

## SECTION A - Builders' Work Requirements - Before Installation

**Lift Pit:**

A1. Form and Finish a flat and level pit with no projections or intrusions as detailed. The pit must be fully and permanently watertight to protect against any ingress of water, oil resistant and capable of supporting the loads indicated.

**Lift Well:**

A2. Lift well to be constructed of incombustible durable material which does not assist the creation of dust. The well to be sealed preferably with **White emulsion paint**, to reduce the creation of dust and to increase the lighting lux level. Lift shaft walls to be built to National Building and Fire Regulations and capable of supporting the loads imposed by the lift's operation. Please note that **Stannah** are unable to accept responsibility for the integrity of material into which fixings are made. If any doubts exist it is suggested a structural engineer is consulted.

It is critical that the minimum plumb well size, travel, pit depth and headroom dimensions are accurate and within the tolerances given. These measurements must be checked for accuracy as construction proceeds and any discrepancies reported. Materials used for lift shaft construction should achieve any necessary fire rating. **Provisions for securing the lift must be flush and of sufficient thickness/ depth to accommodate the appropriate fixing.**

A3. The well shall be totally enclosed by imperforate walls, floor and ceiling

A4. The lift well shall not be used for purposes other than lifts. It shall not contain ducts, cables or devices other than for the lift.

A5. There shall be no less than 500mm horizontal distance from the landing call station to any return wall.

A6. Construct entrances in accordance to the builders work drawing, providing lintel and threshold rebates as applicable. Mark finish floor datum lines at each entrance.

A7. If occupied building, provide fixed hoardings at each entrance, if the premises are occupied by anyone other than construction trades personnel, the hoarding must be constructed as follows: 1000 deep, full height, full width and fully enclosed, access door to open outward and fitted with a SNB type lock. The hoarding must remain in position until the lift is commissioned. If unoccupied building, provide suitable toe boards & guard rails to all lift openings with a working space of minimum 1000mm deep x full width.

A8. Provide and erect scaffolding in lift well to dimensions shown on plan. Each stage of scaffolding to be positioned relative to guide rail fixings (see 'Section View on Guide Wall'). Provide a 150mm toe-board at low level, a mid-rail at 470mm and a top rail at 550mm above each stage. Scaffold boards and tubes are not to protrude the line "Y" - "Y". Supply hatches & ladders as required to ensure safe access to all stages. Allowance must be made during the lift installation that the scaffold levels may need adapting. All scaffolding must comply with the latest scaffolding & working at height regulations. This is not a requirement if the lift will be installed in Stannah structure.

A9. A smoke vent may be required at the top of lift well ducted to outside air. Liaise with local building control for confirmation. The temperature in the lift well should be maintained between 5° and 30°C.

**Hydraulic Pump Unit Location:**

A10. The pump unit is to be wall mounted. Wall to be able to support 75kg load imposed by the pump unit. To be located no more than 5 metres from the base of lift guides in a weatherproof, damp free & adequately ventilated space. Additionally there shall be 2m headroom and 700mm clear space in front of the open cabinet. Temperature to be maintained between 10° and 30°C.

A11. Provide adequate, well lit and safe permanent access to pump location for lift installation and maintenance personnel. Access to the location shall have min. 2m headroom and to be easily accessible without the need to use ladders or to pass through other persons property.

A12. If pump is to be installed in a separate room/cupboard, the door is to open outwards & be fitted with a lock which can be opened from the inside without the use of a key e.g. Yale lock.

A13. If pump is remote from the lift, it will be necessary to provide trunking (50mm sq. or round) for routing of electrical cables and hydraulic hose between pump and base of guides. If pump is positioned in room adjacent to lift well, all that will be required is an aperture through the wall. See 'Location Plan', for route of lift services.

**Builders Work After Installation, Before Test**

A14. Door returns to be built up to tie in and secure lift architraves

A15. Threshold recesses to be filled in with screed or similar incorporating the required degree of fire resistance. Floor finishes (tiles/carpet) to be flush & level with lift landing door cills.

A16. Service hole from hydraulic pump unit, to be filled with a non rigid fire resistant material.

