

Hawkeye Fiber Optics Conduit Specifications

1. Conduit depth: We recommend burying the conduit 18 inches below grade. Minimum depths not subject to vehicular traffic (please see item 14 below if subjected to vehicular traffic):
 - a. 12 inches on private property.
 - b. 24 inches on City and County Right of Way.
 - c. 36 inches on State Highways.
2. Trench should have a flat surface and be deep enough to obtain minimum cover.
 - a. First 6 inches of backfill must be soft earth or sand and free of rocks. Fill must be able to pass through 1/2 inch screen.
3. Conduit with runs of 150 feet and multiples thereof shall have an intermediate pull box installed. If it's impractical to place a pull box at 150 feet and the entire length is greater than 225 feet, a larger size conduit must be used.
4. Duct bends: The minimum radius bend should be 6 times the diameter for conduits 2 inches or less, and 10 times the diameter for conduits greater than 2 inches.
5. The service entrance should be located outside of the dwelling and must be accessible at all times. The entry location must conform to current National Electrical Code (NEC) code requirements. The conduit at the home should rise no more than 5 feet and not less than 2 feet above grade.
6. We recommend that the riser conduit on a service pole extend 8 feet above the grade. This is to protect the conductors. All conduits should be capped to prevent water and debris from entering.
 - a. When telephone and electric service conduits terminate on the same service pole, it's preferable to place the two conduits opposite each other on the service pole. It's permissible to place conduits with less separation, but not less than ¼ of the circumference of the pole (climbing space must be maintained).
 - b. Riser conduit must be properly strapped to pole.
7. Poly pull string or equivalent with a minimum 200 lb. rating should be installed in all conduits.
8. Minimum conduit sizes:
 - a. 1 ½ inches for single residence. 1 inch is allowed if the stub out from the pull box is 2 inches and you're placing the 1 inch inside the 2 inch stub out.
 - b. 2 inches for service up to 4 residences.
9. Customer retains ownership and maintenance responsibility for conduit system on private property.
10. Customer should ensure conduit and pillboxes on their premises are free from obstruction prior to installation of service drops or cable.
11. Clearance from power conduits and wires must be maintained. Ensure the following separations are maintained between power and telecom conduits as applicable:
 - a. 3 inches when encased in concrete.
 - b. 4 inches when separated with brick or mason.
 - c. 12 inches of well tamped earth when only earth.
 - d. 6 inches when crossing foreign objects, i.e. water, sewer etc.
12. The minimum protection requirements for buried facilities subjected to vehicular traffic should be:
 - a. 24 inches of well tamped earth if direct buried.

- b. 12 – 18 inches if concrete encased.
- 13. Please attempt to place conduit systems well away from trees or shrubs