

Loads & Fixings - Lifts with Upper Level Door (2m to 7m Travel)

Lift Loads		
Quantity	Value	Comments
A	0.5kN	Door threshold fixing at each entrance, except base level
B	2.2kN	Guide side fixing, top landing level
C	2.8kN	Guide side fixing, mid height between floors, or intermediate landing level
D2	2.1kN	Floor load, at position D, horizontal plane, (shear load in fixing); see also 'D1'
D1	2.5kN	Floor load, at position D, vertical plane, laminate infill panels; see also 'D2'
D1	3.6kN	Floor load, at position D, vertical plane, glass infill panels; see also 'D2'

Notes:

- Details provided apply to indoor applications only, where all specified fixings can be made directly into solid substrate or structural members.
- Loads**
 Loads from the lift occur in horizontal & vertical planes. All values stated in the table are per position indicated in the sketches. All loads stated are for 'worst case' conditions (of load & travel). Where applicable, appropriate load factors have been applied. No 'safety factors' have been applied.
- 2a. Horizontal plane loads**
 Fixings at positions A & B are compulsory and loads can be assumed as push & pull. Fixing C is only required for travel greater than 5m and loads can be assumed as push & pull. A horizontal plane load is also carried in fixings at D - see paragraph 2b. Additionally, fixings at A, B (and C when required) are subject to a shear load, maximum 0.5kN per position.

 Minimum pitch between guide side fixings (B to C & C to D) to be 2.1m.
- 2b. Vertical plane loads**
 Fixings at D are compulsory. Fixings at D are made (vertically) into floor & are subject to a shear load D2, as well as a vertical load D1. Loads D1 are point loads due to structure weight. Additional vertical plane loads are applied at: base of the ram (1 position), guides (2 positions) & 4 positions under lift platform buffers (marked *). Each of these 7 loads can be taken as point loads. Refer to sketch 'Lift base' & table.
- It shall be the customer's responsibility to ensure suitability of the building structure for the stated loads, both in terms of strength, & also suitability of the fixings proposed. If any doubts exist, we advise that a structural engineer is consulted.
- Provisions for securing the lift must be flush with the lift aperture and of sufficient thickness/depth to accommodate the appropriate fixing. Exact positions and types of fixings will be detailed on a site specific builders work drawing.

EXAMPLE FIXING TYPES

'A', 'B' & 'C' FIXING POINTS

Concrete:

M10 studding set into Hilti HY70 resin with min. embedment of 90mm.

Timber:

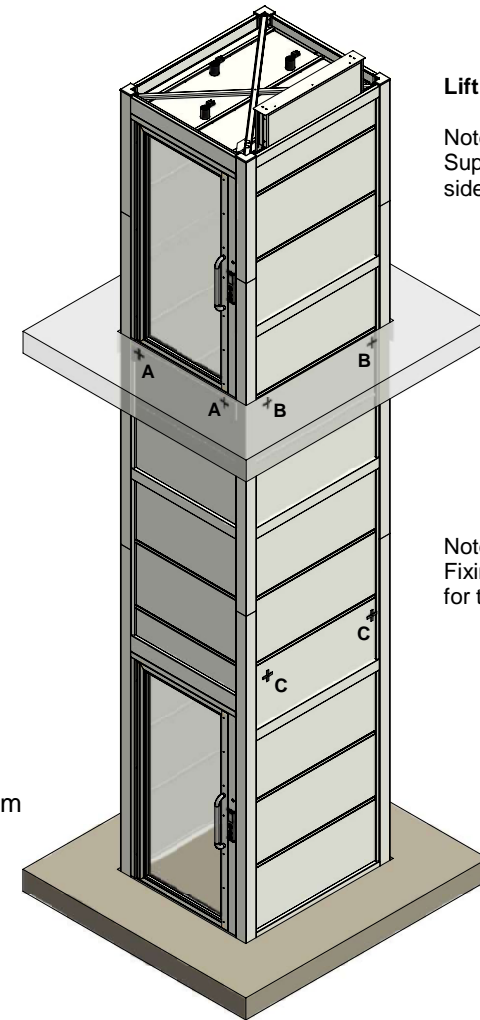
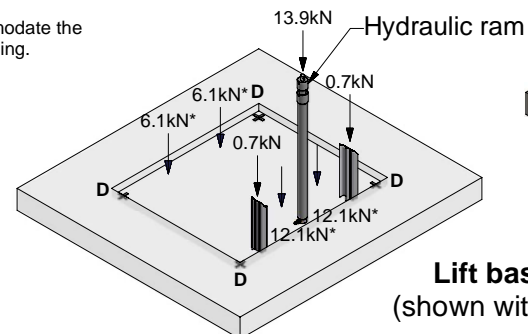
10mm coach screws into timber beam with min. depth 70mm.

Steel:

M10 studding drilled and tapped into a steel plate 8mm thick.

'D' FIXING POINTS

Into concrete using 10mm expandable anchor with min. depth 120mm.



Lift Structure

Note:
Supporting wall on guide side is omitted for clarity.

Note:
Fixing C is only required for travel greater than 5m.

Waiver

The data sheet is for guidance only & must not be used for proper working drawings. Please contact us for particular details before proceeding. Owing to our policy of continual improvement, we reserve the right to alter specifications & dimensions without prior notice.