

## **PART 1 - GENERAL**

### **1.1 General**

- .1 Acceptable construction method is PVC conduit or Teck cable unless otherwise stated.
  - .1 PVC conduit shall be rigid, conduit assemblies shall be FT-4 rated.

### **1.2 Location of Conduits**

- .1 Drawings do not indicate conduit runs.
- .2 Locate conduit in a neat manner.

## **PART 2 - PRODUCTS**

### **2.1 Conduits and Teck Cable**

- .1 Rigid PVC conduit unless otherwise noted.
- .2 Flexible liquid-tight metal conduit where noted only. Provide metal conduits:
  - .1 To service drain water feed pump.
- .3 Minimum conduit size: 19 mm.
- .4 Teck cable: FT-4 rated.
- .5 Minimum Teck conductor size ##12 AWG for power feeder circuits.

### **2.2 Outlet Boxes**

- .1 Provide PVC CSA approved outlet, junction and pull boxes.
  - .1 FT-4 rated.
- .2 Provide gang boxes where wiring devices are grouped.
- .3 Provide approved Teck cable connectors for connection of Teck cables to boxes and enclosures.

### **2.3 Conduit Fastenings**

- .1 Two hole PVC straps to secure surface conduits smaller than 50 mm. Two hole PVC coated steel straps for conduit larger than 50 mm.
- .2 Stainless steel channel type supports and fittings for two or more conduits at 2 m on center.
- .3 Use stainless steel screws, maintain vapor barrier where applicable.

### **2.4 Conduit Fittings**

- .1 Fittings: manufactured for use with conduit, Teck cable or cable tray specified as applicable. Coating same as conduit, Teck cable.
  - .1 FT-4 rated.
- .2 Factory elbows where 90° bends are required for 25 mm and larger conduits.
- .3 Watertight connectors and couplings for EMT and Teck cables.

### **PART 3 - EXECUTION**

#### **3.1 Conduit and Teck Cable Installation**

- .1 Equip vertical runs of conduits with pull boxes containing approved wire strain supports at intervals as required by Code.
- .2 Install conduits to conserve headroom in exposed locations and cause minimum interference in spaces through which they pass.
- .3 Use conduit or Teck cables for all wiring unless otherwise indicated in the specifications. All devices shall be surface mounted types.
- .4 When pulling conductors into conduit, do not use any lubricant which is harmful to the conduit or to the insulation of the conductors.
- .5 Lay out conduit as to avoid interference with other Work and so that it can drain with no pockets in which water can collect.
- .6 Where runs are exposed on the surface, support conduit or Teck cable at intervals not exceeding 1.5 m and as per Canadian Electrical Code Part 1.
- .7 Provide liquid-tight flexible connection shall be provided to all motors and miscellaneous equipment.
- .8 Replace conduit if kinked or flattened more than 1/10 of its original diameter.
- .9 Run square and parallel or perpendicular to building lines.
- .10 Group conduits, Teck cables wherever possible in a neat and workmanlike manner, properly supported with approved hangers, securely anchored to surface channels.
- .11 Maintain FT-4 rating.

#### **3.4 Box Installation**

- .1 Rigidly attach outlet boxes to the building structure in an approved manner.
- .2 Support boxes independently of connecting conduits.
- .3 Where blank coverplates are installed on outlet boxes, they shall match the outlet boxes.

#### **3.5 Identification**

- .1 Provide lamicaid identification labels as specified.

---

End Section 16132