1 to T2Y terrace house types, by Eric Lyons and Span. (From *Eric Lyons and Span*, RIBA Publications).



1977

- Dual-aspect house, from *Greater London Council Preferred Dwelling Plans*.





illustrates our own emerging awareness of this. In line with received good urban-design practice, the project places parking within the curtilage of the property, in order to limit the need for on-street parking. The adoption of the Joseph Rowntree Foundation's Lifetime Homes standards (housing standards that aim to provide the flexibility to meet the changing needs of residents as their personal circumstances change) thus requires a 3.3m-wide covered parking space with connection to the front door. The desire to keep a continuous street line brings these into the volume of the building, creating very wide, perforated frontages. A habitable room on the ground floor facing the street is required under Secured by Design (police guidelines for 'designing out crime'); while Lifetime Homes requires a entry-level WC, large enough to accept a shower. The consequence of all these factors is that the ground floor is much larger than the upper floors, leading to an L shape in both plan and section. Given this, it came as little surprise, when Mæ's Alex Ely, writing in a recent AJ piece on the Housing Design Awards (AJ 16.08.07), suggested that 'family housing of the early part of the 21st century may come to be characterised by the courtyard or what could be termed the L house'.

Experience of working with these issues is teaching us to think critically in relation to codes. A good example of this is in relation to the Lifetime Homes requirements for disability access. This calls for an ambulant disabled stair, capable of accepting a stairlift, the aforementioned downstairs WC and shower; and a position for a future lift. Although the issue from which these requirements are derived is a fundamentally important one, it is worth considering whether all elements of this provision are simultaneously necessary, as the code requires. The average household in the UK moves once every seven years – hardly a lifetime – and it may be that, as a society, we should rather be trying to provide a diversity of property types, rather than relying on a single model. My own grandmother has both a stairlift and downstairs facilities but, ultimately, would rather have the opportunity to move to a bungalow – unfortunately a scarce commodity in her neighbourhood.

As a practice, our attitude has been to favour those elements which 'civilise' the house. The 900mm-wide, shallow stair becomes a generous moment in a tight plan, whereas the lift would destroy the volume of the room. The large downstairs sanitary facilities are designed to double as a utility space, and so on.

Another concern stemming from the provision of such amenities is that their impingement upon overall space requirements is not accounted for by the agents who 'advise' clients. New UK housing boasts the highest number of rooms per dwelling of any country in Europe but simultaneously offers the smallest floor areas (see `www.designforhomes.org`) – larger stairs and the proliferation of sanitaryware only exacerbates that problem. Paradoxically, the Joseph Rowntree Foundation's research into housing need determined that 'when faced with trade-offs consumers show that they strongly prefer additional bedrooms or larger rooms sizes to additional bathrooms.' Of course, sizes in plan predominate in such discussions, but we should not forget volume, with room height being one of the other great attractions of older housing. On one current project, we are manipulating the section to allow the principal room of each type to have a 3m rather than 2.4m ceiling height. It remains to be seen whether this will make it through the 'value engineering' process.

Thinking beyond the individual terraced dwelling raises other issues. The plan's width and the need to meet density requirements places pressure on the plot's depth. This can result in a smaller back garden, minimal overlooking distances and small buffer spaces in front of the houses, against relatively narrow streets. These frontages have, in any case, to be small – so there is no chance of the future occupant paving over and parking a car on them. Collectively, these proximities, along with the need for level access under Part M, mean clever design is needed to offer required levels of privacy, something a volume housebuilder cannot automatically be expected to engage with. More fundamentally, they offer a vision for suburbia that is in fact distinctly urban.

