

# Stannah

## FX - Structure Supported Lifts

### for timber-framed buildings

Sustainability has become a key issue for the construction industry. The government has adopted the concept as a major theme in its thinking, integrating it into Building Regulations with the introduction of Part L. This means we are seeing a move towards building methods and materials which have a reduced impact and damage on the environment.

This has put pressure on builders, specifiers and developers to look at the environmental impact of their projects and consider sustainability in all planning, design and construction.

One initiative being increasingly adopted is the use of timber framed buildings. The use of timber has many environmental benefits; wood is a naturally renewable building material, it reduces raw material waste and is recyclable at the end of the life of the building.

The natural shrinkage and settlement inherent in this type of building design has rendered previous lift structures too rigid, as movement around the lift entrances can be as much as 30mm on a five floor lift.

A solution was needed, and Stannah Lifts Ltd eagerly took up the challenge. The company took its existing FX structure-supported lift and adapted it to suit timber framed buildings, creating a new option in the FX range.

*The FX lift's own structure already eliminates the need for scaffolding, a lifting beam and load bearing wall. This latest modification means that installing an FX lift in a timber framed building could not be easier.*



Left: A six-storey timber framed housing development.

Far left: A Stannah FX structure supported lift for Bellway Homes North East housing development.



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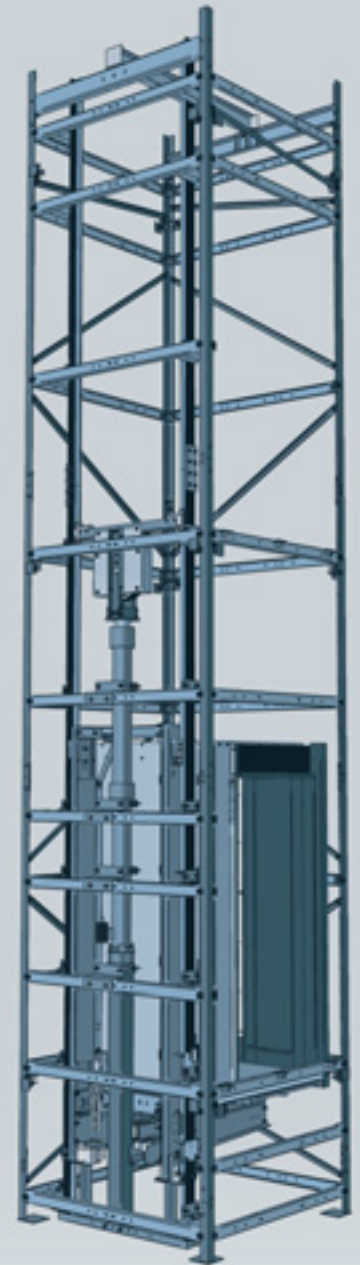
*Meeting  
the needs  
of timber  
framed  
buildings*

**Research and development of the new lift structure required analysing the movement within timber framed buildings and modifying the FX solution, increasing the flexibility, ensured the lift structure would not be unduly stressed by any building movement.**

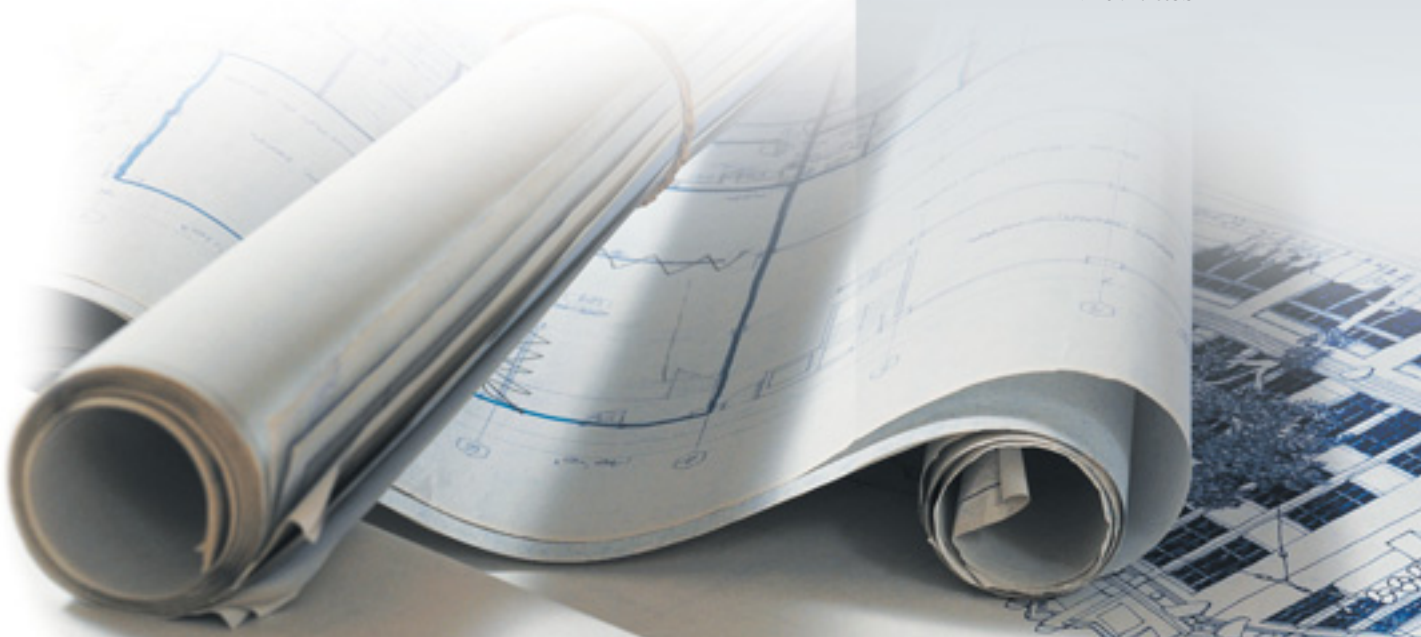
On our standard lift structure designs the landing doors are fixed to the steel structure, whilst on the new timber solution the landing entrance frames are fixed directly to the inside face of the timber shaft. This method allows the building to move independently of the lift structure, preventing the distortion between the building and the lift architrave frame previously experienced. The new structure is supported by contact with the internal walls of the lift shaft and slipper plates are used to allow the vertical movement of the building to slide past the fixed lift structure. This maintains the lift structure location within the lift shaft, allowing more space at the top of the installed structure frame and prevents the building from settling on to the lift structure frame.

