



UNIT - 3



General Rules, materials and accessories
Types of wiring - Conduit wiring
Wiring layout of Residential building
Grounding: Importance of grounding
Types of grounding
Safety: Causes of accidents, Accident prevention
Circuit Breakers (MCB & ELCB), Electronic Fuses



GENERAL RULES AND ACCESSORIES



Electrical tools





Electrical tools



Wire strippers

- Stripping insulation from conductors
- Cutting small conductors
- Crimping wire lugs



Phillips screwdriver

Installing and removing phillips-head screws



Flat-blade screwdriver

- Installing and removing slot-head screws



Tap tool

Equipping drill holes with bolt threads
Re tapping damaged threads
Determining bolt size





Electrical tools



Slip-joint pliers

- Holding couplings and conductors
- Tightening couplings and conductors



Magnetic torpedo level

- Leveling conduit and equipment



Keyhole saw

- Cutting holes in plasterboard for circuit boxes



Conduit reamer

- Reaming burrs from cut conduits and EMT





Rules for care of hand tools



There are many more hand and power tools that electricians will use in residential and commercial wiring.

All tools should be used only for the purpose intended.

It is the electrician's responsibility to keep his or her tools sharp, clean, and lubricated.

A well maintained tool has a longer life and is safer than an improperly maintained tool.

Repair tools when possible, but discard worn or damaged tools.



RULES



Select the right tool for the job.

Keep tools clean, lubricated, and in good working condition.

Purchase good quality tools they are safer and will last longer.

Repair tools when possible, but discard worn or damaged tools.