## Section B - Electrical Requirements - Before Installation

B1. Provide a dedicated single phase supply protected by a 16Amp type D MCB. The lift supply is to terminate in a lockable isolator at position shown on builders work diagram.

B2. Provide a 13 AMP electrical outlet socket adjacent to the lift installation at all levels. The supply to these sockets is **not** to be derived from the lift supply detailed in note B1 above.

B3. Ensure that lighting at all landing levels is not less than 50 lux.

It is essential that a supply is available for installation commencement. Where a permanent supply is not ready a temporary supply will be acceptable. **NOTE: A PERMANENT SUPPLY MUST BE AVAILABLE FOR FINAL TESTING AND HANDOVER OF THE LIFT.**

B4. **Intercom:** The remote intercom master unit (warden unit) is a wall mounted handset in a location no greater than 50 metres (cable run) from the lower landing of the lift. When located further than 5 metres from the lift guides position, this is by prior agreement and the client is responsible for running the cables to the required location.

B5. **Lift Fire Alarm Interface:** On receipt of a signal from the building fire alarm control system, the lift will park at a designated floor with the doors open.

**Requirements by others:**

- One volt free normally open contact must be maintained/closed for the duration of the fire alarm signal, once the fire alarm is cancelled, the contact is to return to its normally open state.
- Contact must be rated to switch an inductive load of 24v dc at 0.2amps.
- Contact to be connected with a two core cable of suitable length to reach our control cabinet (located on the guide side wall, 1500mm above the pit base).
- Completion of these items must be co-ordinated with our installation department so that the fire alarm signal can be tested and observed by our lift installation engineer.

## SECTION C - General / Safety Requirements

C1. Provide assistance with the offloading, storage and hoisting of lift equipment as necessary & make provision for transferring lifts equipment to a location adjacent to the lift.

C2. A working area of 5m x 5m approx. required at lower level for pre-assembly and manoeuvring 4m lengths of lift equipment. This area should be cordoned off and access restricted to lift installers only. Immediate area in front of each landing entrance shall be similarly cordoned off.

C3. It is the responsibility of the builder to prevent the ingress of moisture, dust and other substances from contaminating the lift equipment during and on completion of the installation.

C4. Provide adequate weatherproof, dry lockable storage area for all lift equipment, tools and plant on the day of delivery and for the duration of the installation.

C5. Provide adequate protection to all finished surfaces during and on completion of the lift installation.

C6. Safe, clear, uninterrupted and well lit access to the whole of the lift installer's work area must be maintained at all times. Access between floors must be provided via a fixed staircase.

