

Optical Fiber Cables and Raceways

Introduction to Article 770—Optical Fiber Cables and Raceways

Article 770 covers the installation of optical fiber cables, which transmit light for control, signaling, and communications. This article also contains the installation requirements for optical fiber raceways, as well as the requirements for composite optical fiber cables that combine optical fibers with current-carrying conductors.

Article 90 states that the *NEC* isn't a design guide or installation manual. Thus, Article 770 doesn't deal with the performance of fiber optic systems. For example, it doesn't mention optical fiber cable bending radius. It doesn't tell you how to install and test optical fiber cable safely either, but that doesn't mean you should look into an optical fiber cable, even if you can't see any light coming through it. Light used in fiber optic circuits usually isn't visible, but it can still damage your eyes.

PART I. GENERAL

770.2 Definitions

Definitions necessary for the application of Article 770 have been relocated.

Conductive Optical Fiber Cable. An optical fiber cable that contains metallic strength members, metallic vapor barriers, and metallic armor or sheath. **Figure 770-1**

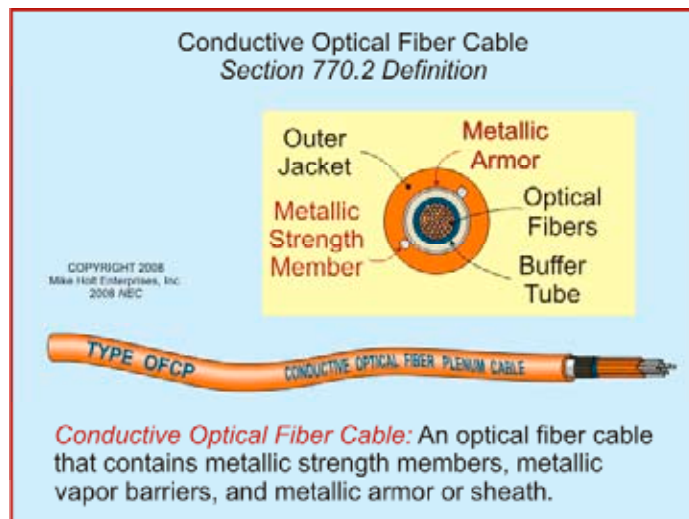


Figure 770-1

Nonconductive Optical Fiber Cable. An optical fiber cable that contains no metallic members or electrically conductive materials. **Figure 770-2**

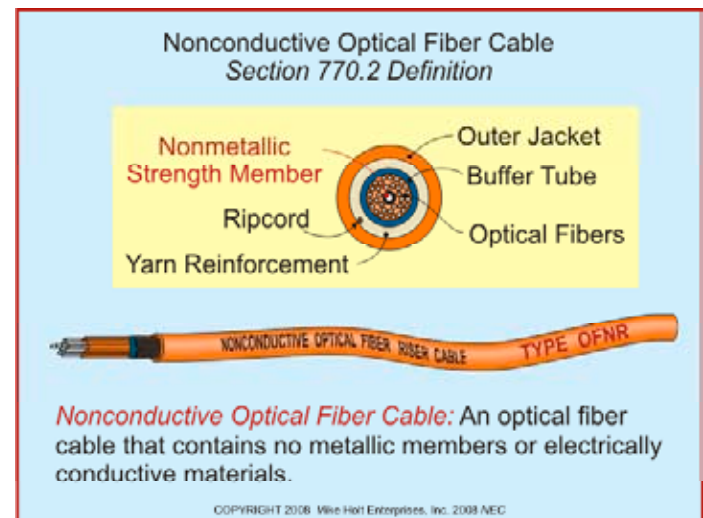


Figure 770-2

ANALYSIS: These definitions were relocated to 770.2 from 770.9, to follow the *NEC* Style Manual, which places article definitions in section "xxx.2."