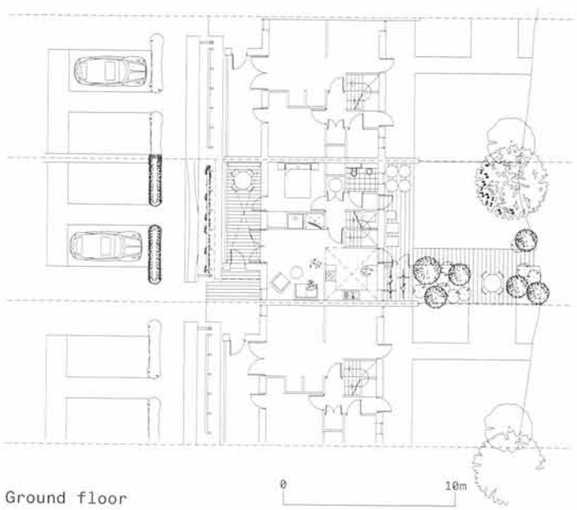
We may breathe a collective sigh of relief that urban-design guidance from institutions like CABE has been instrumental in undermining planning authorities' insistence on minimum overlooking distances. These have often denied the opportunity for density and for sensible relationships with the historic street pattern. However, we now appear to be in freefall, and serious research on what is, in reality, acceptable is necessary if we are not to simply arrive back in the 19th century.

If the space between us all is diminishing, then what occupies it also comes under threat. In contrast to strictly defined internal requirements, where the Housing Corporation's Scheme Development Standards can tell you all the requirements for a two-person room down to the size of the dressing table, no legislation or local authority guidance defines the provision of amenity and garden spaces.

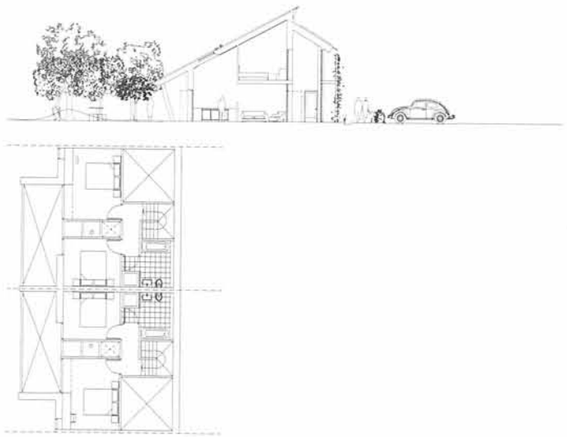
As a profession we were vilified for decades over the mistakes made in the provision of housing after the war, and we cannot afford to make them again. After the dogma of Modernism and the many irrelevancies of Post-Modernity, we now have a moment of opportunity to reflect upon how strong historically successful models, of which terraced housing is a primary example, may be reinvigorated and redefined. Whether we are successful or not, our efforts will, nonetheless, shape and define our settlements, our social relationships and the views across our countryside for decades to come.

STRIDE TREGLOWN

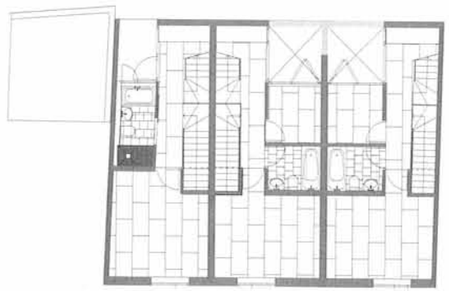
• Letchworth, Hertfordshire: 60 units at a density of 36 dph.



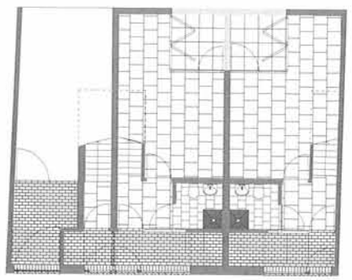
Ground floor



First floor



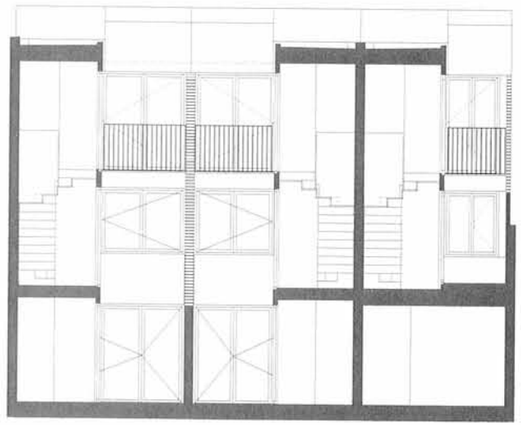
First floor



Ground floor

STEPHEN TAYLOR

• Chance Street: a terrace of three houses in Bethnal Green, East London, at a density of 96 dph.



