

Incorporating Lifetime Homes standards into modernisation programmes

Lifetime Homes standards - design criteria which ensure that homes are designed flexibly enough to meet the needs of most households with the minimum of adaptation - are increasingly being adopted in the building of new homes. This project examined the extent to which the same standards could be applied to existing homes as part of a refurbishment programme. Looking at a pilot study of ten homes in York, it found that most residents welcomed improvements in line with Lifetime Homes standards. The researcher, David Bonnett, found:

- f Three-quarters of the Lifetime Homes standards were readily achieved as part of a fairly standard refurbishment programme.**
- f The majority of these could be included at little or no extra cost.**
- f In the main, occupants felt that - once installed - Lifetime Homes improvements increased safety and convenience for all age groups, not just people with disabilities.**
- f The most widely approved changes were: provision of a household car parking space; an entrance level WC; accessible emergency controls and, despite initial reservations, raised electrical sockets.**
- f Even occupants who were unsteady on their feet or who used a wheelchair did not want a ramped front entrance, though ramped access at the rear was more acceptable. Ramps were perceived as highly visible and unwelcome indicators of vulnerability and disability.**
- f Difficulty in persuading contractors to deviate from traditional methods meant that they had to be specifically briefed on the aims of Lifetime Homes improvements. This applied especially to services contractors on the accessibility and positioning of emergency and other controls.**
- f The researcher concludes that:**
 - The 'no-cost' improvements identified should be included as a matter of course in any refurbishment or service replacement programme.**
 - The 'low-cost' improvements identified should be part of the detailed considerations of any refurbishment programme.**
 - The opportunity for including 'high-cost' alterations should be considered, and the costs weighed against the one-off costs and disruption to occupants of implementation at a later stage.**
 - Where space is limited, allowance should be made for further adaptation at a later stage; for example, where an entrance level WC is introduced its positioning should if possible allow for widening at a later date if wheelchair user standards are required.**

Background

Few new houses have an accepted standard of accessibility. Most older housing has none at all. Yet one in four households includes a person with a disability, usually someone elderly, and most housing in the UK is over fifty years old. The problem of inaccessible homes therefore exists on a large scale.

This project examines the feasibility of including Lifetime Homes standards in a refurbishment programme for older housing. These standards (see Figure 1) have been devised for new homes. By introducing forethought and flexibility into the design and layout of homes, they aim to make homes better for people at all stages of their lives. Many of the design criteria offer advantages for a range of households, for example, families with young children. Alterations can readily be made if a household member becomes temporarily or permanently disabled in some way, or simply becomes less able with age; Lifetime Homes are also easily accessible for disabled visitors.

The criteria are intended as part of the design thinking for new housing. Many builders are now adopting them as standard. But new housing in any one year accounts for a small percentage of the housing stock. Even widespread adoption of the criteria would therefore have only a limited effect. Greater impact would derive from the application of the Lifetime Homes standards to existing housing.

Government policy is to provide grants for individual improvements but the most effective time for this is when major refurbishment is undertaken. This is especially relevant for social housing, where thousands of pounds are spent each year on expensive one-off adaptations. Much of this cost might be saved if access improvements were included as part of refurbishment and modernisation programmes. Such opportunities are rarely taken in a planned way, either by private owners, local authorities, or housing associations.

This project set out to establish whether or not this approach can be recommended with confidence by examining:

- To what extent could the Lifetime Homes Standards be practically and effectively incorporated as changes into existing homes? Inevitably the scope for inclusion of the standards depends on particular house types, but general recommendations were sought.
- Would any cost implications of including the standards be acceptable, and could they be minimised by their inclusion in a refurbishment programme?
- Would a range of households - young and old, single people and larger families - all agree that the standards were relevant to their concerns and formed

desirable alterations to their homes? In other words, do the aims of the Lifetime Homes concept and the concerns of occupants coincide?

Costs of implementation

The project demonstrated that many of the standards could be absorbed into the refurbishment budget at little or no cost, though this was not the case for standards requiring rearrangement of spaces, such as enlarged bathrooms or adding ground floor WCs. With ingenuity these changes were all possible but only at extra cost.

