**Risk Assessment – Electrical Contracting (NICEIC Approved Contractor)**

| **Task Description** | **Hazard** | **Risk** | **Persons at Risk** | **Initial Risk Rating (Low/Medium/High)** | **Control Measures** | **Residual Risk Rating** | **Responsible Person** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Isolation and lock-off procedures | Inadvertent energisation, electric shock, arc flash | Serious injury, burns, fire/explosion | Electricians, apprentices, other contractors, occupants | **High** | Apply safe isolation per company procedure and BS 7671: identify all sources; isolate; fit personal D-lock and tag; prove tester on proving unit; test for dead; retain key; display 'Do Not Energise'; barriers; competent persons only; insulated tools; record in isolation log | Low | Electrician in Charge / Site Supervisor |
| Working at height | Falls from ladders/towers; falling objects | Serious injury or fatality; injuries to people below | Electricians, other contractors, occupants | **High** | Avoid if possible; select suitable access (podium/tower/MEWP); pre-use inspection; 3 points of contact; edge protection; tool lanyards; exclusion zone below; trained/authorized users only; weather checks for external work; rescue plan if using MEWP | Medium | Electrician in Charge / Appointed Person for Work at Height |
| Trip hazards (leads, materials, floor boxes) | Slips/trips/falls | Sprains, fractures | All site personnel and visitors | **Medium** | Good housekeeping; cable management (ramps/tape); route planning; keep R2/wandering lead off floor where practicable; clear access/egress; adequate lighting; signage | Low | All Operatives (supervised by Site Supervisor) |
| Use of power tools | Contact with moving parts; noise/vibration; electrical fault | Cuts, eye injuries, HAVS, hearing loss, shock | Operator and nearby workers | **Medium** | Battery or 110V CTE tools; RCD protection; pre-use checks/PAT; guards in place; task training; dust extraction; PPE (eye/hearing/gloves); remove defective kit from service and label | Low | Tool User / Site Supervisor |
| Hot works (soldering, brazing, grinding) | Sparks/heat; ignition of combustibles; burns | Fire; smoke inhalation; personal burns | Operator, other contractors, occupants | **High** | Hot Work Permit; remove/cover combustibles; fire blankets/screens; suitable extinguishers to hand; local extraction; gas checks; trained operator; 60-min fire watch post-work; record in permit | Low | Permit Holder / Site Supervisor |
| Cable installation (1st/2nd fix) | Manual handling; cuts/abrasions; strike hidden services; work at height | Musculoskeletal injury; lacerations; service strikes | Electricians, apprentices, other contractors | **Medium** | Plan routes; confirm services (CAT & Genny/drawings); use rollers/reels; team lifts; gloves; maintain clear walkways; suitable fixings and segregation; fire-stopping reinstated; WAH controls as required | Low | Electrician in Charge |
| Live testing (only where unavoidable) | Contact with live conductors; arc flash | Electric shock/burns; blast injuries | Electrician; bystanders | **High** | Task-specific RA and permit; GS38 compliant leads/probes; barriers and exclusion zone; competent person with buddy/standby; insulated mat/gloves; remove jewellery; minimise exposure time; approved instruments; clear emergency response plan | Medium | Electrician in Charge / Authorised Tester |
| Use of a scissor lift for work at height. | Falls from height due to improper use or failure of guardrails;  Tip-over from uneven ground or overloading;  Entrapment between lift and overhead structures;  Electrical contact if working near overhead power lines;  Falling tools/materials from the platform. | Injuries ranging from minor to fatal;  Equipment damage;  Legal and financial consequences;  Work delays. | Lift operator;  Co-workers in the vicinity;  Site visitors or passers-by. | **High** | Ensure operator is trained and certified;  Conduct daily pre-use inspections;  Use harnesses if required by site rules;  Establish exclusion zones around the lift;  Check ground conditions for stability;  Avoid use in high winds or poor weather;  Ensure emergency lowering procedures are known. | Low to Medium, assuming all controls are implemented and monitored. | Electrician in Charge / Site Supervisor |