

Above-Ground Duct Barriers for Supply Service Conductors

Distribution Company Awareness

There has been an increase in the number of supply service ducts (i.e. conduit) found pulled away from supply enclosures, such as meter bases, exposing the Electrical Distributor's supply service conductors due ground movement.

When the ownership demarcation point is on the line side of the meter base, the Electrical Distributor is responsible for ensuring that all infrastructure and equipment providing a barrier to the Electrical Distributor owned energized conductors are adequate. Barriers include the duct to the meter base, buried duct systems and trench backfill. See DB-01-14 for additional information.

In January 2022, CSA published C22.3 No. 7:20 (Underground Systems) with CCA amendments, which included a revision to clause 10.3 Supply equipment.



CSA C22.3 No. 7:20, Underground Systems Excerpt

10.3.2 Above-ground duct attached to supply enclosures

Above-ground duct attached to supply enclosures shall account for ground movement (e.g., settlement, freeze/thaw cycles, seasonal soil moisture variation, or future weather projections), and changes through expansion or contraction to the duct.

Note: Expansion joints for duct can be used to account for ground movement and expansion and contraction forces.

ESA Recommends

Electrical Distributor's standards should incorporate means to account for ground movement for ducts attached to supply enclosures, such as meter bases.