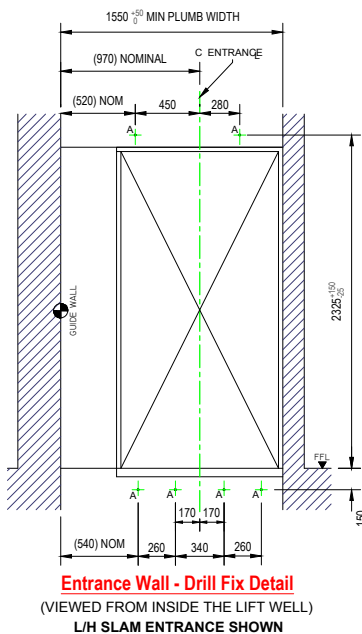
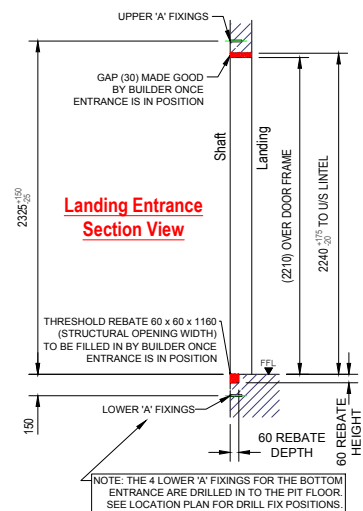
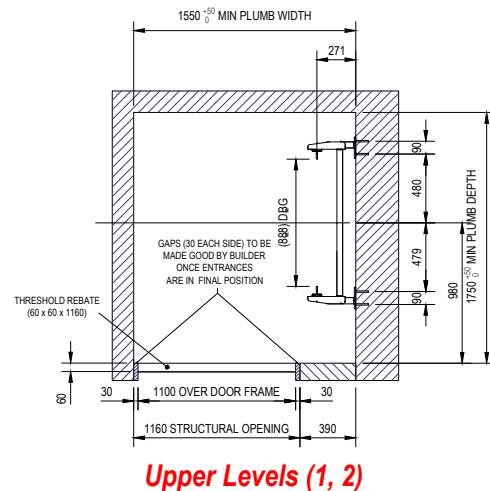
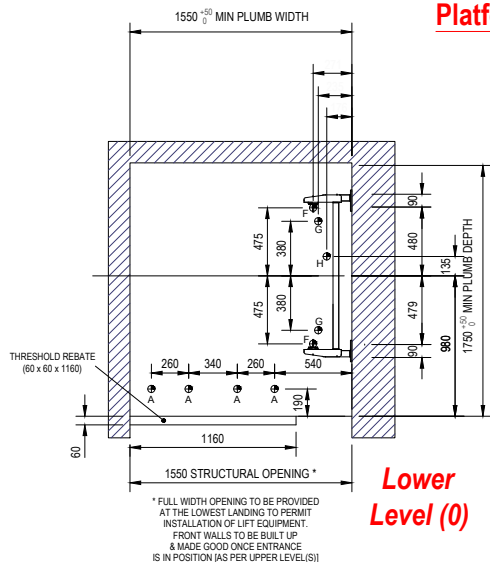
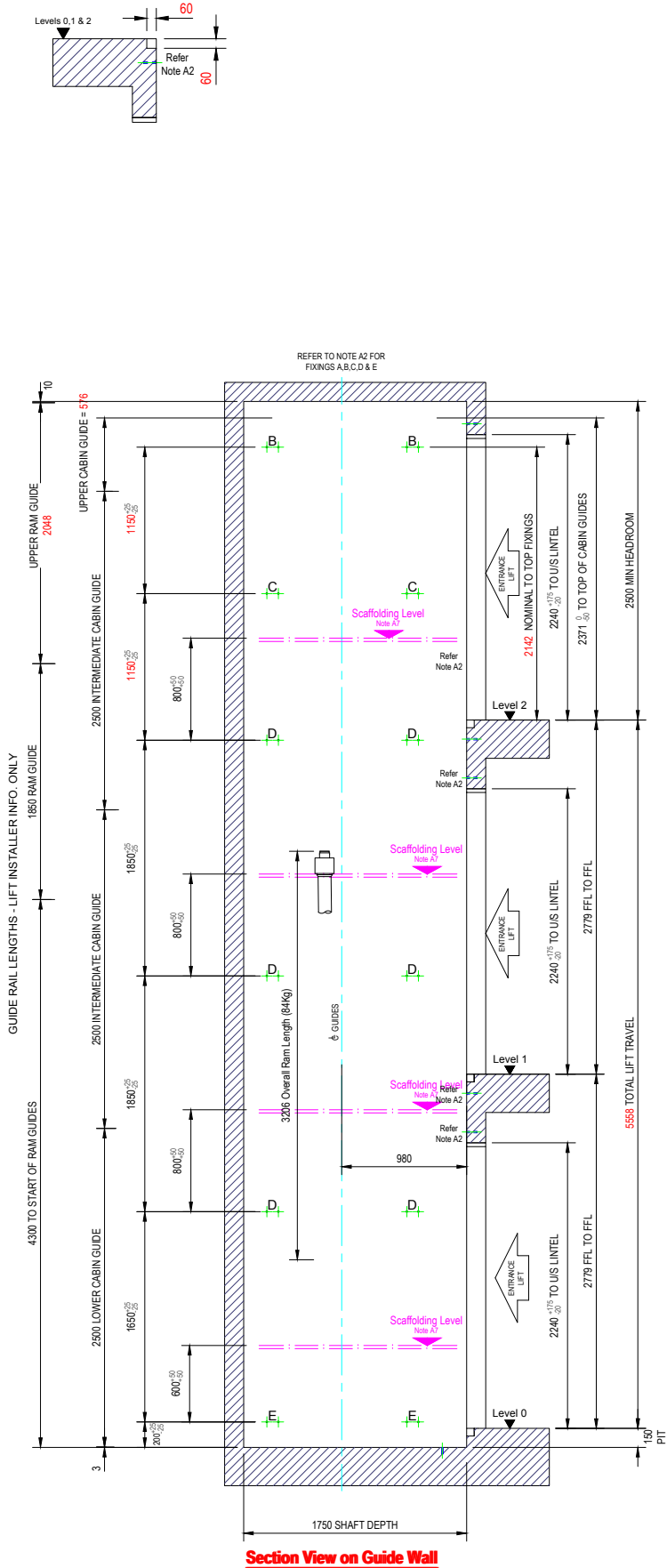
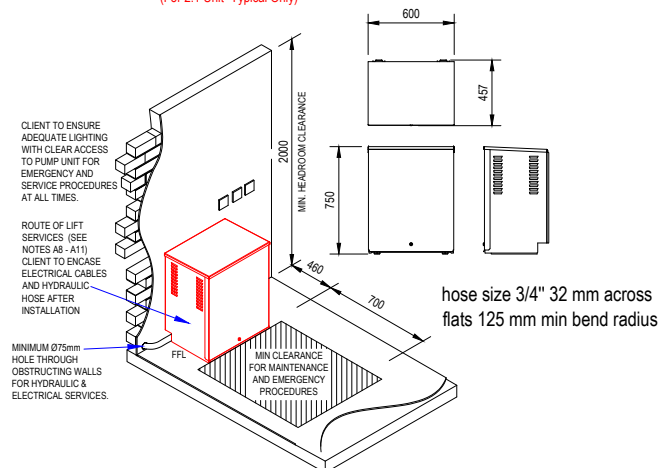
C7. Provide suitable facilities for the disposal of debris and environmental waste. Lift supplier will work in accordance with the site waste plan / procedure.

