


| RAMSPROZONE | | RISK ASSESSMENT — MINISPACE LIFTS INSTALLATION | |  |
|----------------------------|-----------------------------------|--|--|---|
| Company / Contractor Name: | [ENTER COMPANY / CONTRACTOR NAME] | | | |
| Doc No: | [DOC NO.] | | | |

| DOCUMENT INFORMATION | | | | | |
|---|--|--|--|--|---|
| Document No. <i>[ENTER DOC NO.]</i> | Revision 00 | Assessment Date <i>[DD/MM/YYYY]</i> | Review Date <i>[DD/MM/YYYY]</i> | Project Name <i>[ENTER PROJECT NAME]</i> | Project No. <i>[ENTER PROJECT NO.]</i> |
| Project Location <i>[ENTER PROJECT LOCATION]</i> | Prepared By <i>[NAME / DESIGNATION]</i> | Reviewed By <i>[NAME / DESIGNATION]</i> | Approved By <i>[NAME / DESIGNATION]</i> | Client / Owner <i>[ENTER CLIENT NAME]</i> | Main Contractor <i>[ENTER MAIN CONTRACTOR]</i> |
| Sub-Contractor / Team: <i>[ENTER SUB-CONTRACTOR / TEAM]</i> | Applicable Standards: ISO 45001:2018 ISO 31000:2018 ISO 9001:2015 ISO 14001:2015 IOSH Managing Safety ILO-OSH 2001 | | Task / Activity Description: MINISPACE LIFTS INSTALLATION — including shaft preparation, guide rail erection, machine room-less (MRL) drive unit installation, car and counterweight assembly, safety gear and governor installation, wiring and commissioning. | | |
| <p>△ TEMPLATE NOTE: All fields in <i>[RED BRACKETS / ITALIC]</i> are placeholders. Replace each with your project-specific information before issue or use. Provided free of charge by RAMSPROZONE for global HSE professionals.</p> | | | | | |

RISK ASSESSMENT — MINISPACE LIFTS INSTALLATION

| RISK MATRIX KEY — 5×5 (Likelihood × Severity) | | | | | |
|---|-------------|--|--|--------------|---|
| Rating Band | Score Range | Likelihood Scale | Severity Scale | Colour Code | Action Required |
| VERY LOW (VL) | 1 – 4 | 1 = Rare 2 = Unlikely 3 = Possible 4 = Likely 5 = Almost Certain | 1 = Negligible 2 = Minor 3 = Moderate 4 = Major 5 = Catastrophic | Dark Green | Monitor; no immediate action required. |
| LOW (L) | 5 – 8 | Risk Score = Likelihood x Severity | | Green | Manage by routine procedures. |
| MEDIUM (M) | 9 – 12 | Scores 13 & 14 fall between HIGH and MEDIUM — treat as HIGH. | | Amber | Senior management attention required; additional controls to be implemented. |
| HIGH (H) | 15 – 16 | | | Orange | Work must not proceed without senior-level authorisation and robust controls. |
| CRITICAL (C) | 20 – 25 | | | Red / Purple | STOP work immediately. Escalate to senior management. Do not proceed until risk is reduced. |

