

Note:

All items in the checklist must be filled accordingly with a tick (✓).

The “Observation” on section 12 is provided for additional details including rectification action for unacceptable conditions. Where applicable, the LEW may supplement this Report with additional information.

Name of installation :

Address of installation :

Installation Licence No.: _____ Expiry Date : _____ Date of inspection : _____

☐ Drawing No(s) _____ submitted previously on _____
is/are still valid.

☐ New drawing which shows details of loads and circuits are enclosed.

Drawing No. _____

☐ From public electricity supply system:
 Approved load = _____ kVA
 Incoming circuit breaker rating = _____ A

☐ From Generating Set:
Details of generating sets are as follows:

Particulars		Gen Set 1	Gen Set 2	Gen Set 3	Gen Set 4
Serial No.					
Supply Voltage (V)	Phase to Phase				
	Phase to Earth				
Rated kVA					
Power Factor					
Frequency (Hz)					
Fuel Used					
Mains Circuit Breaker Rating (A)					

☐ 400 V 3Ø, ☐ 230 V single Ø,

☐ 110 V single Ø, ☐ 55 V single Ø

DESCRIPTION			Compliance		
			C	NC	NA
(4) EARTHING ARRANGEMENT					
	4.1	For double-wound 110V single Ø transformer, centre tap of secondary winding is earthed.			
	4.2	The type of earthing system for electrical installation supplied from generating set, is TN-S.			
	4.3	Main earthing terminal or bar is adequately sized and properly installed.			
	4.4	Earth inspection chamber is accessible for inspection and each earth electrode point is provided with a warning label.			
	4.5	Bonding of metallic parts, where applicable, is adequate.			
(5) GENERATING SET					
	5.1	Barricaded to prevent access by non-authorised persons.			
	5.2	Adequate working space around generating set.			
	5.3	Access to generating set not impeded.			
	5.4	Generating set not installed in hazardous location.			
	5.5	All live parts protected against direct contact.			
	5.6	Adequately sized earthing bar or terminal is provided.			
	5.7	Proper labelling of earthing conductors provided.			
	5.8	For 3 Ø generator > 55 V, star-point is earthed.			
	5.9	For 1Ø generator > 55 V, neutral is earthed.			
	5.10	Engine frame and generator frame bonded to earth.			
	5.11	Bonding of metallic parts, where applicable, is adequate.			
	5.12	All outgoing supply cables provided with overcurrent and earth fault protection.			
	5.13	Protective devices are in operating condition.			
(6) MAINS INCOMING SUPPLY AND EARTH LEAKAGE PROTECTION					
	6.1	For incoming supply ≤ 300 A 3Ø, a circuit breaker with residual current device is used.			

(Abbreviations: C – Comply, NC – Not Comply, NA – Not applicable)

DESCRIPTION			Compliance		
			C	NC	NA
	6.2	For incoming supply > 300 A 3Ø, a circuit breaker with overcurrent and earth protective devices are used.			
	6.3	Residual current circuit breaker with tripping current ≥ 100 mA operates within 0.1s at rated tripping current.			
	6.4	Earth fault loop impedance is tested for satisfactory operation against electric shock under single fault condition.			
	6.5	Overall insulation resistance $\geq 1 \text{ M}\Omega$ phase to phase,			
	6.6	Earthing conductor is appropriately sized and properly terminated.			
	6.7	Danger signboards are displayed at main generating set and main intake switchboard.			
(7)	DISTRIBUTION BOARD (DB)				
	7.1	DB is properly installed and earthed.			
	7.2	Submains cables are properly terminated and installed.			
	7.3	DB is properly labelled.			
	7.4	Good protective conductor continuity.			
	7.5	Danger signboards are displayed at distribution boards.			
	7.6	All cables installed underground are mechanically protected.			
	7.7	No metal sheath or armour of any cable is used as circuit protective conductor.			
(8)	FINAL CIRCUITS				
	8.1	For final circuits $\leq 63 \text{ A}$, RCCB with tripping current $\leq 30\text{mA}$ operates within 0.1 s			
	8.2	For final circuits exceeding 63 A but not exceeding 100 A, RCCB with tripping current $\leq 300 \text{ mA}$ operates within 0.1 s			
	8.3	For final circuits > 100 A, RCD with tripping current not exceeding 500 mA is provided.			
	8.4	Insulation resistance to earth of each final circuit $\geq 1 \text{ M}\Omega$.			

(Abbreviations: C – Comply, NC – Not Comply, NA – Not applicable)

DESCRIPTION			Compliance		
			C	NC	NA
	8.5	Polarity at all socket outlets is correct.			
	8.6	All flexible cords, switches, plugs and socket outlets are in good and serviceable condition.			
	8.7	All switches for 1 Ø supply ≤ 110 V shall be of double-pole type with protection in each live conductor.			
	8.8	Colour codes of plug, socket outlet and cable coupler of different operating voltages are correct.			
	8.9	All cables are properly supported.			
	8.10	Circuit protective conductor is provided for each final circuit.			
	8.11	No flexible cord is used as fixed wiring.			
(9)	SOCKET-OUTLET ASSEMBLY				
	9.1	Socket-outlet assembly is properly installed and earthed.			
	9.2	Socket-outlet assembly is the recommended type.			
	9.3	Socket-outlet assembly incoming is a fixed plug (male).			
	9.4	Outgoing outlets are fixed sockets (female).			
	9.5	Earth fixed socket-outlet protected by approved type residual current circuit breaker (RCCB), current rating not exceeding 30 mA and a MCB.			
(10)	ENVIRONMENTAL CONDITIONS				
	10.1	Unimpeded access to the main switchboard.			
	10.2	Switchroom locking facilities are provided.			
	10.3	Switchroom show no sign of water leakage or seepage.			
	10.4	Lighting for switchboard is adequate.			
	10.5	Switchroom ventilation is adequate.			
	10.6	Switchroom is not used for storage.			
	10.7	Switchroom free of vermin and rodents.			
	10.8	Instruction for treatment of electric shock.			

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(11) For information, to contact the main contractor at telephone number _____ for emergency.

(12) **GENERAL OBSERVATIONS**

(13) **DECLARATION BY LICENCE ELECTRICAL WORKER**

I have carried out inspection on _____ (*date of inspection*), witnessed by the representative of the licensee and hereby I declare that the electrical installation is fit and safe for operation.

Name of LEW: _____ Licence No : _____

Signature: _____

The inspection was witnessed by the owner / operator of the electrical installation.

Name of Representative: _____

Designation: _____

Signature: _____