

INTRODUCTION: Here at Dolphin Stairlifts South West (also known as Dolphin Devon), we offer a wide range of products to suit most user's needs. Being an approved agent for many of the largest manufacturers in the industry including *Stannah*, *Wessex*, *Access*, *Platinum*, *Terry Lifts* and *Bruno* means we can provide the right product for our client's individual requirements.

We regularly receive referrals from local councils and OT's before carrying out a survey visit in the client's home. The main factors to consider when assessing a stairlift user and their stairs are detailed in this handy guide.

1. STAIR ENVIRONMENT

1.1 Staircase minimum width

The minimum stair width we can install stairlifts on is 610mm (providing there is enough space at the top of the stairs to turn the stairlift.)

If the stairs are narrower, we would look at a Through Floor Lift option, providing there is enough space in the property - top and bottom).

1.2 Space and obstructions

We typically need at least 600mm from the bottom step to the nearest obstruction to accommodate for the track and stairlift (see fig a).

If there is a radiator, we will either replace it with a smaller one (if possible) or remove it completely.

Another issue we have sometimes is an inward opening door with a lack of space to open if the stairlift was to get stuck at the bottom of the staircase. In this case we look at replacing the door with an outward opening door - providing it is safe to do so.

We also come across windowsills that may need cutting back to the wall so we can fit the stairlift as far back as possible (see fig b).



Fig a.



Fig b.

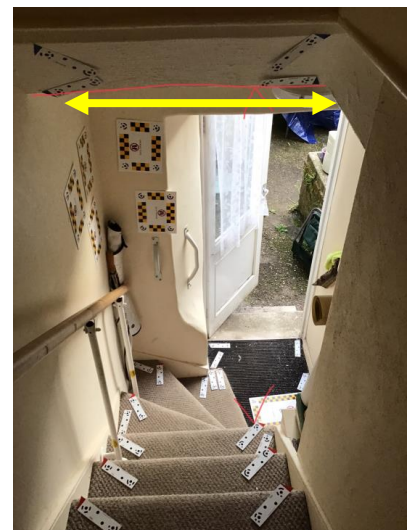


Fig c.

Handrails can also be removed if possible. We can also carry out carpentry alterations where necessary (e.g. infill platforms and trimming newel posts are common alterations).

1.3 Low bulkhead

The height over the stairs (*see fig c*) can cause problems for taller users. Typically, a standard bulkhead is around 2 metres up from the step that you are measuring, anything below 2 metres needs to be looked at and factored into a survey with precise user and stair measurements.

1.4 Structure of the staircase

The staircase has to be strong enough to support a stairlift and its user.

Many people assume stairlifts are primarily fixed to the walls - but this is not true. In fact, nearly all stairlifts are primarily fixed to the stair treads - and in some instances can also be fastened to the wall if stair fixings are not adequate.

1.5 Angle of staircase

The average staircase has an incline of 42° and the steepest incline we can achieve with certain models is 70°

The shallowest incline we can achieve with certain models is 0°.

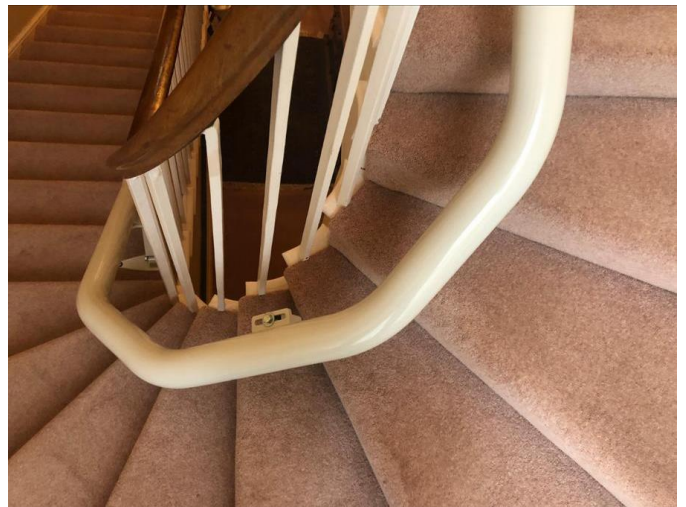


Fig d.

