PANDUIT

Critical Steps for 250µm Coated Fiber OptiCam LC Termination

© Panduit Corp. 2013

BEST PRACTICES

FS043

- If installing more than a few connectors, or if installing OptiCam connectors for the first time in a long time, terminate several connectors and test immediately after termination to ensure proper technique is being applied. Testing after a few connectors allows verification that the tools are in good working condition and helps to gauge the working conditions of the environment and calibrate glow level thresholds.
- 2. Make sure the OCTT batteries are new and fresh. If the light in the connector appears to be less bright prior to camming, consider replacing the batteries.
- 3. Make sure the VFL patch cord is in good condition, the split sleeve is in good condition, and the ferrule endface is clean and not scratched.
- 4. Connector glow, or lack of glow, is an indicator, not a verification of termination success. Power meters should always be used for certification testing. VFLs and/or OTDRs can be used for troubleshooting. If an OTDR needs to be used to test, launch and receive cords need to be utilized in the test. The link must be tested bi-directionally and an average value for each connector must be calculated to ensure proper insertion loss
- 5. Cleaving
 - a. After stripping and cleaning the fiber, carefully place the fiber into the cleave tool with the buffer coating at the 7mm mark. Gently hold the coated fiber against the groove in the base plate using thumb and forefinger of your free hand. With your other thumb, gently push down on the housing until the blade contacts the fiber and the end of the housing contacts the rubber coating on the base plate. Release the housing completely (the housing is spring loaded and will return to its home state) so that the blade is no longer contacting the fiber. While still holding the fiber against the groove in the base plate using your thumb and forefinger, quickly bend the base plate. This will snap the fiber and produce the cleaved end. DO NOT cut the fiber with the blade or hold the housing down on the fiber while bending the baseplate. These actions will result in a bad quality cleave.
 - b. Do not clean the fiber after cleaving. At this point, the fiber needs to be inserted into the connector, per the installation instructions, to prevent contamination or damage to the cleaved fiber.
- 6. Inserting the Fiber into the Connector
 - a. Slide the build-up tube until the end is even with the cleaved end of the fiber
 - b. While holding the build-up tube and fiber together, slide into the body of the connector
 - c. Push the build-up tube until it stops (this is the build-up tube hitting the clamps). The insertion mark on the build-up tube should be at the end of the connector.
 - d. While holding the build-up tube, push the fiber in a bit further (to insertion point) until it stops (this is the connector fiber mating with the field fiber).
 - e. While holding both the fiber and build-up tube, create a slight bow in the fiber by applying more forward pressure to the fiber toward the connector. Secure the fiber into the fiber clamps.

- 7. Camming the Connector
 - a. After inserting the fiber into the connector and creating a bow in the fiber by securing the fiber in the clamps, hold the fiber behind the build-up tube and push forward slightly to ensure that the fiber endfaces are in contact.
 - b. Cam the connector by rotating the connector housing 90 degrees and turn on the laser.
 - c. Ensure the VFL cord is in contact with the connector after camming by giving the VFL cord a gentle push into the sled, against the connector.
 - d. The glow in the connector should be very dim (for both multimode and singlemode connectors). If terminating in a well-lit area, the glow should be dim when your hands are cupped over the connector. Do not use the glow in the front or back of the LC connector to judge the termination, only use the glow in the middle of the connector under the latch.



Glow indicates proper termination



Glow indicates improper termination.

For Instructions in Local Languages and Technical Support:

www.panduit.com/resources/install_maintain.asp



E-mail: techsupport@panduit.com Phone: 866-405-6654