

RIVO MULTITRADE OPTICAL SYSTEMS

How to use heat shrink tubing during optical cable splicing



Overview

Splice Trays Using Heat-Shrink Splice Protectors This document describes the installation of optical fiber with both single-fiber and/or ribbon fiber heat.

Key Takeaways

Heat shrink tubing is used to protect and reinforce fiber optic splices by sealing the joint and providing mechanical strength.

Preparation Before Splicing

- Select the correct heat shrink sleeve for your fiber type (single fiber or ribbon fiber) and ensure it contains adhesive and a reinforcing rod if required for environmental protection ().

- Slide the heat shrink tubing onto one of the fiber ends before stripping or cleaving the fiber. Installing it after stripping can damage the fiber ().

- Strip the fiber jackets carefully, typically removing the outer jacket, Kevlar, and inner buffer layers, exposing the bare glass fiber ().

- Clean the fiber with lab-grade isopropyl alcohol to remove contaminants that could affect the splice ().

Splicing Procedure

- Cleave the fiber ends precisely using a fiber cleaver to ensure a clean, flat surface for fusion ().

- Align the fibers in the fusion splicer under microscope guidance, ensuring the ends are properly positioned in the V-grooves ().

- Perform the fusion splice by applying an electric arc, which melts the fiber ends to form a permanent joint ().

Applying Heat Shrink Tubing

- Position the heat shrink sleeve over the completed splice, ensuring it covers the joint and extends a few centimeters onto each fiber ().
- Shrink the tubing using a heat oven or the splicer's heating element, applying heat evenly until the sleeve tightly seals around the splice and the reinforcing rod, if present ().
- Avoid overheating, which can damage the sleeve or fibers. Allow the sleeve to cool completely before handling ().
- Optional outer shrink tube can be applied over the first sleeve for additional protection, ensuring no inner jacket is exposed ().

Final Steps

- Inspect the splice for proper alignment and absence of bubbles or defects ().
- Secure the spliced fiber in a splice tray or enclosure to prevent mechanical stress ().
- Dispose of any fiber fragments safely and ensure the work area is clean (). Using heat shrink tubing correctly ensures mechanical strength, environmental protection, and reliable optical performance for fiber optic splices, making it a critical step in the splicing process ().

Article Content

Splice Trays Using Heat-Shrink Splice Protectors

This document describes the installation of optical fiber with both single-fiber and/or ribbon fiber heat-shrink fusion splices into metal

Fiber Splicing Tutorial | NYC Mesh Wiki

Connect cable ends to testing devices and test signal loss. Carefully release each cable from splicer clamps. Slide shrink sleeve over

Heat Shrink Splicing: A Comprehensive Guide

This method relies on heat-shrink tubing, a specialized polymer material that contracts radially when exposed to heat, creating a tight

Steps and precautions for using a fusion splicer

After fusion, secure the splice with a heat shrink tube and heat it. Ensure fiber and heat shrink tube compatibility, and

100pcs Clear Fiber Fusion Splice Sleeve Kit, 2.6mm 60mm

Clear sleeve make it easy to detect splice before shrinkage. The fiber optic heat shrink tubes is tight and the metal support maintains

The FOA Reference For Fiber Optics -Mechanical Splices

Cleave the fiber using the process appropriate to the cleaver being used. Splicing
Insert the first fiber into the mechanical splice.

Tip for inserting optical fiber into heat shrink tubing during fusion ...

#fcst #ftth #fttx #fiberoptics #network #heatshrinktube #fibersplice
#fusionspliceprotectionsleeve Tip for inserting

How to Apply Heat Shrink Tubing Properly – Croylek Ltd

The primary use of the heat shrink tubing is to secure and tightly fit around the cable.
Therefore, make sure that the tubing size is

40mm Clear PE Heat Shrinkable Tube Fiber Optical Cable 2.6mm

Consist of a rod of reinforcing the splice, heat fusion tubing and cross-linked polyolefin, to provide mechanical strength at the fusion

Fiber Optic Protection Splicing Sleeves Heat Shrink Tube

A specially designed cross-linked clear heat shrinkable tubing, with clear fusion tubing liner, providing strength member and

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