

Lift vs Extension

for children & adults with muscular dystrophy & allied neuromuscular conditions

The factors to be considered by a disabled person and/or their family to help make a well-informed choice

To be used in conjunction with:

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| Chapter 8a | <i>Equipment for Adaptations;</i> |
| Chapter 11 | <i>Justification for Funding;</i> |
| Chapter 14 | <i>Scales & Templates;</i> |
| Chapter 15 | <i>Adaptation Specifications;</i> |
| Chapter 18 | <i>Addresses: Manufacturers/Suppliers/Sources of Advice.</i> |

The main issue involved in the choice is an assessment of the best use of space. The decision is about which option either uses up the least space or gives access to the most space and the opportunity to provide the best facilities, within both the house and garden.

A lift is usually the first option to be considered, particularly if a grant application is being made, as grants officers prefer to approve adaptations that are within the structure of the house. However, where both a lift and an extension are possible structurally, the final decision must depend upon which option will be the most appropriate for the disabled person and the carers, bearing in mind the long-term effects of the particular disability.

Guidance is presented under the following headings:

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Lift

The issues to be considered are:

- ⇒ types of lifts available;
- ⇒ is a lift appropriate?
- ⇒ choice of model.

Types of lifts available

These are as follows:

- ⇒ stairlift with a platform for a standing passenger;
- ⇒ stairlift with an integral chair;
- ⇒ stairlift with a platform for a wheelchair;
- ⇒ vertical through-floor lift.

Stairlift with a platform for a standing passenger

Unless there are unusual circumstances or a lift is needed for only a short period, this type is not recommended for the safety of anyone with muscular dystrophy.

Stairlift with an integral chair

Many adults prefer this type of lift; however, unless such lifts are used as a 'stop-gap' solution, they are not suitable for anyone with muscular dystrophy. This is because of the difficulty in transferring on and off the seat, the problems of both balancing and carrying objects, and, if/when a wheelchair is necessary, the need for a second wheelchair upstairs.

Stairlift with a platform for a wheelchair

Although these lifts do not take up valuable space in a house, there has to be a large enough area, both at the base of the flight of stairs and at the top, to accommodate the platform. In addition, there must be sufficient space to enable the user to manoeuvre the wheelchair with ease, on and off the platform. These lifts also take up the full width of the stairs and therefore prevent anyone else using the stairs at the same time.

Vertical through-floor lift

These models are usually open and not enclosed in the same way as a public service lift. Initially, even if a wheelchair is not needed, this type of lift will be invaluable as a means of going between the two floors and carrying small items such as toys and washing. If necessary, a wall-mounted seat can be fitted prior to the use of a wheelchair in the future. However, this may be contraindicated because of the difficulty of standing up from the seat unless it is high enough to be used as a 'perching' seat.

Forward planning is essential to ensure that, where possible, the lift will be suitable for the size of any wheelchair that may be used in the future, and for the combined weight of the chair (which could be **140kg**) and the occupant.

Is a lift appropriate?

The following questions need to be answered:

- ⇒ Is the house large enough for the loss of space taken up by the lift and access to the lift to be unimportant?
- ⇒ Is there a suitable position for the lift on the ground floor and directly above on the first floor – or are the stairs suitable for a wheelchair-platform lift?
- ⇒ Are the first-floor facilities suitable in space and layout for a wheelchair?

Is the house large enough for the loss of space taken up by the lift and access to the lift to be unimportant?

Most houses lack space and are unsuitable for the installation of a lift. The space needed for a lift is considerable, because of the area needed for both the lift and access to the lift. The recommended size is likely to be approximately **1500mm** in length and **1000mm** in width for the lift – and an area of the same size in order to approach the lift in a wheelchair and open the door.

Is there a suitable position for the lift on the ground floor and directly above on the first floor – or are the stairs suitable for a wheelchair-platform lift?

