





# WIRING ACCESSORIES AND MATERIALS



- All the wiring systems and electrical installations needs the following accessories:
  - Cables
  - Flexible wires
  - Switches
  - Fuses
  - Ceiling rose
  - Lamp holders
  - Plugs
  - Socket outlets
  - Junction boxes





# CABLES



- A cable is made of some conducting material such as copper or aluminium. It is surrounded by insulation and a sheath for mechanical protection.
- The cables are generally classified according to the insulation used. Different types of cables are as follows:
  - Weather- proof cables
  - Polyvinyl chloride insulated cables (PVC)
  - Lead sheathed cables
  - Cab tyre sheathed cables (CTS)

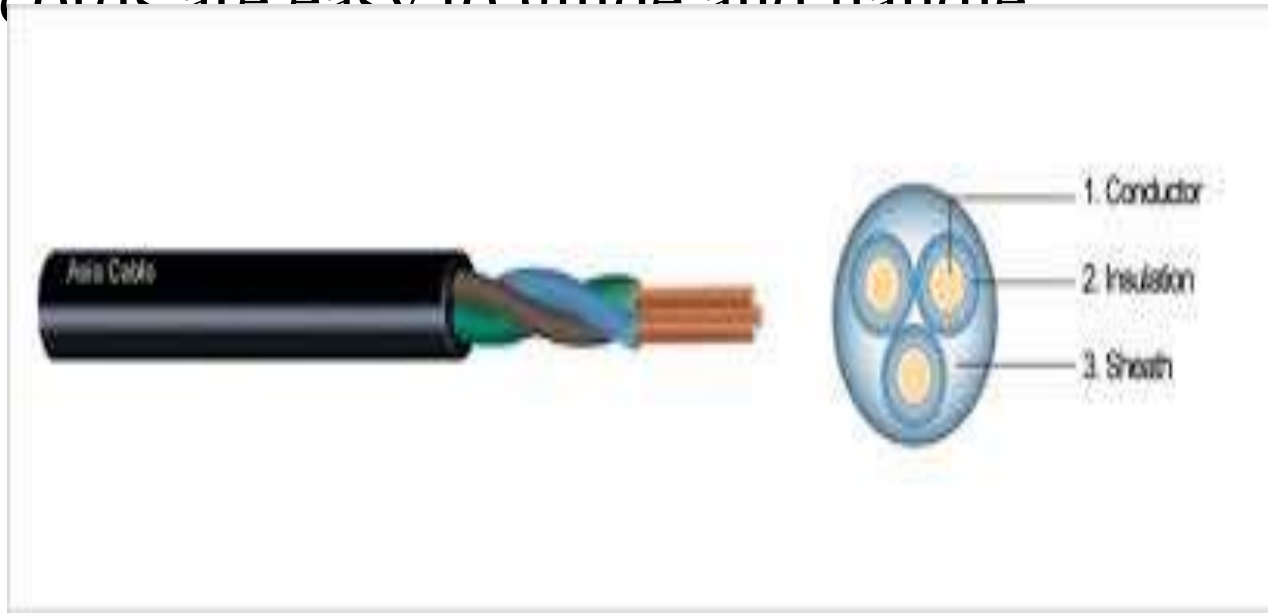




# FLEXIBLE CORD



- In the flexible cord, a large number of fine wires are used to form the conductor. These are insulated by plastic insulation.
- The flexible cords are used as connecting wires to connect the portable domestic appliances and light fittings etc.
- These cords are easy to guide and handle





# SWITCHES

- A switch is supposed to carry out the make (connect) and break (disconnect) of electrical connection to the load.
- Switches should be connected to the live (L) wire in the circuit.
- The switches can be classified into two types as follows:
  1. Tumbler switch
  2. Flush switch





# RFACE OR TUMBLER SWITCH



- Mounted on the mounting block directly connected to the surface of the wall. It is projected out of the surface of the wall.

••Single-way switch

••Two-way switch





## PULL SWITCHES OR CEILING SWITCHES

- The Pull switches are fixed on the ceiling and all live parts are out of reach of the operator
- The switch has strong mechanical action. It is operated with a single pull.