C8. Provide mess room and welfare facilities for our engineers for the duration of the lift installation.

C9. Ensure adequate first aid facilities are in place and a trained first aider is available.

C10. All finished floor surfaces to be protected against accidental damage.

## Platform Lift Location Plans

Hydraulic Pump Details  
(For 2.1 Unit - Typical Only)

## LIFT SPECIFICATION

**General:**

No of persons: 5  
Contract Load: 400 kg  
Rated speed: 0.15 m/s nominal  
Power Supply: 230V, 1 ph, 50Hz  
Cabin Size: 1100 x 1400mm

**Drive mechanism:** Hydraulic

Operation: Latched controls

**Landing door detail:**

No of entrances: 3  
Door operation: 2 panel side opening  
Fire rating: 120 mins (E120)

# Stannah

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**Site:**

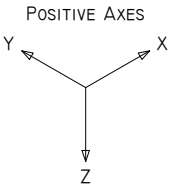
27 Ducks Hill Road  
Northwood  
Middlesex  
HA6 2NW

Drawing Number: AV417060

Drawn: J.Harris Date: 22/02/2021

Applied Loads

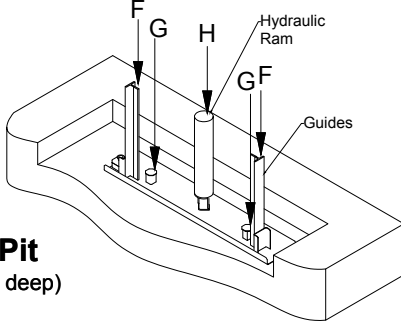
| Position | X (kN) | Y (kN) | Z (kN) | Comments                                                                                                                             |
|----------|--------|--------|--------|--------------------------------------------------------------------------------------------------------------------------------------|
| A        | 0      | -0.3   | +0.8   | Door frame fixing at each entrance (loading directions relative to door orientation)                                                 |
| B        | -3.2   | ±1.0   | 0      | Guide side top fixing (stated loads shared between 2 fixings at each B position)                                                     |
| C        | -4.8   | ±1.2   | 0      | Guide side penultimate fixing (stated loads shared between 2 fixings at each C position)                                             |
| D        | ±4.3   | ±1.2   | 0      | Guide side intermediate fixing(s) - number of pitches dependant on travel (stated loads shared between 2 fixings at each D position) |
| E        | +3.9   | ±1.2   | 0      | Guide side bottom fixing (stated loads shared between 2 fixings at each E position)                                                  |
| F        | 0      | 0      | +11.0  | Vertical load at the base of each car guide                                                                                          |
| G        | 0      | 0      | +19.3  | Vertical load at each car buffer                                                                                                     |
| H        | 0      | 0      | +24.0  | Vertical load at the base of hydraulic ram                                                                                           |