| # | Work Activity / Task | Hazard Identified | Who May Be Harmed | Existing Controls | L | S | Score | Initial Rating | Additional Control Measures | R.L | R.S | R.Score | Residual Rating | Responsible Person |
|---|---|---|--|--|---|---|-------|----------------|--|-----|-----|---------|-----------------|----------------------------|
| 1 | Shaft Preparation & Pit Excavation | Uncontrolled collapse of partially unsupported lift shaft pit walls onto workers below during manual excavation and concrete breaking activities | Groundworkers, structural operatives, adjacent trades | <ul style="list-style-type: none"> Site induction covering excavation hazards delivered to all operatives Existing site segregation barriers around shaft opening | 3 | 4 | 12 | MEDIUM | <ul style="list-style-type: none"> Commission a structural engineer's survey and written shoring/propping scheme prior to any excavation below 1.2 m (ISO 45001:2018 Cl.8.1.3). Issue a Confined Space / Excavation Permit to Work; inspect shaft condition at the start of every shift. Mandatory hard hat, safety boots, hi-vis, and fall-arrest harness when working at pit edge; edge protection with 950 mm handrail and 150 mm toe-board installed (ILO-OSH 2001 Cl.3.10). | 2 | 3 | 6 | LOW | [ENTER NAME / DESIGNATION] |
| 2 | Guide Rail Erection & Plumbing | Fall from height during vertical guide-rail installation inside the lift shaft, resulting in fatal or severe injury from unprotected working platforms at elevation | Lift installation engineers, steel fixers, supervisor | <ul style="list-style-type: none"> General site Working at Height policy in place; operatives issued with personal harnesses Existing MEWP pre-use inspection checklist in operation | 3 | 5 | 15 | HIGH | <ul style="list-style-type: none"> Erect a purpose-designed independent working platform or temporary lift installation scaffold within the shaft; inspect to BS EN 12811-1 or equivalent before use (ISO 45001:2018 Cl.8.1). Issue a Working at Height Permit to Work; IRATA/PASMA-competent operatives only; third-party harness inspection within 12 months. Deploy rated anchor points at each rail bracket fixing level; twin-lanyard fall-arrest system mandatory; rescue plan posted at shaft entry with emergency contact details. | 2 | 4 | 8 | LOW | [ENTER NAME / DESIGNATION] |
| 3 | Machine Room-Less (MRL) Drive Unit Lifting & Positioning | Sudden uncontrolled descent or swing of suspended MRL traction drive unit during crane or chain-block lifting, causing crushing injury to operatives beneath the load | Lift engineers, crane operator, banksman, adjacent personnel | <ul style="list-style-type: none"> Site Lifting Plan template in use; all lifting equipment subject to six-monthly statutory examination (LOLER/equivalent) Banksman / slinger appointed for all lifts as per site lifting procedure | 2 | 5 | 10 | MEDIUM | <ul style="list-style-type: none"> Produce a specific Lifting Plan for the MRL unit, signed by a LEEA-accredited Appointed Person; confirm SWL of all rigging components exceeds 3x load weight. Establish an exclusion zone of minimum 1.5x lifting height radius; enforce with physical barriers and signage; no personnel permitted beneath suspended load at any time (ILO-OSH 2001 Cl.3.10.3). Use certified spreader beam with manufacturer-rated attachment points; tag lines fitted to control load swing; operation suspended in winds exceeding Beaufort Scale 6. | 1 | 4 | 4 | VERY LOW | [ENTER NAME / DESIGNATION] |
| 4 | Car & Counterweight Assembly | Inadvertent release and uncontrolled movement of counterweight stack during assembly within the shaft, causing impact injury to workers and structural damage | Lift installation engineers, mechanical fitters | <ul style="list-style-type: none"> Manufacturer's installation instructions available on site and issued to lead engineer Toolbox talk programme covering manual handling and | 3 | 4 | 12 | MEDIUM | <ul style="list-style-type: none"> Apply manufacturer-approved counterweight restraint clamps and retention bolts at every stage of stack assembly; do not remove until guide-shoe engagement is confirmed. | 2 | 3 | 6 | LOW | [ENTER NAME / DESIGNATION] |

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|---|--|--|--|--|---|---|-------|----------------|---|-----|-----|---------|-----------------|----------------------------|
| | | | | mechanical assembly hazards | | | | | <ul style="list-style-type: none"> Permit minimum two trained lift engineers for all counterweight operations; no solo working in shaft during assembly phase (ISO 45001:2018 Cl.8.1.4). Verify counterweight guide clearances against rail alignment prior to releasing restraints; document check in the Lift Installation Quality Record (ISO 9001:2015). | | | | | |
| 5 | High-Voltage Electrical Wiring & Control Panel Connections | Contact with live conductors during connection of 3-phase supply to the MRL controller and traction motor, resulting in electrocution or severe arc-flash burns | Electrical engineers, lift commissioning technicians | <ul style="list-style-type: none"> Permit to Work system (electrical isolation) in operation across the site Site electrical rules issued at induction; only qualified electricians permitted to work on HV circuits | 2 | 5 | 10 | MEDIUM | <ul style="list-style-type: none"> Apply full Lock-Out / Tag-Out (LOTO) procedure prior to any cable connection; verify isolation with a calibrated proving unit (CAT III/IV rated); display 'Danger - Do Not Energise' tags at the distribution board (IEC 60364 or local equivalent). Arc-flash hazard assessment required; operatives to wear arc-rated PPE (minimum 8 cal/cm² ATPV face shield, gloves, and coverall) during live-adjacent work. Restrict access to wiring zone with a Barrier and Permit; only IEE/IET or nationally recognised qualified electricians authorised to make final connections; electrical installation inspection and test certificate required before energisation (ISO 45001:2018 Cl.8.1). | 1 | 4 | 4 | VERY LOW | [ENTER NAME / DESIGNATION] |
| 6 | Safety Gear & Overspeed Governor Installation & Testing | Unintentional deployment or failure to disengage safety gear during static and dynamic drop tests, causing uncontrolled car descent and entrapment/injury of test personnel in the shaft | Lift engineers, commissioning engineers, test supervisor | <ul style="list-style-type: none"> Manufacturer's commissioning and test procedure checklist issued to lead engineer General Works Instruction covering pre-commissioning checks | 2 | 5 | 10 | MEDIUM | <ul style="list-style-type: none"> Testing to be performed strictly in accordance with EN 81-20/50 (or equivalent recognised national standard); only the manufacturer's commissioned test engineer and the appointed safety supervisor permitted in the shaft during drop testing. Shaft entry restricted by physical barriers and signage; establish a communications protocol (radio) between car, pit, and overhead positions before any dynamic test commences. Pre-test functional check of governor rope tension, car safety gear engagement travel, and buffer clearances documented; emergency stop accessible from pit and car positions throughout testing (IOSH Managing Safely principles). | 1 | 4 | 4 | VERY LOW | [ENTER NAME / DESIGNATION] |
| 7 | Confined Space Working in Lift Pit | Oxygen depletion or accumulation of flammable vapour in the enclosed lift pit during construction and | Lift engineers, pit workers, emergency rescue team | <ul style="list-style-type: none"> Confined Space entry policy documented in | 2 | 5 | 10 | MEDIUM | <ul style="list-style-type: none"> Issue a Confined Space Entry Permit for every pit entry exceeding 1.2 m depth; appoint a trained Entry Supervisor and a | 1 | 4 | 4 | VERY LOW | [ENTER NAME / DESIGNATION] |