Does the layout of the rooms allow for a double bedroom, large enough for the essential fittings and a lift, to have en-suite facilities? Boys with Duchenne muscular dystrophy and other children and adults with neuromuscular conditions are often undressed on their bed and then they transfer into the bathroom either on a mobile bath or shower chair, or on an extended track of the ceiling hoist. The latter option is usually chosen when a shower toilet and/or bath with an integral seat is installed. Adjoining rooms enable this procedure to be carried out within the warmth and privacy of the two rooms – and respects the dignity of the disabled person.

Are the first-floor facilities suitable in space and layout for a wheelchair?

There is no point in installing a lift if either the bathroom or bedroom is too small. It is important to be aware of the space needed in the future as the need for additional equipment and the size of the wheelchair increases.

Bathroom

There must be sufficient space for the following:

- **A suitable bath or shower**

Where possible, the choice of equipment must be made on the basis of need and not space, and the choice will be between:

- an *Arjo* Sovereign bath with space to cover the arc of the seat;
- Mermaid Ranger with a pillar at the side or end of the bath, with space to cover the arc of the seat;
- ASM Multi-System;
- level-access shower.

- **Vanity washbasin**
 - 1050-1200mm in width and a front-to-back depth of 675-695mm.
 - 1000mm in front of the basin to allow sufficient space for a wheelchair to approach squarely.
- **Toilet**
 - 900mm at the exposed side of the toilet for positioning a wheelchair for sideways transfer.
 - 500mm from the centre of the pan to the wall or nearest obstruction. This allows space for wall-mounted rails and for a chair to be superimposed over the pan, if either are needed.
- **Additional door**
 - 926mm width door to provide direct access to the bedroom.

The circulation of a powered wheelchair

- 1700mm turning circle or the space to carry out a 3-point turn.

Bedroom

There must be a suitable position for the lift (if it cannot be accommodated on the landing) and yet enough space for the essential items, as follows:

- **Wall space for an electric bed**
 - Length: 2155mm.
 - Width: 2160mm for a double bed, and either 1080 or 1220mm for a single bed. It is always wise to allow for the wider single bed because this option will then be possible in the future - or will allow a single bed to be pulled away from the wall to enable a carer to work from both sides of the bed.
 - Side: 1800mm to enable the ceiling hoist over the bed to be used for transferring from one wheelchair to another, or from wheelchair to easy chair or Mermaid Ranger/shower chair.
- **Standard storage facilities**
 - Wardrobe and chest of drawers.
- **L-shaped working surface**
 - A minimum length of 1800mm x 1200mm.
- **Door**
 - 926mm width door to provide direct access to the bathroom.
- **The circulation of a powered wheelchair**
 - 1700mm turning circle.

Choice of model

The factors to consider are as follows:

- ⇒ whether the lift has to be suitable for a wheelchair;
- ⇒ the space available for the most appropriate model;
- ⇒ the size of lift and weight limitations;
- ⇒ the availability of electronic doors and the sensitivity of the switches;
- ⇒ the position of the controls;
- ⇒ choice of lift.

Whether the lift has to be suitable for a wheelchair

For most people with a neuromuscular condition, it is vital to have a wheelchair model of lift installed, if a wheelchair is needed now or is likely to be needed in the future. This will avoid incurring the additional and considerable expense of changing the lift at a later date, usually to a vertical through-floor lift.

The space available for the most appropriate model

The approximate space has been discussed, but it is important to find the most suitable model of lift and to check the dimensions.

The size of lift and weight limitations

These may be crucial, particularly for adults, and children as they get older and use more sophisticated, larger and heavier wheelchairs. Care must be taken to ensure that the lift that is installed will not limit the choice of wheelchair in the future. The recommended size is approximately **1000mm** in width and **1500mm** in length (which may be a 'special' car size in the wheelchair model).

The availability of electronic doors and the sensitivity of the switches

The lift must have electronic doors and accessible, sensitive controls to ensure that it can be operated independently, particularly in the long term when the disability may have increased.

The position of the controls

The position of the controls and their accessibility, on the ground floor, first floor and in the lift is very important. The height of the switches and the space at either side will be crucial, and these measurements are discussed under *electrical fittings* in Chapter 15 *Adaptation Specifications*.