1.6 Fan / Kite winders

If we find these on the stairs, we always try to position the curved stairlift track on the narrower side as this will leave the wider part for other stair users - and if the stairlift user needs to get off the stairlift, it is much safer to do so (*see fig d*).

2. USER DIMENSIONS

2.1 Weight

We pay attention to how a user 'carries' their weight as this is very important in deciding which stairlift is best suited to them.

A standard stairlift has a maximum weight capacity of 125kg / 19 stone – although we can also supply heavy duty models with a max weight limit of 190kg / 30 stone

Although stairlifts have a max weight limit, we prefer to have a 2 stone tolerance, just in case the user's weight increases after the stairlift has been fitted.

2.2 Height

This is important so we can achieve the right seat height to make the user's life easier and safer. Seat heights range from 390mm to 575mm, depending on the stairlift model.

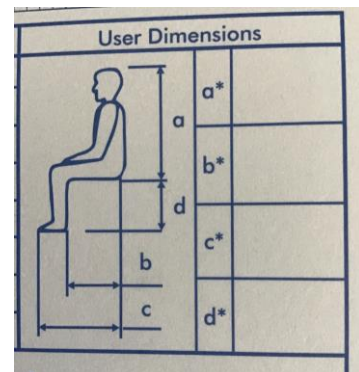
If the user struggles to bend their legs, we may have considered a 'stand and perch' style stairlift in the past - but we now try to avoid these as it could be more hazardous for the user. In these cases, a through floor lift may be considered instead.

Another alternative is a downward facing stairlift as their legs will be pointing down the stairs, until they get to a wider area at the top where they can then turn.

2.3 Dimensions whilst sitting

Where possible, we will always get the user to sit on a straight-backed hard chair to gain accurate hip to knee; hip to front of toe (if they cannot tuck their feet back further than their knees); floor to underside of thigh, and if bulkhead is low, bottom to top of head measurements.

This will give us a good idea as to whether there will be any clashing on the stairs.



2.4 Mobility

Mobility capabilities and whether they need to transfer from a wheelchair are major factors in deciding what stairlift is the most suitable - or if a stairlift is a feasible option.

3. STAIRLIFT 'STARTS'

We offer a range of 'starts' to suit both the staircase and the user, including:

- first step start
- drop nose start
- 180° wraparound start
- 90° wraparound start
- hinged or retractable rail
- horizontal overruns.

3.1 First step starts *(see fig e)*

Offer '0' protrusion beyond the first step and a slightly higher seat position for taller users. The use of this option is governed by the height of the first step.

3.2 Drop nose starts *(see fig f)*

Offer lower 'seat to floor' heights, with minimal track protrusion (175mm).

3.3 Hinge / retractable track starts *(see fig g)*

These offer an alternative for stairs with a doorway or walkway at the bottom.

With this start there must be an alternative entrance in case the stairlift break down in front of a main entrance and the door cannot be opened. Alternatively, we can look at changing the door to open outwards (only if it is safe to do so).

N.B. A hinged / retractable rail section cannot be positioned at the top of the stairs.

We try to avoid hinged rails on curved rail stairlifts, as it's extra things to go wrong, more things for user to think about – and prevents finger trapping.



Fig e – first step start



Fig f – 90° vertical standard drop nose



Fig g – retractable rail start



Fig h – Flow 2A with standard drop nose



Fig i – Flow 2A with standard drop nose

3.4 180 ° & 90° bend starts *(see figs j, k, l)*

These are great options to wrap the stairlift track around the bottom newel post away from the stairs, on an opposite side to a doorway perhaps.



Fig j –Vertical 90° start



Fig k - 90° start



Fig l - 180° start

3.5 Horizontal overrun starts *(see fig m.)*

These allow the lift to be brought away from the stairs, leaving more room for other household users to pass at the bottom - and for an easier mount & dismount for users.