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|---|---|--|--|---|---|---|-------|----------------|--|-----|-----|---------|-----------------|----------------------------|
| | | fit-out activities, leading to asphyxiation or ignition causing explosion | | <p>the Company Safety Management System</p> <ul style="list-style-type: none"> Gas detector (4-gas) available on site and allocated to pit operations | | | | | <p>Standby Person at pit level at all times (ISO 45001:2018 Cl.8.1.3; ILO-OSH 2001 Cl.3.10).</p> <ul style="list-style-type: none"> Continuous forced mechanical ventilation (minimum 10 air changes per hour) during occupation; continuous 4-gas monitor (O2, LEL, CO, H2S) with audible alarm; alarm set-points to comply with applicable occupational exposure limits. Non-sparking tools mandatory where flammable vapour risk is confirmed; emergency rescue kit (tripod, winch, SCBA) staged at pit entry; rescue drill conducted prior to first entry. | | | | | |
| 8 | Final Commissioning, Load Testing & Handover | Structural overloading of the lift car, sill, or landing door assemblies during rated load and overload tests, causing sudden mechanical failure and ejection of test weights or personnel | Commissioning engineers, client representatives, building occupants if inadequately excluded | <ul style="list-style-type: none"> Building exclusion zone policy in place; security barriers at all landing levels during testing Manufacturer's load test procedure available and referenced in works package | 2 | 4 | 8 | LOW | <ul style="list-style-type: none"> Perform rated load (100%) and overload (125%) tests per EN 81-20/50 or equivalent; use calibrated and certificated test weights; confirm sill and car structural ratings with manufacturer's data sheet prior to test. Exclude all non-essential personnel from every landing level and the pit during dynamic load testing; post a dedicated exclusion marshal at each landing entry point. Engage a notified third-party inspection body (e.g. LEIA-accredited or equivalent) to witness final load test and issue the Thorough Examination certificate before handover to the client (ISO 9001:2015 Cl.8.6; ISO 45001:2018 Cl.8.1). | 1 | 3 | 3 | VERY LOW | [ENTER NAME / DESIGNATION] |

| DOCUMENT REVISION HISTORY | | | |
|---------------------------|--------------|--|----------------------|
| Rev. | Date | Description of Change | Approved By |
| 00 | [DD/MM/YYYY] | Initial Issue | [NAME / DESIGNATION] |
| 01 | [DD/MM/YYYY] | [DESCRIBE REVISION — e.g. Updated following site inspection findings / additional hazard rows added] | [NAME / DESIGNATION] |

| APPROVAL & SIGN-OFF | | | |
|---|---|---|---|
| Prepared By | Reviewed By | Approved By | Client / Owner Representative |
| Name: [ENTER NAME] Designation: [ENTER DESIGNATION] Signature: _____ Date: _____ | Name: [ENTER NAME] Designation: [ENTER DESIGNATION] Signature: _____ Date: _____ | Name: [ENTER NAME] Designation: [ENTER DESIGNATION] Signature: _____ Date: _____ | Name: [ENTER NAME] Designation: [ENTER DESIGNATION] Signature: _____ Date: _____ |