The traditional terraced-house plan is as relevant today as it was 200 years ago, but modern designs are heavily influenced, both in terms of footprint and internal layout, by extensive regulations and guidance. The principal national standards, both regulatory and advisory, which affect the design of terraced homes, are outlined below.

BUILDING REGULATIONS (DCLG)

www.planningportal.gov.uk

PART B can be onerous for three-storey houses, because a protected staircase route to the main exit must be provided unless there is an approved means of escape from the top floor. This can rule out open-plan layouts and make loft conversions problematic. The latest revision to Part B (April 2007) encourages a fire-engineered approach using a combination of fire-detection, warning and sprinkler systems which allow more flexibility in open-plan layouts.

PART E lays down clear requirements for the acoustic performance of the party wall and impacts wall construction, which in turn influences street frontage between dwellings. The latest revision to Part E (April 2003) changed the range of frequencies that are tested in an attempt to control bass frequencies from loud music.

PART L limits glazing areas, making it difficult to achieve adequate daylighting when deep plans are combined with narrow frontages.

PART M requires the entrance level to be accessible to a wheelchair user. It governs the widths of entrances and corridors and the location of WCs. The entrance and internal doors on the entrance level must have a clear width of 775mm or more. A wheelchair-accessible WC must be provided at entrance level or on the principal storey. WCs must be at least 1,000mm wide internally, with a clear space of 750mm deep outside so that the door can open outwards. This makes it difficult to locate the WC beneath the stairs, leaving little option but to locate it next to the front door, or between the two ground-floor rooms, or at the back of the house blocking a through-route to the garden.

SECURED BY DESIGN

www.securedbydesign.com

The rigid recommendations of this non-statutory accreditation have been the source of disagreement between the police, the DCLG and CABE. One recommendation – street access only to terraced houses and back-to-back gardens – means access to the garden has to be through the kitchen or living room.

DESIGN AND QUALITY STANDARDS (THE HOUSING CORPORATION)

www.housingcorp.gov.uk

These establish requirements and recommendations for all new homes that receive Social Housing Grants. Since April 2007, new schemes are assessed according to Housing Quality Indicators under three headings: location; site and unit design; and external environment. The requirements for unit size and layout rely on the National Housing Federation (NHF) *Standards and Quality in Development*. While the requirements are broadly compatible with Part M and Lifetime Homes, the NHF standards are in some cases stricter – requiring, for example, that entrance doors be at least 800mm clear.

LIFETIME HOMES (JOSEPH ROWNTREE FOUNDATION)

www.lifetimehomes.org.uk

Lifetime Homes standards are increasingly being applied by local authorities to all new homes. By requiring a 300mm-wide space besides the leading edge of doors, the width of the internal entrance area grows to 1.3-1.4m. The standards also require a future shower provision for the entrance-floor WC, which means this needs to be at least 1.4 x 1.8m.

The main living room has to be at entrance level and while a kitchen/diner is sometimes regarded as acceptable for the 'hospitality' aspect of this requirement, it would not satisfy the need for a temporary bedspace. The bathroom must be suitable for use by a person in a wheelchair and there is a need to plan for the provision of a hoist from bedroom to bathroom.

CODE FOR SUSTAINABLE HOMES (DCLG)

www.planningportal.gov.uk

Since April 2007, publicly funded new housing has been required to meet Level 3 of the Code for Sustainable homes, a six-level environmental performance standard for new homes.

Solar orientation is a key aspect of the code which impacts terraced housing. The need to optimise passive solar gain is difficult to reconcile with urban-design considerations of streetscape. Similarly, as the installation of renewable technologies such as solar panels and photovoltaics becomes commonplace, the built form of terraced houses will need to incorporate the need for south-facing roof slopes. A secondary concern is provision for recycling, cycle stores and individual metering, all of which impact the design of semi-private space.

BUILDING FOR LIFE (CABE/HBF/CIVIC TRUST)

www.buildingforlife.org

This is intended to be the national benchmark, encouraging housebuilders to provide new housing that demonstrates a commitment to high design standards and good place-making. Question 8 (Is car parking well integrated so it supports the street scene?) and Question 15 (Do internal spaces and a layout allow for adaptation, conversion or extension?) deserve particular attention in relation to terraced housing.

By Andy Jobling and Julia Park, Levitt Bernstein Associates