

Using OSP Indoors

Why Can't I Use OSP Cable Indoors?

Outside plant (OSP) cables are designed and manufactured to withstand temperature extremes, water exposure and other common conditions associated with outdoor use. They do not typically, however, possess the fire resistance characteristics required for indoor use.

In the United States, Article 800 of the National Electrical Code (NEC), also known as NFPA 70, covers requirements for low-voltage communications cables. Article 770 covers requirements for optical fiber cables. Both require that cables used in premises (indoors), both commercial and residential, be "listed for the purpose" by a Nationally Recognized Test Laboratory (NRTL, pronounced "nurtle"). Other countries have similar requirements.

Because OSP cables do not meet the fire resistance requirements, they are strictly limited on their use indoors. The NEC requires that all non-listed cables be terminated within 15 m (50 ft) of entering the building (certain exceptions to this rule are permitted, but are beyond the scope of this document; please refer to the current edition of the NEC). Always check the local codes as well, which may restrict the use even more.

Cables are available that are suitable for outdoor use and possess the fire resistance ratings for certain applications.

For more information, refer to the Tech Guideline 18 – What is Indoor/Outdoor Cable?