Grade II listed home
Future-proofed with a Stannah lift
Perfect solution
Find out what a Midilift
did for our Chairman's home

Stannah

When Stannah Group joint-chairman Brian Stannah and his wife Jenny began to contemplate old age and a means of remaining in their much-loved family home their thoughts naturally turned to lifts. The solution, a Stannah Midilift XLplus home lift and a huge amount of lift and building expertise.

The idea

Brian explains:

"My daily journey down the stairs with the tea tray began a thought process that led me to thinking about moving ourselves and goods around the house in our later years. We knew we wished to remain in our home but the challenges that old age inevitably will bring might force us to leave. We decided to investigate how we could future-proof our home so we could welcome our three sons and eleven grandchildren for many years to come."

Obviously, you may be forgiven for thinking a Stannah stairlift would be the answer, but this 4-storey home required a more permanent solution.

The expertise

Having a family of lift expertise at the ready was marvellous but some heavy-weight building expertise would be essential for this project too.

Enter architect Peter Thompson, structural engineer John S Ellard and, of course, Stannah Lifts Ltd, who manufacture lifts for both domestic and commercial applications.

1685
the year the house was built

329
years of being lived in

4
floor levels

1
Midilift XLplus lift

The house, which was originally built in 1685 with various additions over the centuries, presented many challenges from the off. The lift was to go from the cellar over four floors to the attic.

The project team at first thought the obvious solution would be to place the lift externally to the existing building, encasing it in an extension. This proved to be impossible as there was no point from which the lift could reach all levels without compromising the listed status the house enjoys.

The cellar

This area of the house posed the first and biggest problem. The ancient cellar has an arched vaulted ceiling so creating an aperture for a lift shaft would be no mean feat. Finding a pathway through the house, that would provide a plumb line for the lift to travel and level access on each level, resulted in the lift sitting in the centre of the cellar, so breaching the centre of the arch.

Architect Peter Thompson from Peter Thompson Architects explains:

"The initial call from Brian was a challenging proposition but we were determined to find the right solution for both the house and its occupants. Building an external lift is often a solution but not in this case. The aim of the lift installation was to provide level access to all areas of the house and it simply couldn't be achieved unless the lift travelled through the house. To include both the cellar and the attic meant choosing the pathway for the shaft and then reconfiguring the layout of some rooms to make this possible. Finally the footprint of the lift was dictated by the space available and, of course, Stannah was able to supply a bespoke product."

Brian continues:

"Manufacturing a lift to our available footprint was one element but by far the largest obstacle was the structural engineering to support the cellar and the house, prior to installing the lift. I may have commented about the over-engineering of the structural work in our cellar but, in truth, this gave us every confidence in the project team. It also indicated that the installation of a lift in a listed building may take some time."

Structural engineer John S Ellard of Graham Garner & Partners Ltd explains:

"It may have looked like a case of over-engineering but we had to be certain that the vaulted structure was secure before the building works began. The first task was to inset steels into regular channels right through the curve of the wall/ceiling which permanently strengthen the arch and remain in situ after the installation. Then the whole was propped with the shaft constructed almost to the reinforced aperture level before we broke through the ceiling."

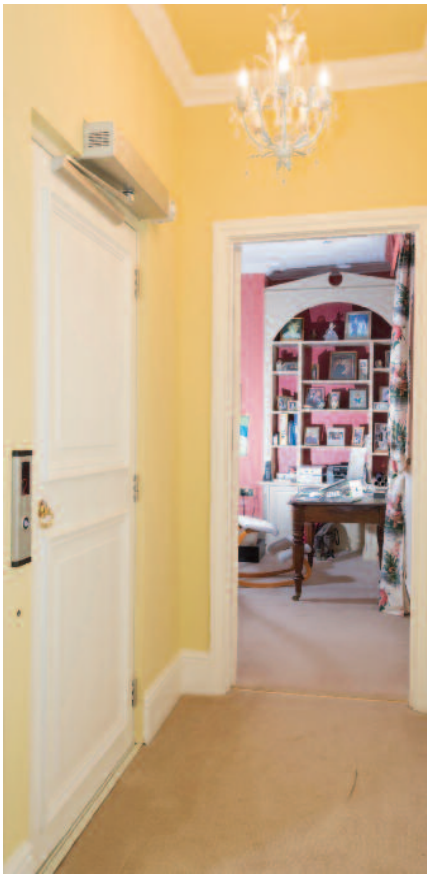
At cellar level the lift has a single entry. The lift car has a unique footprint so bespoke engineering was required. The lift is large enough to take several people or even a wheelchair, with plenty of space in front of the lift.

