**WARNING!**

User should be aware of possible hazards due to presence of invisible (infrared) radiation when examining connectors with the naked eye or a microscope. A laser IR detection card (Edmund Industrial Optics #NT55-292 or equivalent) may be used to allow visualization of invisible IR light.

Material used in cleaning (isopropyl alcohol, Electro-Wash, and canned air) should be used in a well ventilated area and not near an open flame. Follow all of the manufacturer’s safety and disposal instructions. **KEEP OUT OF REACH OF CHILDREN.**

**Maintain Minimum Bending Radius**

EZ Bend® Optical Fiber must not exceed a 5.0 mm (0.20 in.) bend radius throughout the installation.

**Cable Attachment**

EZ Bend cable, 4.8 mm only, can be stapled in place with a standard staple and Arrow T25™ staples. T25 staples are recommended due to the rounded top profile, as shown in the circle above. The rounded top profile minimizes the crushing force placed on the cable.

**Cable Properties**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Cable OD</th>
<th>Max Tensile</th>
<th>Nominal Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRW 4.8 indoor</td>
<td>4.8 mm</td>
<td>440 N</td>
<td>19.5 kg/km</td>
</tr>
<tr>
<td>DRK 4.8 indoor/outdoor</td>
<td>4.8 mm</td>
<td>440 N</td>
<td>21.0 kg/km</td>
</tr>
<tr>
<td>DRW 3.0 indoor</td>
<td>3.0 mm</td>
<td>310 N</td>
<td>7.45 kg/km</td>
</tr>
</tbody>
</table>

EZ Bend cable contains solid-core fiber with macro-bending performance beyond ITU G.657B requirements. EZ Bend 3.0 mm cable is intended for use in applications where the cable will be installed in micro-duct, raceways, or behind protective moldings. Bend limiters are not required.

EZ Bend 4.8 mm cable is intended for use in applications where the cable will be stapled in place. There isn’t a required limit of staples or distance for typical indoor applications, but staples are commonly placed roughly 50 cm (18 inches) apart. Additional staples may be placed to maintain bends around corners as needed. EZ Bend may be installed in studs through drilled holes.

**Installation Instructions**

1. Remove Assembly from packaging. Lengths less than 20M are shipped in a zip lock bag. Multiple assemblies are shipped in a cardboard shipping container. Remove one at a time opening the packaging. Remove the assembly and the tape, keeping the coil in place. Holding one end, release the cable, letting gravity straighten the cable.
2. When the lengths are longer and are shipped on a spool, remove the tape on the outside end connector. You may uncoil from the spool or utilize a rod in the hub to unspool the fiber as it is pulled.
3. Route the assembly by pulling the cable, not the connectorized end, not to exceed 60 lb. tension.
4. Remove the dust cap and inspect the end prior to installing the connector in the adapter.
5. Install each connector into the coupling by aligning the key on the connector body with the keyway on the coupling. The SC UPC or SC APC connector is properly installed when the key is completely seated inside the coupling.
6. If a high-loss condition exists, use the SC cleaning procedures and reinstall the connectors as described in Step 1.
7. When doing rearrangements or reinsertions of the SC connectors, use the SC cleaning procedures at the end of this practice to clean all components and reinstall the connectors. Some pictures of completed installations are shown below.

**Splicing Information**

The fiber in EZ Bend cables is fully compatible with standard ITU G.652D, G.657A, and G.657B fiber when any type of splicing is used: core-aligned, clad-aligned, or V-groove splicing. No special tools, software, or procedures are required for fusion splicing of EZ Bend cables. If a fusion splice machine offers a program on the menu for splicing EZ Bend® to standard single-mode fiber, that program should be used. If no specific program is offered, the following simple guidelines should enable splice losses within expected levels.

**Fusion Splicer Type**

- Clad Alignment – passive alignment
- Clad Alignment – active alignment
- Core Alignment – active alignment

**Program and Settings**

- Standard Single-mode
- Standard Single-mode
- Multimode

**OF S EZ Bend® cables are compatible with fusion splice-on or mechanical splice-on connectors, mechanical splices, and standard connector end face polishing procedures.**

More information can be found in the OFS White Paper, “OFS Bend-Insensitive Single-Mode Fibers: Application and Splicing Guidelines”. Contact OFS at 1-888-FIBER-HELP for specific information.

