

different phases shall preferably be bunched separately. Identification tags or ferrules shall be provided at termination of wires in switchboards with respect to connected equipment for ease of installation and maintenance.

1.4 POWER, LIGHTING AND CONTROL CABLES

PVC Cable for underground installation shall also be PVC insulated and PVC sheathed.

1.4.1 Surface Cables

Cables for distribution system on surface shall be either single-core or multi-core, as specified in drawings or BOQ. The cables shall be PVC insulated and PVC sheathed.

1.4.2 Cables in Conduits

All cables/wires, in conduits shall be of copper, PVC sheathed or PVC insulated as specified in design drawings or BOQ.

1.5 PHASE IDENTIFICATION

All cables shall have phase identification colors on insulation of each phase. The color code for three phase circuits shall be red, yellow and blue for phase conductor and black for neutral conductor.

Single phase circuits shall have red for phase and black for neutral conductor.

1.6 CABLE ACCESSORIES

Best quality cable accessories should be used with the approval of consultant. The cable accessories, include, cable tray, cable trunking, floor trunking, clips, saddles (all galvanized). Cable glands made of brass should be used when cable enters/leaves a panel/Distribution Board. Identification tags made of engraved brass plates to be used for all cables. All the cables should be securely fixed to cable tray or trunking with help of plastic ties. Cable lugs should be compression type. Lugs should be pressed with help of compression machine approved by consultant.

1.7 CONDUIT WIRING-INSTALLATION

The wiring through conduit shall be started only after the conduit system is completely installed and all outlet boxes, junction boxes, etc. are fixed in position.

The wires shall be pulled in conduit with care and, to facilitate pulling, the cable manufacturer's recommended lubricant shall be used. Use of any kind of oil or soap will not be permitted.

Where several wires are to be drawn in the same conduit, they shall be pulled together. The wires shall not be bent to a radius less than ten times the overall diameter of the wire, unless otherwise recommended by the manufacturer.

The wiring shall be continuous between terminations. The looping in system shall be followed throughout. Any joint in wires will not be allowed. The use of connectors will only be allowed at location where looping-in is rendered difficult. The consent of the Consultant in writing, will be required for using connectors.