

Ceiling Channel for In-Building Vaults



1. Scope

This standard provides the requirements for the installation of ceiling channels in new or retrofit in-building vaults.

2. Application

This standard provides direction to Seattle City Light (SCL) crews and contractors about how to properly install ceiling channels in Network and Looped Radial vaults to support ceiling-mounted equipment including Integrated Web Channel Bus (IWCB) or trapeze-type cable supports.

3. Installation

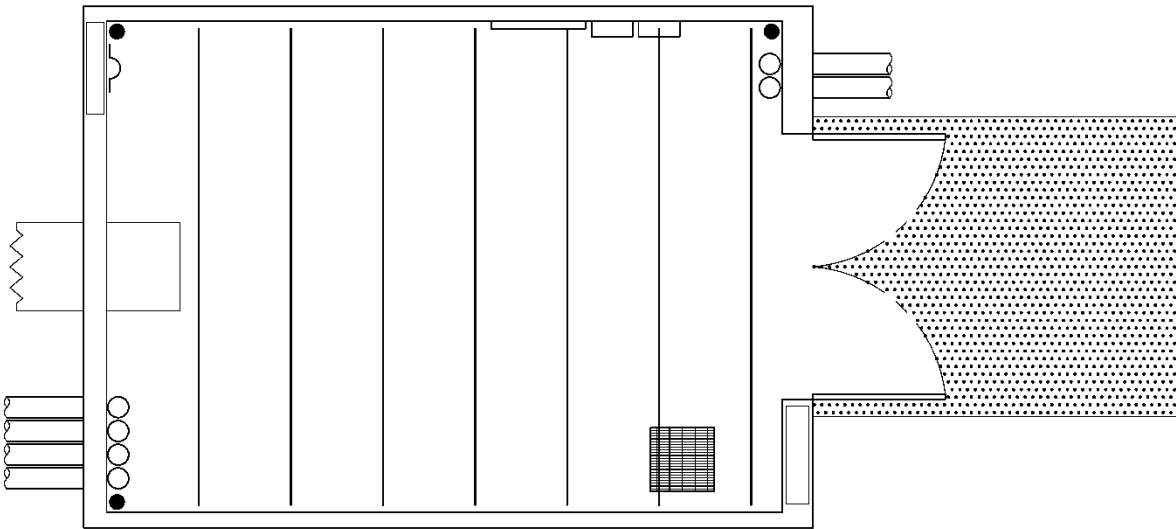
3.1 Spacing

Channels shall be spaced on 22-in centers across the ceiling of all in-building vaults including IWCB vaults. Channel shall be installed level so that the threaded rods hang vertically when attached with standard channel nuts. Channels shall be installed with the channel ends 6 to 12 inches away from the vault walls.

For Network vaults, confirm direction of channels with SCL engineer prior to construction.

For Looped Radial vaults, channel layout shall be parallel to the wall from which the customer service bus or conduits enter. See Figure 3.1.

Figure 3.1 Example Ceiling Channel Layout for a Looped Radial In-Building Transformer Vault

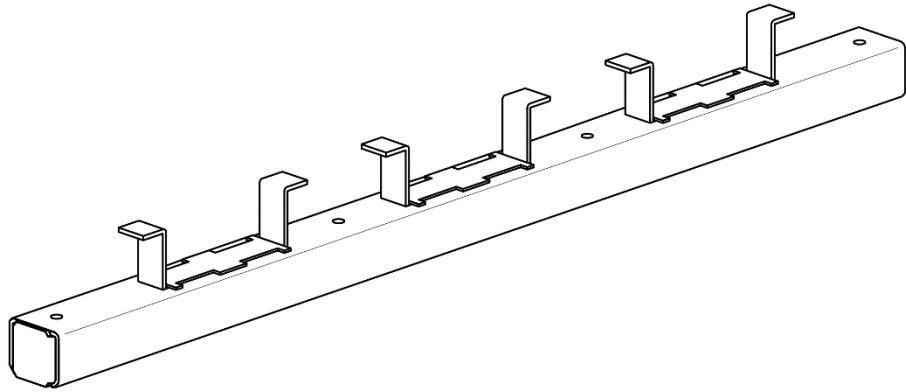


3.2 Construction

Concrete insert channels shall be embedded in the ceiling concrete during construction with the bottom of the channel flush with the ceiling surface per manufacturer's instructions. See Figure 3.2.

Concrete inserts shall be 12-gauge, galvanized Unistrut P3200 series (1-5/8 in x 1-3/8 in) or equal.

Figure 3.2. Concrete Insert



4. References

Hanson, Brett; SCL Standards Engineer and originator of 0257.06
Kohashi, Owen; SCL Civil Engineer and subject matter expert for 0257.06
SCL Construction Standard NCI-190 (canceled); "Ceiling Channel for Network Vaults"