**Loss Measurement Information**

OFS recognizes that bi-directional measurements in some applications such as MDU deployments may be difficult because access to the fiber inside the residence may be impractical. As a result, some technicians qualify optical loss using a one way (uni-directional) OTDR measurement. One way OTDR measurements inherently involve large errors and are not recommended. **However, if this method is to be used, please consult the OFS White Paper, “OFS Bend-Insensitive Single-Mode Fibers: Application and Splicing Guidelines” for OTDR result interpretation guidelines.** Assemblies can be measured with a light source and power meter prior to installation and after installation.

**OFS FIBER OPTIC TECHNICAL ASSISTANCE**

1-888-FIBER HELP
(1-888-342-3743)

* For cleaning, always use isopropyl alcohol (>91% 2-propanol + water).
**Install SC Connectors onto Coupling**

1. Install each connector into the coupling by aligning the key on the connector body with the keyway on the coupling. The connector is properly installed when the white line in the grip disappears inside the coupling.
2. If a high-loss condition exists, use the SC cleaning procedures and reinstall the connectors as described in Step 1.
3. When changing arrangements or reinsertions of SC connectors, use the SC cleaning procedures to clean all components and reinstall the connectors as described in Step 1.

**Clean SC APC Connector**

For optimal results, use the Chemtronics Qb®® Cleaning System (Chemtronics #QBE). Position one Qb®® wipe over the foam platen. Spray a small spot (about the size of a quarter) of ElectroWash IX Fiber Optic Cleaner (Chemtronics #E9810 or ES1210) onto one corner of the Qb®® wipe. Orient the connector properly (i.e., APC connectors should be oriented and tilted, as needed, to ensure the end face contacts the wipe) and move the connector endface across the wipe, from the wet area to the dry area of the wipe, in one direction. Blow clean compressed air across the endface, to remove any lint particles. A new area of the wipe should be used for each connector. (Note: This procedure may also be used for SC PC connectors, instead of the procedure shown to the right).

**Install LC Connectors into Adapter**

1. Install connector(s) into the adapter by aligning the latch(s) on the connector(s) with the slot(s) on the adapter and gently push into place. An audible click is heard when the connector(s) snap into the adapter.
2. If a high-loss condition exists, use the LC cleaning procedures and reinstall the connector(s) as described in Step 1.
3. When doing rearrangements or reinsertions of LC connectors, use the LC cleaning procedures to clean all components and reinstall the connectors as described in Step 1.

**Clean LC APC Connector**

For optional results, use the Chemtronics Qb®® Cleaning System (Chemtronics #QBE). Position one Qb®® wipe over the foam platen. Spray a small spot (about the size of a quarter) of ElectroWash IX Fiber Optic Cleaner (Chemtronics #E9810 or ES1210) onto one corner of the Qb®® wipe. Orient the connector properly (i.e., APC connectors should be oriented and tilted, as needed, to ensure the end face contacts the wipe) and move the connector endface across the wipe, from the wet area to the dry area of the wipe, in one direction. Blow clean compressed air across the endface, to remove any lint particles. A new area of the wipe should be used for each connector. (Note: This procedure may also be used for LC PC connectors, instead of the procedure shown to the right).

**Clean SC Connector, Coupling, and Attenuator**

Clean connector ferrule with a wipe moistened with isopropyl alcohol and blow-dry with canned air. Clean end and sides of ferrule.

**Clean LC Connector and Adapter**

Clean connector ferrule with a wipe moistened with isopropyl alcohol and blow-dry with canned air. Clean end and sides of ferrule.

**Clean Attenuator**

Clean attenuator by holding canned air nozzle 3 inches from the end of the attenuator. Blow air into each side of the attenuator.

**Warning:** Do not try to clean adapter with a standard pipe cleaner. The LC’s sleeve inner diameter is too small. Also, do not try to clean the adapter with LC adapter brush if a connector is mounted in the adapter.

For cleaning, always use isopropyl alcohol (>91% 2-propanol + water).