# ROTARY SNAP SWITCH







# PUSH BUTTON SWITCH



- This type of switch consists of one blade only.
- The blade is given a rocking action by press button and movement is controlled by a cam and spring.





# FUSES

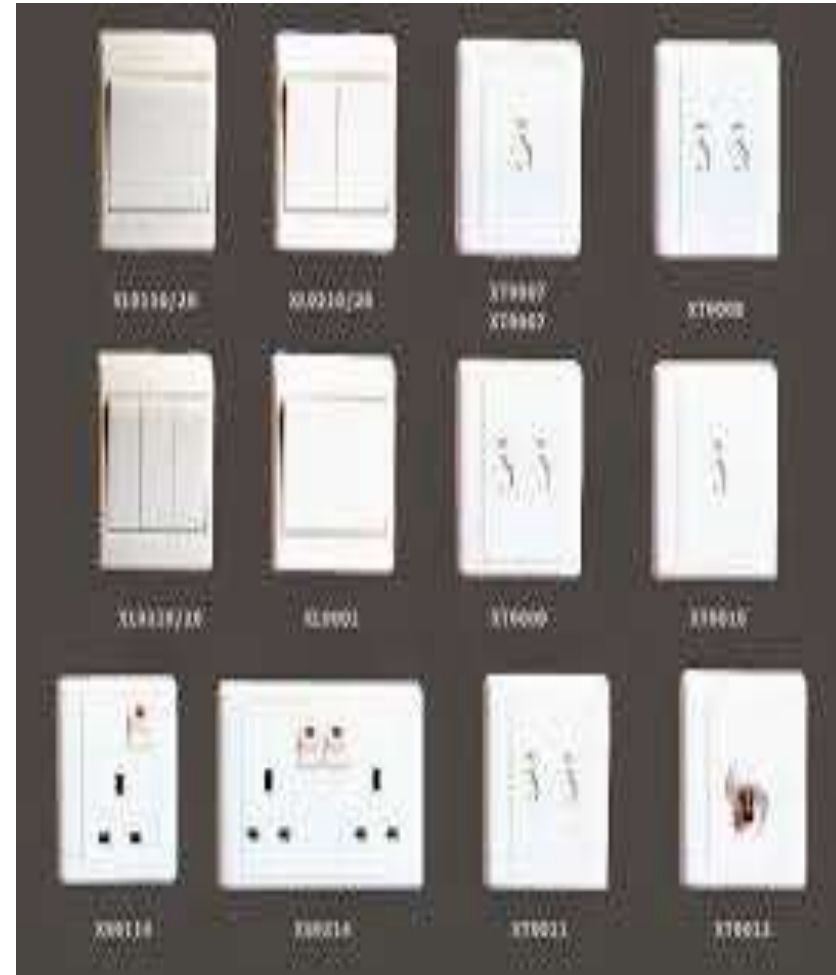
- In any electrical installation, **fuse is used for protecting the appliances against over current.** Fuse is used in different stages of the wiring.
- A fuse can be made of the following conducting materials:
  - 1.Copper
  - 2. Lead
  - 3. Aluminium
  - 4. Alloys of lead and
  - 5. Zinc
  - 6. Tin





# SHOCKET OUTLETS

- The socket outlets are provided for temporary electrical connections such as table lamps, table fans, radio, TV, mobile chargers etc.
- The socket outlet can be of the following two types:
  - Two pin type (Live, Neutral)
  - Three pin type (Live, Neutral, Earth)





# PLUGS

- The plugs along with flexible cords are used for providing the electrical supply to the portable appliances like table fan, table lamps, radio etc.
- The plugs are available in two types, similar to the sockets:
  1. Two pin plugs
  2. Three pin plugs





# LAMP HOLDER

- A lamp holder supports the lamp and connects it to the supply system as well
- The lamp holders are classified into following different types:
  1. Batten holders
  2. Angle holder
  3. Pendant holder
  4. Water tight bracket holders
  5. Bracket holders





# CEILING ROSE



- The ceiling rose is used for connecting the ceiling fans, pendant lamps etc to the supply system.
- Ceiling rose is made of the following two parts:
  1. Base
  2. Cover

