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

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.

Lift Loads		
Quantity	Value	Comments
Α	0.5kN	Door threshold fixing at each entrance, except base level
В	1.7kN	Guide side fixing, top landing level
D2	1.0kN	Floor load, at position D, horizontal plane, (shear load in fixing); see also 'D1'
D1		Floor load, at position D, vertical plane, laminate infill panels; see also 'D2'
D1	3.2kN	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. 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, 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.

4. Provisions for securing the lift must be <u>flush</u> with the lift aperture and of sufficient thickness/depth to accomodate 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

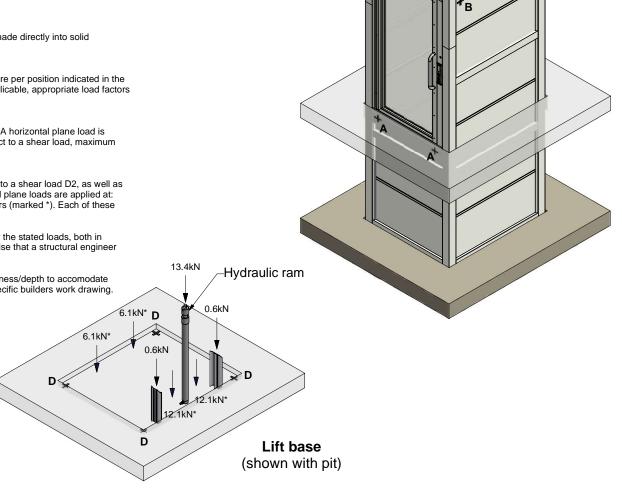
M10 studding set into Hilti HY70 resin with min. embedment of 90mm.

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

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

Supporting wall on guide side is omitted for clarity

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Note: