

Electrical Distribution Safety

GENERAL STATEMENT

This bulletin replaces Bulletins DSB-05-07. It is recommended the copies be destroyed and replaced with this bulletin.

The following bulletin outlines how LDCs meet the required Safety Standards for electrical utilities located inside buildings, under Sections 4&5 of Regulation 22/04.

- For electrical utilities located *inside of buildings*, the Safety Standards are met when the installation meets the requirements of the Ontario Electrical Safety Code (OESC).
- For electrical utilities located *entirely outside of buildings*, the Safety Standards are met when installations meet the requirements of CSA Standards C22.3 or the OESC.

CSA SCOPE STATEMENTS

The Scope of CSA Standards C22.3 No.1 and No.7 do not include electrical utilities inside of buildings. The electrical utilities located inside the building must meet the requirements of the OESC in order to meet the Safety Standards of Regulation 22/04.

Scope of C22.3 No.1

- This Standard applies to the lines and equipment of electric supply and communication utilities *located entirely outside of buildings* and fenced supply stations.
- Conditions not covered herein shall be governed by the appropriate requirements or equivalent Standards in common use, or as required by constituted authority.

Scope of C22.3 No.7

- This Standard applies to the lines and equipment of electric and communication utilities *located entirely outside buildings* and fenced supply stations...
- Conditions not covered herein shall be governed by the appropriate requirements or equivalent Standards in common use, or as required by constituted authority.

ESA DIRECTION

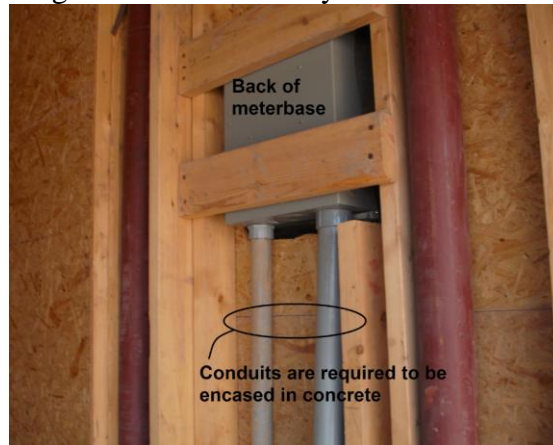
Electrical utility equipment is considered outside of the building or other structure under any of the following conditions:

1. Where installed outside and not beneath a building or other structure
2. Where installed within a building or other structure in a raceway that is encased in concrete or masonry not less than 50mm thick
3. Where installed under not less than 50mm of concrete beneath a building or other structure
4. Where installed in conduit and under not less than 450mm of earth beneath a building or other structure
5. Where installed in any vault that meets the applicable requirements of the National Building Code

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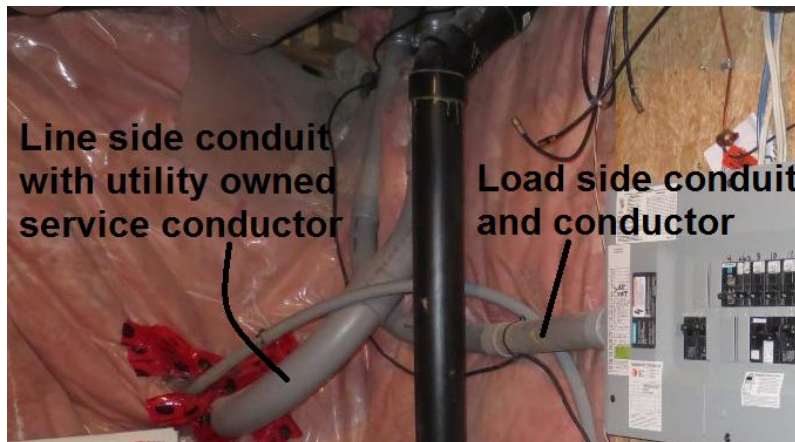
EXAMPLE 1

This picture shows a residential meter base where the line side electrical conduit with utility owned conductors runs inside the garage wall cavity. To meet the Safety Standards, the conduit shall meet all OESC requirements including being concrete or masonry encased.



EXAMPLE 2

This picture shows the incoming line side conduit with utility owned conductors entering the residential basement and exits to the meter base located at the exterior of the home. To meet the Safety Standards, the conduit inside the building shall meet all OESC requirements including being concrete or masonry encased.



ADDITIONAL INFORMATION

If you can provide additional information on this Bulletin or any other Utility issue, please contact ESA to share your experiences. Additional information requests, and follow-up information, may be directed to ESA. Please be prepared to quote Bulletin “DB-06/16”.