TECHNICAL BULLETIN
Community Development & Planning
TOPIC:
Requirements for Rigid Polyvinyl Chloride Conduit (PVC)
June 9, 2009

This Technical Bulletin identifies the generally allowed parameters of Polyvinyl Chloride (PCV) conduit. Code permits the use of PVC conduit in underground and above ground locations where properly supported, protected from physical damage and within the limits of its rated temperature.

Installation Requirements:

The general installation and approval of PVC conduit for underground and above ground installations shall be in compliance with NEC Article 352. In addition, the City of Arlington will enforce compliance of PCV conduit installation methods as required in other NEC Sections and specifically as follows.

1. Underground installations of PVC conduit shall conform to the minimum burial depths as required in NEC Section 300.5 and Table 300.5.

2. Underground installations of PVC conduit within 5 feet of swimming pool walls and not associated with the pool equipment shall conform to the minimum burial depths as required in NEC Section 680.10 and Table 680.10.

3. Where underground PVC conduit extends above grade and is subject to movement by settlement or frost, an expansion fitting allowing for changes in movement shall be provided.

4. PVC conduits subject to physical damage shall be protected 18 inches below grade up to a level of 8 feet above finished grade.

5. The use of PVC conduit is prohibited due to extreme temperatures locations on roof tops or below roof tops in unconditioned areas unless the installation provides for expansion as indicated in #6 below. PVC conduit is sunlight resistant with a maximum temperature limitation of 122°F. The ambient air temperature for the DFW area as determined by ASHRAE is approximately 99°F with additional temperatures increases for installations on roof tops and spaces below roof tops in unconditioned areas.

6. Above ground PVC conduit installations shall be provided with expansion fittings to compensate for thermal expansion and contraction where lengths of 100 feet or greater is installed as required in NEC Section 352.44 and Table 352.44.

7. PVC conduit shall be securely fastened within 3 feet of each outlet box and properly supported at intervals as required in NEC Table 352.30.