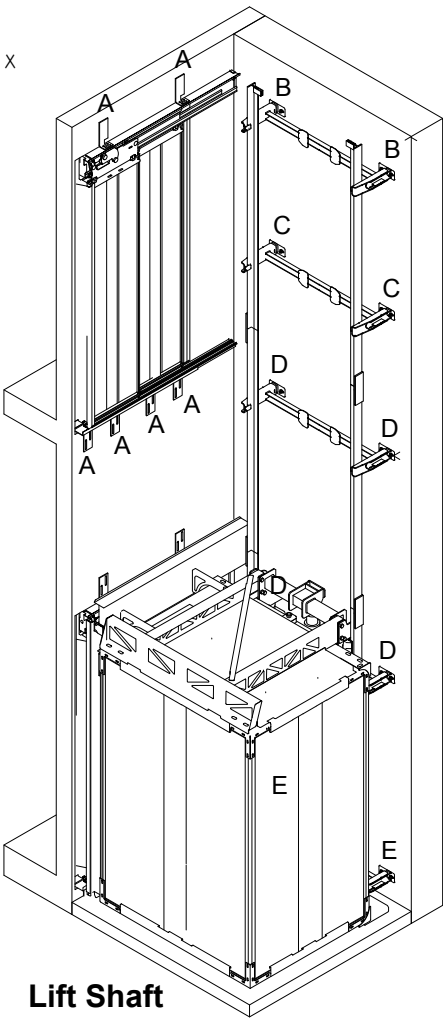
Notes:

- Details provided apply to Midlift Piccolo indoor applications, max 12m travel, where all specified fixings can be made directly into solid substrate or structural members. The table & sketches show all loads from the lift.
- Loads**  
Loads from the lift occur in all 3 axes (X, Y & Z). All values stated in the table are per position indicated in the sketches. All loads stated are for 'worst case' conditions (of load & travel). Loads stated are those in fixings at applicable positions. Where applicable, appropriate impact factors have been accounted for.
- 2a. General Horizontal plane fixings**  
Fixings at lettered positions (A, B, C, D & E) are compulsory. Forces apply in directions indicated in the table (note door loading, A are relative to door orientation). Positive directions shown in the sketch 'Positive axes'.
- 2b. Specific Notes - Horizontal plane fixings in X direction**
  - Restraint forces arise from lift operation; applied load is a couple, in 2 positions (one on each guide). Force magnitude is 3.5kN at 1980mm pitch.
  - Maximum values are stated; restraint force at fixing positions vary in magnitude and direction depending on lift car position & guide bracket layout.
  - Stated forces will act as axial load on fixings at prescribed positions.
- 2c. Specific Notes - Horizontal plane fixings in Y direction**
  - Lateral restraint in fixings arise from a couple applied to the guides, in a plane parallel to a plane passing through the centre of both guides; force magnitude is 1.0kN at a pitch of 1980mm.
  - Magnitude of lateral force varies according to lift position & guide bracket layout; direction of lateral force varies according to position of load in lift car.
  - Stated forces will act as lateral (shear) load in fixings at prescribed positions.
- Preferably, the lift well should not be situated above a space accessible to persons. If spaces accessible to persons exist below the lift well, then base of the pit shall be designed for an imposed load of 5kN/m².
- 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, it is advised that a structural engineer is consulted.
- All dimensions in mm unless otherwise stated.

