

How to cut the filler rope during fiber optic splicing

Article Overview

Use a fiber optic stripper or kevlar scissors to carefully cut the filler rope (aramid yarn) without nicking the fiber, ensuring a clean and safe splice.

Tools Needed

- o Fiber optic stripper or specialized aramid/kevlar scissors
- o Cable stripper for outer jacket
- o Lint-free wipes and isopropyl alcohol for cleaning
- o Fiber cleaver for precise fiber end preparation

Step-by-Step Procedure

- o **Expose the Fiber:** Begin by stripping the outer jacket and buffer tubes of the fiber optic cable using a cable stripper until the bare fiber is visible. Remove any strength members carefully, as these often include the filler rope (aramid yarn) that provides tensile strength .
- o **Secure the Cable:** Hold the cable firmly on a stable surface or in a cable holder to prevent movement. This reduces the risk of accidentally cutting the fiber itself .
- o **Cut the Filler Rope:** Using a fiber optic stripper or kevlar scissors, trim the filler rope close to the jacket or buffer tube. Ensure the cutting tool is sharp and perpendicular to the rope to avoid fraying. Avoid pulling or yanking the filler rope, as this can stress the fiber cores .
- o **Clean the Area:** After cutting, remove any loose fibers or debris. Wipe the exposed fiber and surrounding area with a lint-free cloth soaked in isopropyl alcohol to prevent contamination during splicing .
- o **Proceed to Fiber Cleaving:** Once the filler rope is removed, cleave the fiber using a high-precision fiber cleaver. The cleave should be flat and perpendicular to the fiber axis to ensure a low-loss splice .
- o **Splice the Fiber:** Insert the prepared fiber ends into a fusion splicer or mechanical splice unit. The splicer will align and fuse the fibers, or the mechanical splice will hold them in place with index matching gel .

Safety Tips

- o Always wear safety glasses to protect against fiber shards .
- o Do not cut both fibers at once; handle one side at a time to prevent breakage .
- o Keep the work area clean and free of dust to avoid contamination of the splice . By carefully cutting the filler rope and preparing the fiber, you ensure a clean, low-loss splice and protect the integrity of the fiber optic cable.



How to cut the filler rope during fiber optic splicing

This document tries to explain all there is to know regarding the processes of fiber optic

Fiber optic splicing is the process of joining two or more fibers together. Whether you're deploying a new fiber optic

As fiber optic cable splicing becomes a more common practice, accurately performing the process becomes more accessible. As of

Learn the essential steps and tools for preparing fiber optic cables for connectors or

Fusion splicing is the preferred method for splicing long distance singlemode cable plants, as it's low loss and reflectance maximizes

GENERAL 1.1 Improper use of a respooler (Figure 1) can cause damage to a cable jacket or result in wavy fiber in tight buffered

In the ever-evolving world of high-speed connectivity, fiber optic technology serves as the backbone of

Learn Fiber Optic Fusion Splicing: step-by-step guide to safe, precise fiber

Guide for proper splicing of fiber optic fibers Splicing has become an integral part, especially in the field of electrical installations. Find

This guide breaks down the fundamentals of optical fiber splicing, compares fusion and mechanical techniques, explains factors that

In this week's video, Ben Hamlitsch shows you how to cut, strip, clean, and cleave your

Fiber optic splicing joins two fiber optic cables end to end seamlessly to create a continuous

In this video, you'll see the full fiber splicing process -- from fiber preparation, cleaving,

Master the essential skill of splicing fiber optic cables with our expert guide. Learn the fusion

Fiber splicing is a vital technique in cable maintenance. Knowing how to splice fiber optic cables is key for data communications with

While this guide provides a solid overview of fiber optic cable splicing, the successful execution of these methods

How to cut the filler rope during fiber optic splicing

Web: <https://www.kremgroup.co.za>