From Stannah's experience the concrete pit area and the interior cladding of the timber frame rarely line up, a discrepancy of 30mm being common, so an additional 50mm has been added to the width and depth of the lift shaft for the new option to allow for this discrepancy.

Detailed builders work drawings are produced for each client and provide designers and builders with information on how to reduce problems with settlement on site.



*The FX is supplied in its own structure, reducing building time and costs.*



# Stannah FX Structure Supported Lifts ...at Bellway Homes

*"We are delighted with the Stannah FX installations. The lift design is unique in having built-in tolerances to movement in timber-framed buildings. Block 11 on the site is six storeys and provided a considerable challenge. Having found the perfect solution there will be around 25 structure-supported FX lifts incorporated into the completed development."*

**Darren Hannah**  
Project Manager at  
Ochre Yards,  
Bellway Homes  
North East

**Bellway Group, one of the UK's largest housebuilders, have introduced sustainability into its corporate responsibility agenda and have increased the number of timber framed homes it builds. This is demonstrated in their more recent developments. As a result they have required the services of Stannah Lifts Ltd and the new lift structure.**

Bellway Homes North East installed Stannah FX structure-supported passenger lifts, including the new design for timber framed buildings, into the recently completed phase of its major regeneration housing project in Gateshead.

Ochre Yards sits on the south bank, high above the River Tyne, where there were previously derelict railway sidings. The development offers tenants great views of the Newcastle city centre and the famous Tyne bridges.

When completed, the development will comprise 11 blocks of flats providing 608 residential apartments and a commercial centre incorporating a health, fitness & leisure club and an 80 bed hotel. Of these, 7 blocks are timber-framed, 2 traditionally constructed and 2 are refurbished existing buildings.

The Stannah lifts have provided a particular solution to tolerating natural shrinkage within large timber-framed buildings and Bellway are very happy with the outcome.



**Bellway**

*The Stannah FX lift is providing the perfect solution in timber framed buildings on the Ochre Yards housing development*



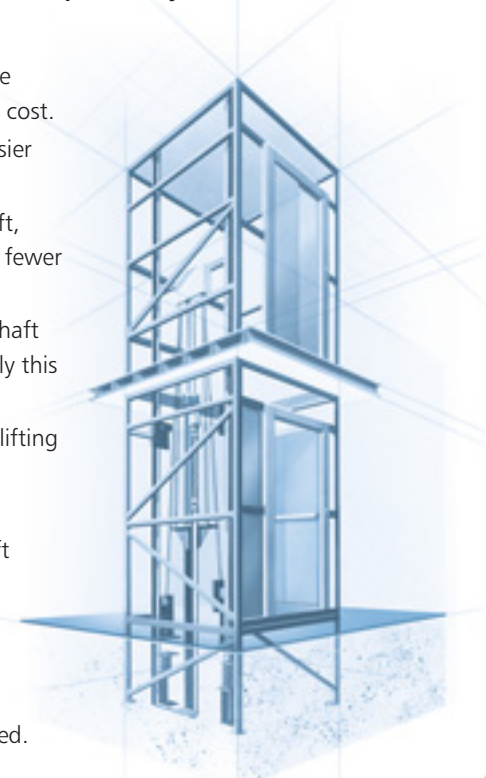
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## Other Structure Supported Lifts



The Stannah structure supported lift can be installed virtually anywhere. It needs no load bearing wall – just a firm base, solid floor and headroom support. This makes installation quicker and simplifies any builders work.

- There is no need for:
  - Inserts (unistruts) for fixing to be built by the builder, making it easier to build and saving cost.
  - Load bearing walls to be built, making it easier and cheaper to build.
  - Scaffolding (on most models) to erect the lift, saving substantial cost and disruption, with fewer people involved.
  - A lifting beam built into the top of the lift shaft by the builder, saving money. Stannah supply this on the structure.
  - The hire of a structural engineer to test the lifting load of the lifting beam, saving cost.
- Designed and manufactured in the UK.
- The structure is assembled within the lift shaft by Stannah.
- Can be installed into existing lift wells with minimal builders work.
- Simplifies building programme.
- No lintels or separate pit access ladder required.
- Built to EN81-70 specifications.
- Can be supplied across most of Stannah's lift range.



*The Stannah FX structure supported lift can give architects and designers the freedom to be creative. The lift can be positioned anywhere and clad to blend with or enhance its immediate environment*



*(From top, left to right):  
FX lift at Cambridge University;  
The Intech Centre in Winchester;  
Offices in Newcastle;  
A Charles Church housing development in Surrey;  
The Arts Institute, Bournemouth*

**For more information about the Stannah Passenger Lift range call Stannah on 01264 339090 or visit [www.stannahpassengerlifts.co.uk](http://www.stannahpassengerlifts.co.uk) to request your brochure.**

***"Trust Stannah to make things easier"***



**Stannah Lifts Ltd**

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To find out more about Stannah's comprehensive range of Passenger Lifts go to  
**[www.stannahlifts.co.uk](http://www.stannahlifts.co.uk)**