The ground floor

On the ground floor the house has several changes in level. To ensure level access was achieved the lift has two through-car entries. One entry, currently in use, is via a raised area from the hallway that leads to the kitchen. The entry on the opposite side of the lift car currently opens into a small utility area (once larger but now accommodating the lift shaft) that has level access into the hallway.

The first floor

On the first floor the lift shaft caused a reconfiguration of two back to back bathrooms. By making both bathrooms smaller an additional landing space was created, providing access to both the lift and the study beyond. On this floor the lift has a single entry.



The attic

Brian and Jenny reluctantly relinquished some of the space in a generous room that houses a piano and library and for many years had provided space for a snooker table. At this level the lift shaft had to break through the original sloping roofline which was of concern to all involved in the project. However the roofline features several dormer windows and the lift shaft echoes their shape and blends unobtrusively in the whole.

The lift

The Midilift XLplus is a small, space efficient, low usage passenger lift. The MRL traction drive ensures quiet operation and energy-efficient use, which combined with minimal load-bearing requirements, make it ideal for domestic installations.

Brian and Jenny's lift was manufactured by Stannah Lifts in Andover to a bespoke specification dictated by the restrictions of their home. One notable specification was bespoke powered fire doors on each landing, finished to match existing doors.

Like other lifts in the 'Plus' range, it includes as standard:

- Structure supported enclosure
- 900mm clear opening at each entrance
- Two tone arrival chime at each landing
- Surface mounted call station with LED display and push button control
- Key switch to isolate lift at main floor
- Emergency lighting and alarm with back-up battery
- Energy efficient LED cabin lighting
- Automatic button controls
- Audible and visual notification of floor level and travel direction
- Two-way intercom communication system for emergency calls
- Full height light ray curtain on entrance edges
- Automatic emergency lowering feature

The lift will be regularly serviced by the local Stannah service branch that covers the South of England, one of eleven regional service branches.

Technical specifications

Standard Load	400kg
Maximum Travel	12m
Speed of Travel	0.15m/s
Drive System	Traction (motor and controller incorporated within the enclosure)
Control System	Automatic
Power Supply	10amp, 240v single phase

Technical data

Platform Size (w × d)	900 × 1400
Footprint Size (w × d)	1310 × 1600
Pit Depth	70
Headroom	2500

The Epilogue

In February 2014 many of us in the UK experienced unprecedented rainfall. Dorset and the Stannah home did not escape unscathed. The cellar and the shallow pit beneath the lift car, created to provide level access, flooded, rendering the lift unusable.

Brian picks up the story:

"We had just congratulated ourselves and the whole project team on a job well executed when the flood happened. We have lived in the house for twenty years, experiencing severe weather but never like this. We could not risk it happening again so we had to take action."

It was decided to raise the stopping position of the lift in the cellar by filling in the shallow pit, lifting the floor of the lift car reducing the height of the entry door slightly too. The lift now has a shallow step up and a ramp for level entry as an alternative. The ancient floor of the cellar is covered in original clay tiles which had to be lifted and reinstated to complete the work.

The result

Over to Brian again:

"The whole project took almost nine months to complete and the costs were substantial with the lift costs being less than 25% of the total. However, the result is extremely pleasing and everyone involved did a terrific job. Our home now discreetly has an invaluable addition of a lift that will help us in the future. For the moment we tend to take the stairs and send items we can avoid carrying in the lift. We look on it as an investment for our later years."

This beautiful family home is now future-proofed for the most senior members of the Stannah family and will continue to host extensive gatherings for all the family members for many years to come.

All Stannah lift products meet required standards, including:
The Equality Act 2010, EN81-70, EN81-3, BSEN115, Health & Safety at Work Act, CE Mark and Certificate of Conformity.

To find out more about Stannah's comprehensive ranges of Passenger Lifts, Platform Lifts, Escalators & Moving Walkways and Goods & Service Lifts, go to **www.stannahlifts.co.uk**

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