Choice of lift

A number of firms manufacture or supply lifts, and individual Local Authorities tend to prefer to use one firm only, as this makes servicing and repairs more straightforward, although if the lift has been bought with a housing grant, maintenance may be the responsibility of the applicant. Two firms have frequently supplied lifts to people with neuromuscular conditions and, when exploring the options, these firms may be a good place to start. However, this does not mean that other lifts are not satisfactory, provided that they are the recommended size, travel the required height and are available with suitably-positioned, touch-sensitive controls.

Harmony wheelchair lift: *Terry Group Ltd*
VM31/VM51 or VM36/VM56 vertical lifts: *Wessex Medical Equipment Co Ltd*

Ground-floor extension

The questions to be answered are:

- ⇒ Is there sufficient space in the garden?
- ⇒ Can the extension be accessed from the hall or family area and (ideally) not through the kitchen?
- ⇒ Can the extension be used to provide wheelchair access into and out of the house?
- ⇒ Can the extension be used to provide wheelchair access between the house and garden?

Is there sufficient space in the garden?

Is the garden large enough for a bedroom/bathroom extension of adequate size, preferably retaining access down the side of the house? One of the problems may be in getting planning permission, but many Planning Departments will look more favourably and 'bend' their rules where disabled facilities are needed. See Chapter 11 *Space Requirements*, Chapter 14 *Scales & Templates* and details in Chapter 15 *Adaptation Specifications*.

Can the extension be accessed from the hall or family area and (ideally) not through the kitchen?

If the kitchen is a narrow galley kitchen, can this be widened to make access safer?

Can the extension be used to provide wheelchair access into and out of the house?

In some situations, where a ramp is not possible at either the front or back door, or where a second fire exit is needed, wheelchair access to the house can be provided into the person's bedroom via French windows or a glazed door with an adjacent window. It is essential to ensure that the doors have a level-access threshold.

N.B. It is important to have a fire exit from the bedroom, if the kitchen (which is often the seat of the fire) lies between the extension and the rest of the house.

Can the extension be used to provide wheelchair access between the house and garden?

An external door from the bedroom is also needed in adaptations where there is no other alternative wheelchair access into the garden or patio at the back of the house. However, because access to the garden is a discretionary item in the Grant, the need may have to be fully justified.

Making the choice between a lift and a ground-floor extension

If the house is equally suitable for *either* a lift *or* extension the following should be considered:

Lift – Advantages

These are as follows:

- ⇒ provided that the doors are wide enough, every room in the house is accessible to the disabled person;
- ⇒ the opportunity for disabled children with particular problems to sleep near their parents;
- ⇒ the carer does not need to go downstairs if the child or adult needs attention in the night.

Provided that the doors are wide enough, every room in the house is accessible to the disabled person

This is likely to be essential to parents who want to be able to get into their children's bedrooms and want to maintain responsibility for the housekeeping and maintenance of the first-floor rooms. In addition, it ensures that the wheelchair user is not excluded from the different areas of family life; this may be important psychologically.

The opportunity for disabled children with particular problems to sleep near their parents

This may be important to families who have a timid, anxious child or a very severely disabled toddler who needs constant attention in the night.

The carer does not need to go downstairs if the child or adult needs attention in the night

This may be particularly important when either the carer is not well or the disabled person is ill and may need even more help than usual.

Lift – Disadvantages

The factors to consider are as follows:

- ⇒ the space needed;
- ⇒ a person with a neuromuscular condition may not be independent in the use of a lift;
- ⇒ the possible need to use the lift to access a toilet;
- ⇒ if the disabled person is in the bedroom or bathroom and needs help, the carer has to go upstairs;
- ⇒ a lift may isolate a young person;
- ⇒ lift maintenance is expensive.

The space needed

A lift takes up valuable space in a home; it is not a thing of beauty; and, although it is expensive, it is unlikely to add to the value of a house.

A person with a neuromuscular condition may not be independent in the use of a lift

Having to be helped places an additional burden upon the carers; if the user is independent, the procedure in using the lift will take time. Consequently, the lift may be used only a few times during the day.

