







Prepared By

M/S P.K. Enterprises

G-Sector ,Naharlagun , P.O/PS- Naharlagun , Papum Pare Arunachal Pradesh

In Consortium with

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M/S Indiavision Realty & Infrastructure Pvt Ltd

A-25, Second Floor, Sector 3, NOIDA — 201301

PARTICIPANT HANDOUT ASSISTANT ELECTRICIAN



Arunachal Pradesh Building & Other's Construction workers welfare board
(APB&OCWWB)

ESS Sector, Itanagar-791110

Assistant Electrician



Role Description

To work as an Assistant Electrician and perform installation, repair, and maintenance of LV electrical connections at construction sites temporary and permanent LV electrical connections at residential and commercial buildings. The individual will be engaged in laying conduits for LV single phase wiring and handle hand and power tools efficiently under supervision of level -4 electrician and above as per applicability. Also the jobholder should be able to engage the helper electrician level -1 suitably and productively. Trained to qualify test & assessment by authorized agency for behavior, knowledge & skill as per all relevant NOS for Assistant Electrician level-3.

What RPL Means?

Recognition of prior learning (RPL): It is an assessment process that involves assessment of an individual's relevant prior learning (including formal, informal and non-formal learning) to determine the credit outcomes of an individual candidate knowhow.

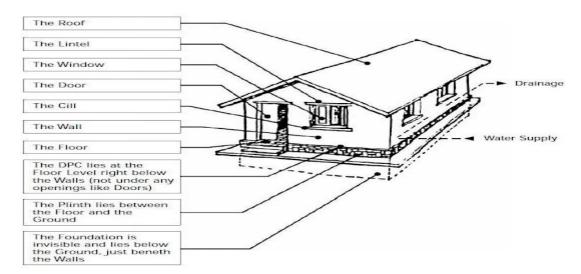
Why RPL?

- Because Construction workers do not have a certificate which tells us about their skill level
- Because construction workers do not get paid according to skill level

Applicable National Occupational Standards (NOS

- CON/N0602: Select and use hand, power tools and electrical devices relevant to construction electrical works
- CON/NO603: Install temporary lighting arrangement at construction sites
- CON/NO604: Install LV electrical wiring at permanent structures
- CON/NO605: Assemble, install and maintain temporary LV electrical panels (distribution boards) at construction site
- CON/N8001: Work effectively in a team to deliver desired results at the workplace
- CON/N8002: Plan and organize work to meet expected outcomes
- CON/N9001: Work according to personal health, safety and environment protocol at construction site

List and describe parts and functions of a building



Foundation & Plinth Lintel

Damp Proof Course (DPC)

Floor & Wall Stair Door & Window

Roof

Electrical Supply

Lintel Cill
Surfaces/ Finishes Drainage

Water Supply

Tools and materials used in construction



Tools

Hammer Plumb Bob With Frame Chisel Water level tube Sheet metal Cutters Flat screwdriver Nee
Tri-Square Me
Steel fish tape and reel tester

Needle-nose pliers Measuring Tape Power Tools Hacksaw Blade



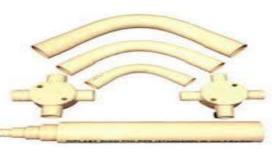
Material

Conduit Wire Junction Box Circuit Breaker Chalk

Conduits

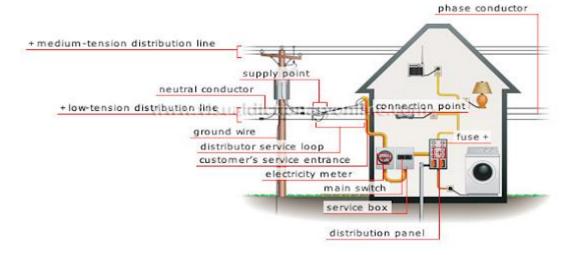
Size	Outside Diameter	Tolerance on outer Diameter	Inside Diameter			Wall Thickness			Standard
			Light	Medium	Heavy	Light	Medium	Heavy	(Meters)
16	16 mm	-0.3 mm	13.7 mm	13 mm	12.2 mm	1.0 mm	1.35 mm	1.75 mm	3
20	20 mm	-0.3 mm	17.4 mm	16.9 mm	15.8 mm	1.15 mm	1.4 mm	1.95 mm	3
25	25 mm	-0.4 mm	22.1 mm	21.4 mm	20.6 mm	1.25 mm	1.6 mm	2.0 mm	3
32	32 mm	-0.4 mm	28.6 mm	27.8 mm	26.6 mm	1.5 mm	1.9 mm	2.5 mm	3
40	40 mm	-0.4 mm	35.8 mm	35.4 mm	34.4 mm	1.9 mm	2.1 mm	2.6 mm	3
50	50 mm	-0.5 mm	45.1 mm	44.3 mm	43.2 mm	2.2 mm	2.6 mm	3.15 mm	3
63	63 mm	-0.6 mm	57.0 mm	-	(max	2.7 mm	-		3



