

Loads & Fixings - Lifts with Upper Level Gate (Up to 3m Travel)

Lift Loads		
Quantity	Value	Comments
A	0.5kN	Door threshold fixing at each entrance
B	1.8kN	Guide side fixing
D1	1.2kN	Floor load at position D, vertical plane, laminate infill panels; see also D2
D1	1.9kN	Floor load at position D, vertical plane, glass infill panels; see also D2
D2	1.0kN	Floor load, horizontal plane (shear load in fixing)

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 tabulated 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 lettered positions A & B are compulsory and 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 are subject to a shear load, maximum 0.5kN per position.
- 2b. Vertical plane loads:**
Fixings at D are compulsory. Fixings at D are made (vertically) into floor & are subject to a shear load (D2). Loads D1 (see table) 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 applied 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:

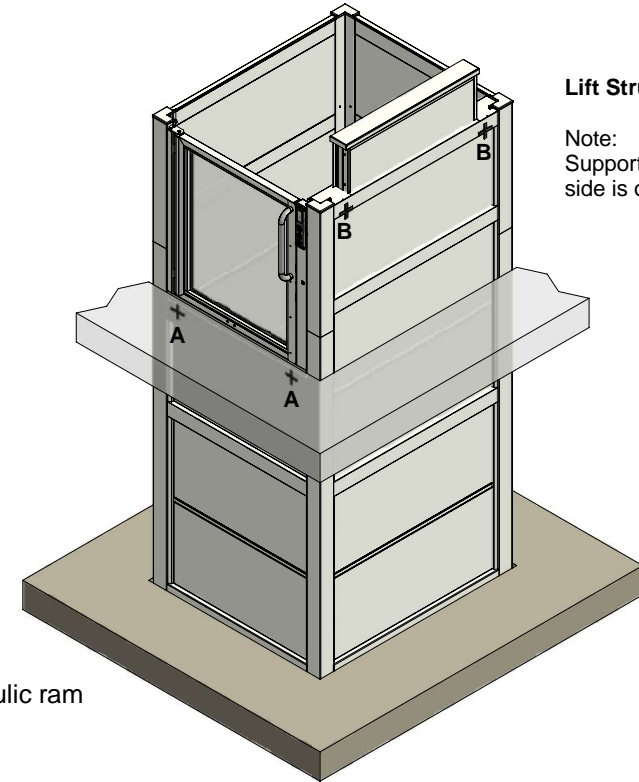
10mm coach screws into timber beam with min. depth 70mm.

Steel:

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

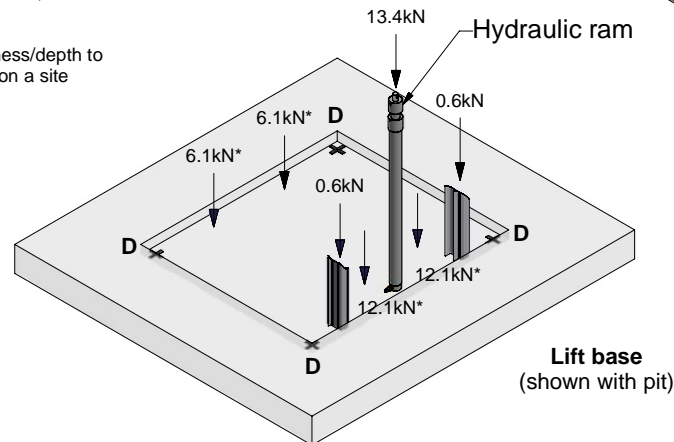
'D' FIXING POINTS

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



Lift Structure

Note:
Supporting wall on guide side is omitted for clarity



**Lift base
(shown with pit)**

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.