

January 2016

VAR-CEC-6-112 [rev-0]

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### VARIANCE

#### Canadian Electrical Code

**SUBJECT: Rule 6-112 Attachment of Overhead Service Conductors**

#### Preamble:

In complying with 6-112(4), Alberta has historically accepted rigid steel conduit in trade sizes 35 and larger to be used as a service mast, providing certain conditions are met.

**Therefore the following province-wide Variance has been approved to allow the continued use of this practise:**

#### Variance

#### Rule 6-112 Attachment of Overhead Service Conductors

##### Use of Rigid Steel Conduit as a Service Mast

Rule 6-112(4) states that service masts shall be assembled from components suitable for such use. (See the Appendix B note for this rule). To be acceptable, a service mast must be able to withstand the stresses it may be subjected to.

In complying with 6-112(4), rigid steel conduit in trade sizes 35 and larger may be used as a service mast provided:

1. the point of attachment for the supply service drop does not extend above the roof more than the following distances:

Conduit Trade Size	Distance Above Roof
35	450 mm
41	600 mm
53	900 mm

- Note:**
- 1) If the distances above must be exceeded, an acceptable alternate type of service mast must be installed. To ensure an acceptable installation, consult with the inspection authority having jurisdiction.
  - 2) Electrical metallic tubing and aluminum conduit are not suitable for use as a service mast.

2. Where 35 and 41 trade size conduits are used, the stress imposed by aluminum neutral supported (NS) cable is minimized by ensuring that the NS cable is No. 4 AWG or smaller and the span does not exceed 30 m in length with a sag of 450 mm at 15°C.
3. The conduit is secured to the building with at least two “anchor” or “U” bolts spaced at least 450 mm apart with one placed near the roof line and the other near the meter socket. Standard conduit straps are not acceptable for this purpose.
4. A suitable roof jack is installed where the mast extends through the upper section of the roof.
5. The service drop is attached to the mast with an insulator located at least 300 mm above the roof surface and not more than 300 mm below the service head.

Where a supporting mast is installed at a distance greater than 600 mm from the outer edge of the roof, or the service drop extends away from the building at an angle less than 45° from the roof edge, the vertical clearances in 12-310 shall apply.

**Expiry:**

This variance remains in force until revoked by the Administrator.