Bulletin 6-9-2
Attachment of overhead service conductors
Rules 6-112, 75-406

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Scope

1) Attachment of overhead service conductors
    a) Examples of unacceptable practices
2) Expanding type sleeve anchors
3) Alternate method for overhead conductor support

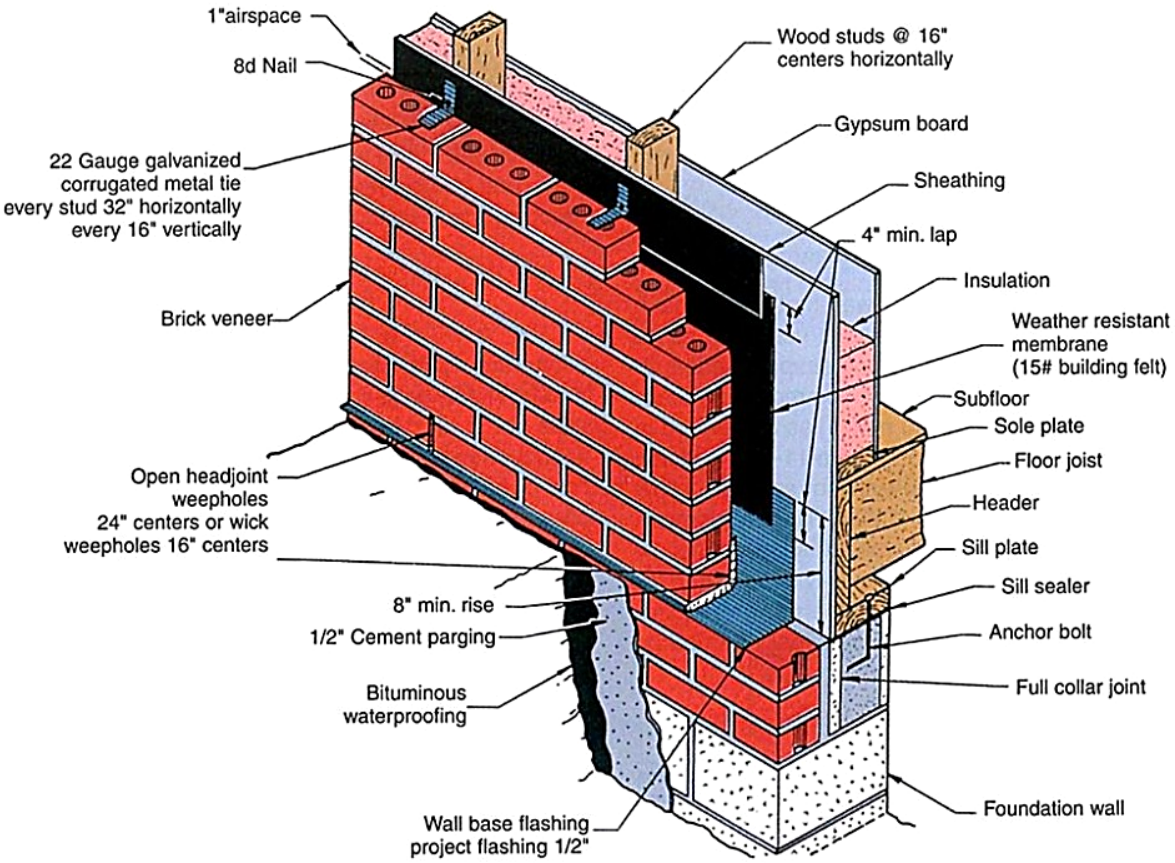
1) Attachment of overhead service conductors

A means of attachment shall be provided for all overhead supply or consumer service conductors to be located on the same of the building as the consumer service head or equivalent and positioned that will permit the service conductors to be angled away from the building as per Rule 6-112 2).

Appendix B Note to Rule 6-112 1) provides examples of acceptable attachment means for supply or consumer service conductors. The examples are based on Specification 35. Rule 75-406 a) also requires secondary service conductors to terminate on a rack of a type shown in Specification 35.

Appendix B Note, item b) ii), considers brick block wall to be structural and solid. Expanding anchors are required to have intimate contact for the complete surface of the anchor. For example, brick veneer (Diagram A1) is not to be considered a structural wall.

Diagram A1



a) Examples of unacceptable practices

1) Lag screws that have been hammered into the wood.
2) Lag screws without first boring the proper pilot hole. (This may crack the wood and have inadequate strength.)
3) Lag screws used on masonry walls. Lead shields or plugs do not have adequate strength for mast attachment.
4) Sleeve anchors located in mortar joints.

Note:
In wood framing where it is necessary to span the distance between two studs, a section of galvanized steel support channel with a clamp can be used to spread the load. Galvanized steel support channel may also be used on block or brick walls to ensure that the position of the two sleeve anchors is not too near the edge of the brick and both anchors are not in the same brick.

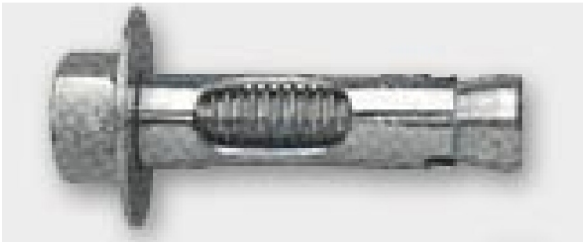
2) Expanding type sleeve anchors

See Photo B1 for acceptable types of expanding type sleeve anchors specified in Appendix B Note to Rule 6-112 1).

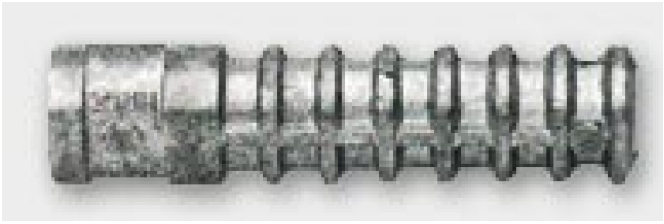
Photo B1 - Examples of acceptable expanding type sleeve anchors

Concrete Double Expansion Anchor

Concrete Single Expansion Anchor



Concrete Sleeve Anchor



Concrete Lag Shield Anchor

3) Alternate method for overhead conductor support

Background
Historically angle iron has been used as a method of supporting overhead conductors in Ontario.

Direction
The purpose of this direction is to provide consistency in the use of angle iron for overhead conductor support.

1) Perforated light duty angle iron is not permitted.
2) Angle iron shall be 4” X 4” X 3/8” hot dipped galvanized (see Diagram B1)
    - Angle iron shall have a minimum of three through bolts securely fastened to the building structure.
    - Bolts shall be 16 mm (5/8”) hot dip galvanized.
    - Bolts shall have 50 mm X 50 mm (2” X 2”) flat washers.
3) The consumers service conduit is required to be securely fastened and supported where it extends through the roof line and the emergence of the conductor from the weather head is required to be a minimum of 150 mm to a maximum of 300 mm above the support for the of attachment of the overhead conductor, as required by Rule 6-116 1) b).

Diagram B1 – Acceptable angle iron design