

## **1 General**

### **1.1 REFERENCES**

- .1 Canadian Standards Association (CSA).
- .1 CSA C22.2 No. 211.1, Rigid Types EBI and DB2/ES2 PVC Conduit.

## **2 Products**

### **2.1 PVC DUCTS AND FITTINGS**

- .1 Rigid PVC duct: to CSA C22.2 No. 211.1, type rigid PVC for direct burial with minimum wall thickness at any point of 1/10". Nominal length: 10' plus or minus 0.5". Type DB2 (thinwall) PVC conduits unacceptable.
- .2 Rigid PVC split ducts as required.
- .3 Rigid PVC bends, couplings, reducers, bell end fittings, plugs, caps, adaptors same product material as duct, to make complete installation.
- .4 Rigid PVC 90° and 45° bends as required.
- .5 Rigid PVC 5° angle couplings as required.
- .6 Expansion joints as required.
- .7 Preformed, interlocking intermediate duct spacers for duct size as indicated
- .8 Use epoxy coated galvanized steel conduit for sections extending above finished grade.

### **2.2 SOLVENT WELD COMPOUND**

- .1 Solvent cement for PVC duct joints.

### **2.3 CABLE PULLING EQUIPMENT**

- .1 Use 6mm stranded nylon pull rope tensile strength 5 kN.

### **2.4 MARKERS**

- .1 150mm wide, polyethylene marker tape in all trenches. Use red colored tape. Install at depth as per drawings.

## **3 Execution**

### **3.1 INSTALLATION**

- .1 Install duct in accordance with manufacturer's instructions.
- .2 Clean inside of ducts before laying.
- .3 Ensure full, even support every 1.5 m and smooth transitions throughout duct length.
- .4 Slope ducts with 1 to 400 minimum slope.
- .5 During and after construction, cap ends of ducts to prevent entrance of foreign materials.
- .6 Pull through each duct wooden mandrel not less than 300 mm long and of diameter 6 mm less than internal diameter of duct, followed by stiff bristle brush to remove sand, earth and other foreign matter. Pull stiff bristle brush through each duct immediately before pulling-in cables.
- .7 In each duct install pull rope continuous throughout each duct run with 3 m spare rope at each end.
- .8 Install continuous strip of marker tape above duct before backfilling.
- .9 Notify Departmental Representative upon completion of direct buried ducts and obtain acceptance prior to backfill.

**END OF SECTION**

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