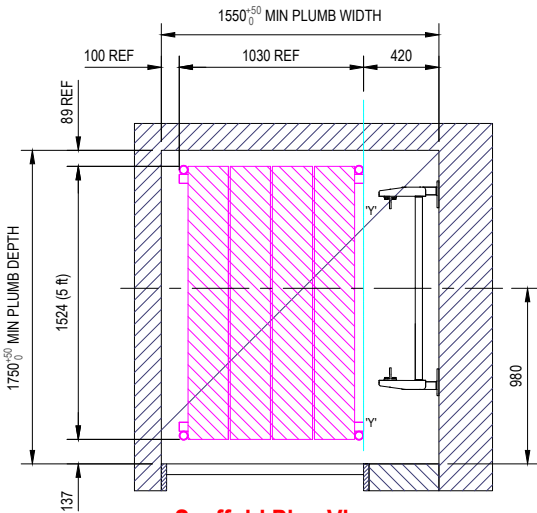
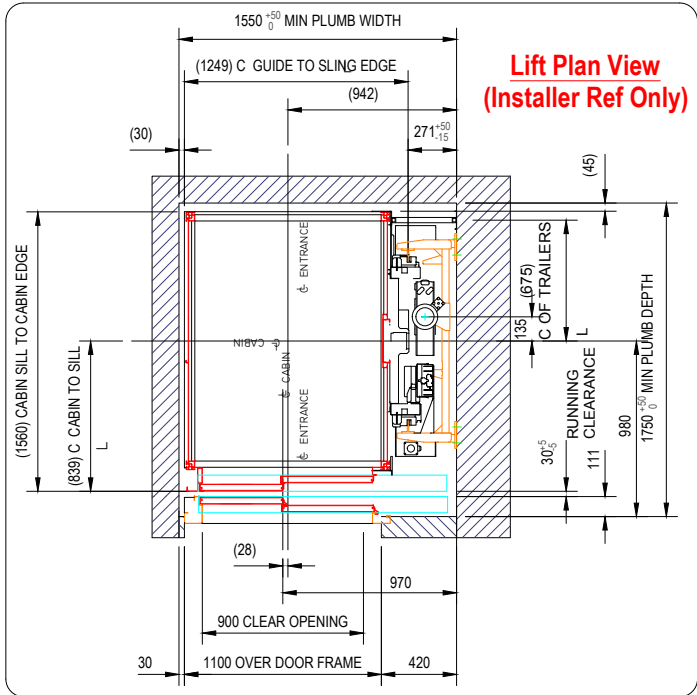
Lift Pit  
(150mm deep)



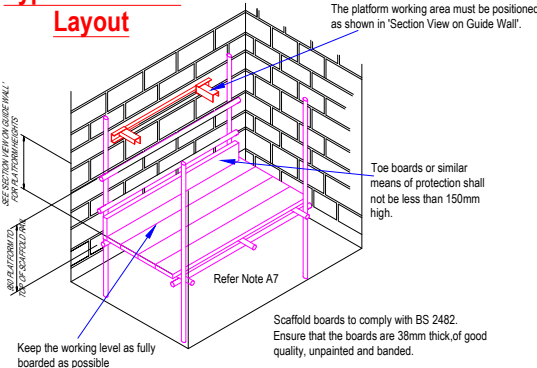
Lift Shaft  
(Up to 12m travel)



| Fixing Schedule - Drill Fix Option 1                                                                                                                                                                                                                                                                                                                                                 |        |             |                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------------|-------------------------------------------|
| Guide Wall (B to E)                                                                                                                                                                                                                                                                                                                                                                  | 20 Off | M10 Fixings | Lift Installer to mark-out, drill and fix |
| Front Wall (A)                                                                                                                                                                                                                                                                                                                                                                       | 8 Off  | M10 Fixings |                                           |
| Pit Floor (A)                                                                                                                                                                                                                                                                                                                                                                        | 4 off  | M10 Fixings |                                           |
| For the above fixings, we would utilise M10 HiTi HIT-V Grade 5.8 Anchor Rods set into HiTi HIT-HY270 resin with a maximum embedment depth of 80mm. It is the clients responsibility to ensure the shaft construction is able to accommodate these fixings and withstand the loads that the lift applies. If any doubt exists, it is advised that a structural engineer is consulted. |        |             |                                           |



Typical Scaffold  
Layout



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