The possible need to use the lift to access a toilet

Unless there is an existing wheelchair-accessible toilet (with a ceiling hoist, if needed) on the ground floor, or the space and funding to provide one, the user would have to go upstairs in the lift each time the toilet was needed.

If the disabled person is in the bedroom or bathroom and needs help, the carer has to go upstairs

This may occur many times each day, and possibly at inconvenient times (e.g. while the carer is cooking a meal).

A lift may isolate a young person

Teenagers often choose to spend many hours in their bedrooms and, because of the length of time taken to use the lift, (compared with the time for direct access from the family living areas into an extension), this may tend to isolate them from family activities.

Lift maintenance is expensive

Maintenance of equipment provided with a grant is usually the responsibility of the applicant and this may be expensive. Social Services sometimes provide this help and this should be checked when decisions are being made.

Extension – Advantages

These are as follows:

- ⇒ provides the facility of a purpose-built bed-sit;
- ⇒ allows a teenager to move freely and quickly between the family areas and their bedroom;
- ⇒ provides the convenience of a ceiling hoist on the ground floor;
- ⇒ enlarges a home;
- ⇒ provides purpose-built facilities;
- ⇒ provides a ground-floor, wheelchair-accessible toilet.

Provides the facility of a purpose-built bed-sit

This is likely to be important to a teenager and, with the installation of double-swing doors, allows independent and instant access to and from the room, in a powered wheelchair.

Allows a teenager to move freely and quickly between the family areas and their bedroom

This provides independence and freedom that should not be underrated. Anyone with a teenage child will confirm that often teenagers prefer the privacy of their own rooms and tend to spend much of their free time amongst their possessions. A ground-floor room provides this privacy without the tendency to become isolated.

Provides the convenience of a ceiling hoist on the ground floor

Allows a ceiling hoist, installed over a bed, to be used to transfer a person from one wheelchair to another during the day, without having to go upstairs. In addition, it enables a child's easy chair with castors, which is used in the family sitting room, to be wheeled into the bedroom, in order to use the hoist for lifting in and out of the chair.

Enlarges a home

An extension provides an additional facility that will add to the value of the house.

Provides purpose-built facilities

A purpose-built extension is likely to provide better facilities than adaptation of existing rooms.

Provides a ground-floor, wheelchair-accessible toilet

This will be very important in a house where there may not be an existing suitable toilet. Also, as the user will always be on the same floor as the toilet, it will be quicker to access.

Extension – Disadvantages

These are as follows:

- ⇒ reduces the size of the garden;
- ⇒ if the child or adult needs attention in the night the carer has to go downstairs;
- ⇒ not suitable for a timid child.

Reduces the size of the garden

Limiting the garden may be a disappointment to keen gardeners and unless the garden is large, will restrict the space for siblings to play.

If the child or adult needs attention in the night the carer has to go downstairs

This may be a frequent problem, particularly during times of illness and chest infections.

Not suitable for a timid child

In spite of the provision of intercoms, a timid child may not like sleeping downstairs alone and may feel anxious and isolated from the rest of the family. As a result, one or both parents may end up bringing their bed downstairs to be near their child.

Summary

The ideal solution is a large house where there is an activities room on the ground floor and sufficient space for a lift, without having a detrimental effect on the circulation of a wheelchair. However, the majority of people live in houses in which there is insufficient space for a lift and the retrospective experience of many families is that (unless there are special circumstances) an extension is a more suitable choice for most – but not all – children. This is because it increases the wheelchair circulation space in the house and will enable children to move quickly and easily between the family areas and their hobbies in their bedroom. With the same value of hindsight, a lift is essential for adults who want to retain access to their children's bedrooms, or for housekeeping and maintenance of the rooms on the first floor.

In deciding between a lift and an extension, as can be seen, there are advantages and disadvantages to both options. The issue is one in which many people feel the need to defend their choice. The problem is that opinions will vary, not only between different families but within the same family, as the importance of the advantages and disadvantages will vary from week to week and from year to year, depending upon the individual situation or problem experienced at any particular time. The aim of this chapter is to provide information based on these factors, so that where both options are possible, each family can make the most informed choice.