FAQ's

1. **What are the ISI Specification for wiring system?**

   The following are the wiring rules laid by Bureau of Indian Standards,

   The wiring should be carried out on distribution systems with main and branch distribution boards to convenient centers. The circuit on opposite side of three wire systems or on different phases of three phase system is kept as far apart as possible in all cases and the minimum distance between two circuits should be 7 feet. Medium pressure wiring and all associated apparatus should comply with ISI specifications. Horizontal run of wiring should be at a height of 3 meter. The number of points in light circuits should not exceed 10 or the total load on circuit should not exceed 800 watts. Earth wire should be 14 SWG in case of copper and 4 mm square in case of aluminum. All conductors should be made of copper. They should have a cross section less than 0.0020 sq. inches, nominal area (3/0.029 inches) and every conductor should be stranded. Burnt element, cut/ broken wiring, loose/open connection and rusted points should never be used to avoid open circuit fault.

2. **What is lighting track?**

   Track lighting is a method of lighting where light fixtures are attached anywhere on a continuous track device which contains electrical conductors.[1] This is in contrast to directly routing electrical wiring to individual light positions. Tracks can either be mounted to ceilings or walls, lengthwise down beams, or crosswise across rafters or joists. They can also be hung with rods from especially high places like vaulted ceilings.

3. **What is submain wiring and circuit wiring?**

   Submain wiring shall mean the wiring from one main/distribution switchboard to another. Circuit wiring shall mean the wiring from the distribution board to the first tapping point inside the switch box, from where point wiring stands.

4. **Guidelines for planning electrical installation for residential apartment building.**

   The following guidelines to be followed for electrical installation for residential building:

   - Meter boards must not be located under the staircase.
   - Main board shall be MCB type with provision of ELCB, located in a niche with ventilated door cover, in the room connecting to the entry.
   - CFL type staircase lighting maybe provided and incandescent and bulk head fittings should not be provided to avoid excessive energy consumption and low burning hours.
   - D.G. set to be provided for each colony to take care of water supply pump set, street lighting and essential load requirement of buildings.
   - Every room must be provided with one fluorescent fitting for energy saving.
   - Kitchen to be provided with a fluorescent fitting, tapped from a batten holder so as to add more bulbs if needed.
   - Incandescent bulkhead fittings not to be used.
   - Quality fittings of reputed make to be used.
   - Exhaust fans opening with one open outlet to be provided and one 15A 5-pin power outlet for kitchen, one 3 pin 5 A for water filter.
   - One power outlet for washing machine.
   - Telephone wiring outlet and TV cabling outlet should be provided.

5. **What are the ISI standards for conduits and conduit fittings?**

   The conduits for each circuit shall be completely erected before any cable is drawn in. conduits for light or power wiring shall be separate. In the prefabrication of conduit systems which are not to be wired in situ adequate allowance shall be made for variations in building dimensions is that the conduits or cables are not subjected to tension or other mechanical strain during installation. In damp places conduits and conduit fittings shall be of corrosion-resistant material or finish.