LV Power Cable & Wire Installation (Outdoor Cables) Checklist

The **LV Power Cable** & Wire Installation (Outdoor Cables) Checklist is used to verify that low voltage cable installation work is carried out according to approved drawings, safety standards and project specifications.

It helps to ensure proper cable routing, termination, testing and quality compliance for safe and reliable electrical operation.

Scope

This checklist provides a systematic approach to inspecting outdoor LV power cable and wire installations to ensure compliance with technical standards and installation procedures.

It helps to

- Identify defects,
- Verify workmanship quality and
- Maintain electrical system safety and reliability.

Project Information

Project		**Location**	
Contractor		**Subcontractor**	
Section of Work		**Level/Area**	
Inspection Ref No.		**WIR No.**	
Inspection Date		**Consultant**	

1. Pre-Installation Inspection

S.No	Inspection	S/C	Contractor	Consultant
1	Verify approved construction/shop drawings and method statement availability.			
2	Confirm excavation depth, trench width, and route alignment.			
3	Check underground utility clearance and civil approvals.			
4	Ensure approved cable type, voltage grade, and size.			
5	Inspect cable drums for physical damage and identification labels.			
6	Confirm sand bedding, warning tape, and cable protection tiles availability.			

2. Cable Laying & Installation Checks

S.No	Inspection	S/C	Contractor	Consultant
1	Verify cable route as per approved layout drawings.			
2	Check cable spacing and segregation between power/control cables.			
3	Ensure cable bending radius complies with manufacturer recommendation.			
4	Inspect pulling method to avoid sheath or insulation damage.			
5	Verify proper dressing and fastening on trays/supports.			
6	Confirm correct phase color identification and ferruling.			

7	Check gland, lug, and termination kit suitability.			
8	Verify proper cable termination torque and tightness.			
9	Ensure earthing/bonding connections are completed.			
10	Check source-to-load cable identification labels.			

3. Testing & Commissioning

S.No	Inspection	S/C	Contractor	Consultant
1	Perform **insulation resistance (IR)** test and record values.			
2	Verify continuity test results.			
3	Confirm phase sequence and polarity checks.			
4	Inspect termination			

	points for overheating risk or loose joints.			

4. Safety & Quality Requirements

S.No	Inspection	S/C	Contractor	Consultant
1	Proper barricading and warning signs installed.			
2	Adequate lighting provided in work area.			
3	Personnel using required **PPE.**			
4	Electrical tools and testing instruments calibrated and damage-free.			
5	Work area clean and free of obstructions.			

6	Qualified and authorized personnel only performing installation.			
7	Permit to work (PTW) available if applicable.			

Approval Signatures

Designation	**Name**	**Signature**	**Date**
Subcontractor QA/QC			
Contractor QA/QC			
Consultant / Client Representative			