

## What is the appropriate thickness for grounding optical fiber cables



### Overview

Although the NEC does allow a minimum size of 14 AWG (minimum) for the size of the grounding conductor, 6 AWG is preferred to allow for both grounding and bonding purposes in compliance with ANSI/TIA/EIA-J-STD-607 and the NEC. This AE Note does not address outside plant fiber optic installations or. The Fiber Optic Association, Inc. (FOA) was founded in 1995 to help develop the workforce to build the fiber optic networks to support a rapid expansion in communications and the Internet. The current language regarding optical fiber cabling grounding found in the NFPA 70 NEC 2014 is as follows: “ 770. 93 Grounding or Interruption of Non-Current-Carrying Metallic Members of Optical Fiber Cables. for installing electrical products and systems. NEIS® are intended to be referenced in contrac documents for electrical construction ation or liability to users of this publication. With communications systems, things are a bit different.

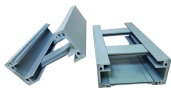
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The type of fiber optic cable and the fibers in the cable should be chosen appropriate for the type of communications system(s) being supported, the type of installation and the environment in which the ...



In installations where an optical fiber cable is exposed to contact with electric light or power conductors and the cable enters the building, the non-current-carrying metallic members shall ...



Go to the far end of the requested cable location area and ground the fiber metallic shield, the metallic stress member, or the locate wire to an independent ground such as an 8-foot ground rod that is not ...



The diameter depends on the type of cable, the tension applied to it and the degree of deflection (typically 25 times the diameter of the cable or as recommended by the cable manufacturer).



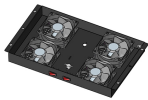
Most cable manufacturers include a 6-AWG copper strand that is insulated and UL-listed. For the bonding conductor, the 6-AWG size is preferred because it complies with both the NEC and ...



Conductive fiber optic cable per NEC 770.100 must be grounded through a bonding or grounding electrode conductor. NEC 770.100 (A) provides the requirements for the bonding ...



Grounding on the load side doesn't serve any electrical purpose, but it does waste money and cause confusion. So in Article 770, and elsewhere in the Code, we are seeing this supplanted by "bonding ...



Understanding how to bond and ground a fiber-optic system with armored cable can be confusing. First, it is important to understand the difference between the terms bonding and grounding.



Metallic components of optical fiber cables entering buildings must be bonded or grounded as per specified guidelines. Conductors should be copper or corrosion-resistant, with a minimum size of 14 ...



Although most fiber optic cables are not conductive, any metallic hardware used in fiber optic cabling systems (such as wall-mounted termination boxes, racks, and patch panels) must be grounded.

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