This is a great solution at the top of the stairs, for someone that is very unsteady on their feet, as it brings them further away from the stairs. It's also a good solution for wheelchair transfers.



Fig m – horizontal overrun

4. STAIRLIFT 'FINSHES'

We offer a range of finishes at the top of the stairs to suit both the staircase and the user.

4.1 'Flush or 'zero-intrusion' finish

Here, the rail simply stops 'flush' with the end of the staircase – and either a manual or powered swivel seat turns the user towards the direction of dismount.



Fig l – Platinum



Fig m – Stannah 260



Fig n – Stannah 260

This is where the footrest either comes level with the top landing or sits just above, all depending on the stairlift model.

This is also known as a standard finish, and most stairlift configurations will finish like this if there is not a lot of space at the top – and no space for an overrun.

With this finish we prefer to include a power swivel as this will automatically turn the user to face the top landing, making it easier for the user to step off.

4.2 Horizontal overrun finish

These are great to bring the stairlift away from the top of the stairs, allowing an easier and safer dismount for the user. It also allows more space for other stair users to get past the stairlift.

In some instances, an overrun of rail can mean a backward facing stairlift on narrow stairs can turn into a wider area away from the stairs. Where possible, we will always try to use an overrun.



Flow X



Fig p – Flow X

Fig
o –



Fig q – Platinum



Fig r – Stannah 260



Fig s – Stannah with Firefly seat

4.3 180° & 90° park bends

These are a great option for bringing the stairlift off the stairs onto a safer top landing.



Fig t – Flow X



Fig u - Platinum

4.4 Multi flight

We can accommodate for multiple flight staircases and are able to install intermediate stopping points. This is provided when there is enough width to turn the chair if an incline is the only way to get off - and the incline stop position is of a safe height. (If we are concerned about this we prefer to carry out a feasibility technical drawing.)



Fig v – Flow X



Fig w – Flow 2A

Alternatively, if there is a large space on the mid landings this would be the best stopping position.



Fig x – multi-landings



Fig y – Flow 2a

5. 2-WAY POWERED SWIVEL

This is a great solution if there is a narrow hallway at the bottom. This will allow the user to face down the hallway, making it easier to get on and off.



Fig z – Stannah 260



Fig Aa – Stannah 260



Fig Bb – Stannah 600

6. STRAIGHT STAIRLIFTS

Straight stairlifts are just a straight piece of track that cannot be bent, just cut to required length. All straight stairlifts will have an incline finish (i.e. the chair will turn onto the top landing).



Most people think they can come onto the top landing, but in fact it is just the footrest that will come in line with the top landing. The chair will turn towards the top landing so the user can get off safely.

We always recommend a powered swivel chair option as this will make the user's life easier and safer. This is known as '*future proofing*'.

Some stairlifts will offer a powered footrest option, to prevent the user having to bend down.

Alternatively, there is a 'linked footrest', but this generally makes the seat and footrest work together rather than independently. (Some users have been known to struggle with this feature)

Most of our straight stairlifts will charge anywhere on the track, whereas a curved stairlift will mainly charge at the top & bottom - but we can also position parking points anywhere on the track.

All stairlifts will make a bleeping sound to indicate being off-charge - but they can also accommodate a visible display for hard of hearing users.

7. DOWNWARD FACING STAIRLIFTS

These stairlifts have been an innovative solution to the original sideways-facing travel stairlift – and we have been installing these since 2012.

The *Flow* stairlift (by Access) has the upper hand on other stairlift models as it has ASL (Auto Swivel & Levelling) technology. This is where it automatically adjusts the angles of the chair position as it travels upstairs – and this can be altered by our own engineers to suit both the user and staircase width.

The *Platinum Ultimate* stairlift is the other stairlift we supply that can travel at one pre-programmed angle - and then rotate at either end of the track (top or bottom).

We hope we have helped with any decision making you may have for your patient, but if you still have any unanswered questions, we are always here to help at 01363-776486 or info@dolphindevon.co.uk - and there is also plenty of information that can be found on our website:

www.dolphindevon.co.uk