Within the context of this refurbishment programme the Lifetime Home standards could be divided into three cost categories.

'No-cost' improvements

In this group were all changes to the positioning of emergency controls, electrical sockets, switches and radiator controls. Because these were to be replaced as part of the refurbishment programme, there was no additional cost involved in positioning them at an accessible level.

'Low-cost' improvements

This group included improvements that cost only a little extra (£25-100) to include as part of the refurbishment programme. Typically these were additional handrails, rehung doors, and external lighting. They also included widened and level paths as part of external works. These access items were incorporated with only a little extra consideration.

Also included in this group were 'hidden' improvements, for example, forming a wall opening for future use for an interconnecting bedroom/bathroom door, or a floor opening for the future installation of a through-the-floor lift. These were only viable inclusions where wall, floors, or ceilings were part of refurbishment or repairs.

'Higher-cost' improvements

Few items came into this category of relatively high cost (over £100) but they were significant in relation to the overall additional expenditure. Costs arose from the rearrangement of internal walls and services to form new ground-floor WCs and/or showers, and enlarged upstairs bathrooms with widened doors. These items had an additional time implication for both design and consultation. Although these were add-on costs, including them as part of an overall refurbishment programme was clearly cheaper than undertaking one-off alterations at a later date.

Practicalities of change

Development of suitable plans

The study demonstrated that most of the Lifetime Homes improvements could be incorporated into the

refurbishment proposals with only a little extra consideration.

Significant internal alterations were possible in all cases, but required additional design and site services. The outcome of these alterations in most homes will adequately serve householders with moderate mobility difficulties. Wheelchair users who required additional space, typically for a ground floor shower/WC, accepted that some concession to loss of storage or some other facility was inevitable.

For most households, achieving wheelchair-user WC space standards was not an acceptable first objective where space was very limited. But the option to expand at a future stage can be achieved by encroaching on an adjoining amenity when circumstances make this acceptable. With critical services already in place, the later cost and disruption of enlarging a WC would be minimised.

On site

A thorough overseer's briefing about the Lifetime Homes aims is advisable, especially for electricians and plumbers. Failure to clearly understand the Lifetime Homes objectives can lead to services remaining in existing or even less accessible positions.

Occupants' views

It was clear that residents approved of most of the Lifetime Homes standards, if not wholeheartedly before, then after implementation. In most cases they could see a direct and practical benefit. The cut-off point for approval seemed to come where practical benefits were instead perceived as special benefits solely related to the circumstances of disability and old age. In this respect, the standards not welcomed were ramped entrances and support rails in bathrooms and front entrances.

Car parking (see Figure 1, point 1)

The prospect of individual car parking spaces was without exception welcomed. This was largely because of improved convenience. The use of individual front gardens as areas for car parking space was considered quite acceptable.

Pathways (see points 2 and 3)

Extra width to narrow paths was generally welcomed, particularly by people using prams and bicycles. The same was the case for level or gently sloping paths, with no steps, especially for families with children.

External lighting (see point 5)

External lighting was seen as essential, but more on the grounds of improved security than for added convenience and safety.

Level entrance (see point 5)

There was wide resistance to introducing ramps to front stepped entrances. Despite possible inconvenience, front entrance steps were preferred to what people thought of as the stigma of having a ramp. In contrast, ramped rear entrances were more acceptable.

Almost all front and rear doorsteps were retained by request. In one case an additional step was introduced because the original was awkwardly high; in another a temporary ramp only was requested by a wheelchair user.

Enlarged open-plan kitchens (see point 7)

The improved circulation in larger open-plan kitchens was widely welcomed.

Ground level WC (see point 8)

The prospect of a ground level WC was welcomed by all households, and the (larger) WC/shower option appealed particularly to families with children. It was considered a valuable improvement by the occupants themselves, but also for visiting elderly relatives.