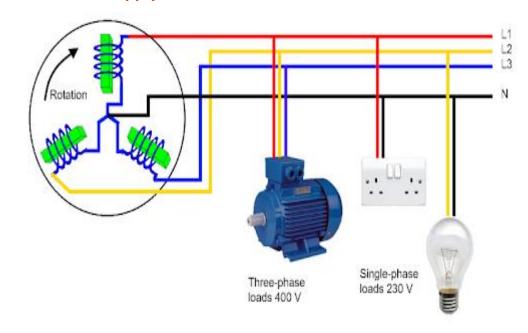


Domestic Supply

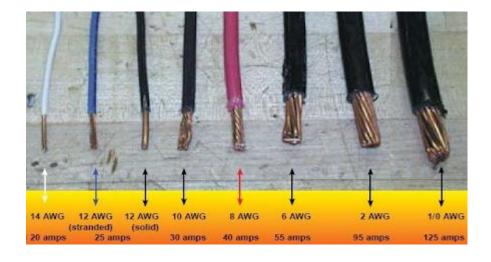




Single & Three Phase Supply



Wire Size





PERSONAL PROTECTIVE EQUIPMENT







Safety Goggles







Safety Helmet



Safety Gloves

Safety Belt

Safety Requirement

Safety Shoes

- Safe access and working platform.
- Lifeline of suitable material like manila rope of 16mm diameter for anchoring the belt.
- Warning for people below through display of caution board and cordoning off the area if necessary
- Work at height should be performed in good daylight, preferably when strong winds do not exist.
- Anchor safety belt while working at height should be ISI marked (BIS approved).







Emergency exit sign



No smoking sign



First aid sign



No open flame sign

Comply with Industry, Regulatory and Organizational Requirements

It is very important for all the employees to comply with industry standards and be aware of various rules, regulations, policies and procedures followed by the company. Apart from educating themselves, it is also important to maintain good relationships with peers, seniors, juniors and all employees. One should be able to make the right decision which is good for the greater good of the company.

Team Work



This is all about being an effective worker.

- Safe worker
- Worker who is responsible for the quality of their work
- Worker that communicates well and works as a team member, sharing information.
- Worker that accepts change
- Worker that plans their daily work Planning is essential regardless of your job role responsibilities because as a worker you are part of a group or team.
- This might be a small team of two, or a large team such as a company or an organization. It is very rare for someone to work completely alone. If we bond together and support each other. If we make true the spirit of teamwork. Regardless of our differences, we can rise to meet our challenges.
- If we are aware of the feeling of sharing life will be easier and the passing of years more fulfilling.

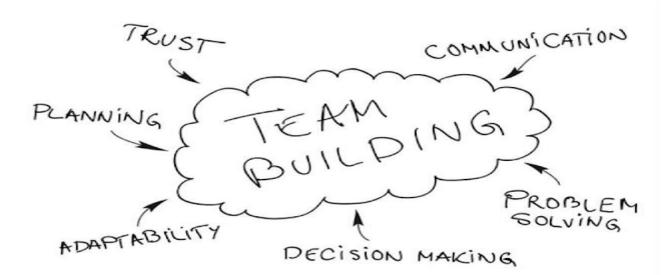
Future possible progression and career development provisions on completion of the course

Electrical Foreman

Construction Electrician Level 4

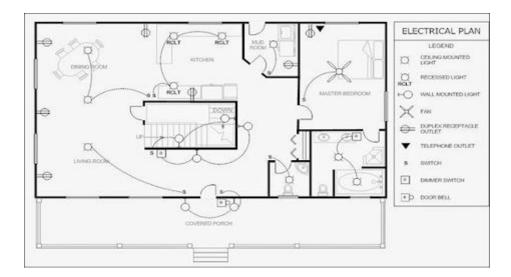
Assistant Electrician Level 3

Helper





Plan



Rules for Electrical Safety

- Use the correct size of cable of right specifications
- Correct rating of fuses
- Use of circuit breakers
- Proper Earthing
- Ensure good insulation/double insulation
- Ensure proper Permit to work
- Tool box talk is must before the work starts
- No Naked wire to be used

Do's and Don'ts during Construction

Do's

- Handle electric appliances carefully
- Use insulated hand tools
- Use correct rating fuses
- Ensure effective earthing for electrical appliances
- Use hand gloves and rubber mat

Don'ts

- Don't tamper unnecessarily with live lines
- · Don't use damaged appliances

Electric shock occurs by touching:

- Phase and neutral simultaneously
- Phase conductor and standing on ground
- · A metallic part, when current is leaking

Useful Notes:

1 Yard = 3 Feet 1 Meter = 3.28 feet 1 Inch = 2.54 CM 1 Feet = 305 MM

1 KG= 1000 Gram



Covid-19 health and safety protocols

Coronavirus health and safety tips



Wash your hands often



Use hand sanitizer



Wear a mask



Don't touch your face





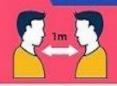






NOVEL C RONAVIRUS (COVID-19)

Protective measures against Coronavirus



A distance of at least 1 meter is necessary to ensure safety for all



Wash your hands with soap and water regularly



If soap and water is not available, use hand sanitizer with at least 60% alcohol



Wash hands before touching eyes, nose and mouth



Throw used tissues into closed bins immediately after use



Cover your nose and mouth with handkerchief/tissue while sneezing and coughing



Avoid mass gathering and crowded places

If you are experiencing symptoms like fever, cough or difficulty in breathing, please call the state helpline number or 24x7 helpline numbers of Ministry of Health and Family Welfare, Government of India and follow the instructions.

Notes:	Ski कौशल भ





THANK YOU FOR PARTICIPATING IN THE TRAINING PROGRAM