Figure 1: Lifetime Homes - Summary of Standards

- 1 Parking space capable of enlargement to 3.6m
- 2 Minimum distance from parking space; level or gently sloping
- 3 Approach to the entrance to be level or gently sloping
- 4 Lifts to be wheelchair accessible
- 5 Entrances covered and illuminated; level access over thresholds
- 6 Widths of doorways/hallways in accord with the Access Committee for England's standards
- 7 Wheelchair turning circle (1500 mm width) in all ground floor rooms
- 8 Wheelchair accessible downstairs toilet, plus opportunity for shower unit later
- 9 Living room at entrance level
- 10 Walls in bathrooms and toilets able to take hand-rails
- 11 Ground-floor bedspace in two-storey houses
- 12 Bath/bedroom ceiling strong enough for hoist; removable door panel between bath/bedroom
- 13 Provision for future stair/chairlift; joists trimmed for through-the-floor lift
- 14 Accessible basin, WC and bath
- 15 Window-sills usually 750 mm or lower and windows easy to open/operate
- 16 Switches, sockets, controls etc at a height of 600-1200 mm

These criteria were developed by a group of housing experts who came together in the Joseph Rowntree Foundation Lifetime Homes Group.

However, both options, but especially the larger, meant the loss of precious storage space. For most households storage space was a priority and they chose the small WC option in order to minimise loss of storage. The positioning of the fittings was critical to making the most effective use of space. Households whose priority was easy access (in this case, a wheelchair user and an elderly person) were prepared to sacrifice some storage space for a larger shower/WC.

Handrails (see point 10)

Older occupants felt the addition of handrails to both sides of the stairs was a useful improvement.

Enlarged upstairs bathroom (see points 12 and 14)

This alteration involved an equivalent loss of space to the adjoining principal bedroom but most families saw this as a fair exchange.

Windows accessible for operation (see point 15)

Without exception all occupants found it difficult or impossible to open and close windows over the kitchen sink. This problem existed before modernisation; it was worsened by new deeper (600mm) kitchen units. A remotely positioned window opener was installed on a trial basis.

Height of controls (see point 16)

The repositioning of **emergency controls** to easily accessible positions was welcomed without exception, though people were slightly cautious about them being within the reach of children. This repositioning water stopcocks, and electrical fuse-breakers.

There was initial resistance to raised electrical sockets, but a height of between 450mm and 600mm (2'0") proved an acceptable compromise, avoiding the need to stoop but overcoming the 'unsightly' appearance of trailing wires. Despite initial reservations this change was subsequently widely approved. The arrangement also allowed greater flexibility of furniture arrangements because access to electrical sockets was less likely to be obstructed.

The same was the case with radiator on/off controls located at the top rather than the bottom of radiators.

The positioning of heating controls at a convenient height was approved, though avoidance of tampering by children needs to be taken into account.

The relocation of gas meters externally was wholly approved and raised the question of why electric meters could not be similarly relocated.

About the study

The Lifetime Homes standards modernisation project formed part of an on-going refurbishment programme. It included ten similar family homes originally built in the early 1930s, occupied by a variety of households.

Further information

A full report on the project is available from David Bonnett - Chartered Architect, 72 Charteris Road, London N4 3AB. An information pack, Lifetime Homes Improvements, which offers a starting-point for considering Lifetime Homes as part of a modernisation programme is also available from the Publications Office, Joseph Rowntree Foundation, The Homestead, 40 Water End, YO3 6LP.

Related Findings

The following *Findings* look at related issues:

- 123** Adaptations for disability (Sept 94)
- 136** Housing needs of people with a physical disability (Feb 95)
- 147** Housing and 'floating support': a review (June 95)
- 155** Community care and housing for disabled people (Sept 95)

For further information on these and other *Findings*, contact Sally Corrie, Publications Officer, on 01904 629241.



Published by the
Joseph Rowntree Foundation
The Homestead, 40 Water End
York YO3 6LP
Tel: 01904 629241 Fax: 01904 620072
ISSN 0958-3084

The Joseph Rowntree Foundation is an independent, non-political body which funds programmes of research and innovative development in the fields of housing, social care and social policy. It supports projects of potential value to policy-makers, decision-takers and practitioners. It publishes the findings rapidly and widely so that they can inform current debate and practice.