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Visual Installation Instructions
FuseLite® SC/LC Connectors on 250-900 µm Tight-Buffered Fiber

Tools Required
- SC or LC FuseLite® Connectors
- Fusion Splicer (OptiSplice® Ribbon Fusion Splicer Shown Here)
- Connector Holder (SOC-HLD-CON-SCLC)
- Fiber Holder (SOC-HLD-900-OS)
- Cleaver
- Dual-Hole Miller Tool
- Fiber Optic Cleaning Fluid
- Lint-Free Wipes
- Permanent Marker

1. SC
   - Insert Rear SC Housing and Protection Sleeve onto the Field Fiber. Proceed to Step 2

1A. SC
   - Insert Rear SC Housing and Protection Sleeve onto the Field Fiber. Proceed to Step 2

1B. LC
   - Insert Rear LC Housing and Protection Sleeve onto the Field Fiber. Proceed to Step 2

2. Two-Hole Miller Stripper (900 µm and 250 µm)

3. Place a Mark ≥ 40 mm from the End of the Fiber

4. Strip the 900 µm Buffer with Larger Notch

5. Strip the 250 µm Coating with the Smaller Notch

CORNING
**Visual Installation Instructions**

*FuseLite® SC/LC Connectors on 250-900 µm Tight-Buffered Fiber*

1. Load the Fiber Holder into the Splicer (on the Right Side).
2. Gently Press Down the Lever Until It Stops, Then Release.
3. Fiber Should Be in “V-Groove”
4. Moisten Wipe with Fiber Cleaning Fluid
5. Clean with Fiber Solution (Wipe Twice)
6. Place Field Fiber in the Holder Groove
7. Align 900 µm Buffer Flush with Raised Channel
8. Close Fiber Holder (SOC-HLD-900-OS) Lid, Keeping Fiber in Place
9. Place Holder in Cleaver and Slide to the Right Until It Hits the Positive Stop
10. Load the Fiber Holder into the Splicer (on the Right Side)
11. Gently Press Down the Lever Until It Stops, Then Release
12. Load Ferrule Assembly into the Connector Holder; Dot Facing Out
13. Fiber Should Be in “V-Groove”
14. Next, Select the Connector Holder and Ferrule Assembly
15. Close the Holder Arm
Visual Installation Instructions
FuseLite® SC/LC Connectors on 250-900 μm Tight-Buffered Fiber

17. Load the Connector Holder into the Splicer (on the Left Side)

18. Fiber Should Be in "V-Groove"

19. Close the Splicer Door

20. See OptiSplice One or OptiSplice® Ribbon Fusion Splicer Instructions for Completing the Splice

21. Open the Oven in Preparation

22. Open the Splicer Door

23. Open the Connector Holder Arm First

24. Open the Fiber Holder Door Next
Visual Installation Instructions
FuseLite® SC/LC Connectors on 250-900 μm Tight-Buffered Fiber

![Image of the process steps](image)

1. **Remove from Oven**
   - CAREFUL; OVEN WILL BE HOT
   - Close Lid and Wait for "Bong" Sound
   - SC

2. **Hold Both Sides and Lift Straight Out**
   - Keep Tension on the Splice
   - Center Sleeve Over the Splice

3. **Center and Place Splice in Oven**

4. **Close Lid and Wait for "Bong" Sound**

5. **Remove from Oven**
   - CAREFUL; OVEN WILL BE HOT

6. **Slide the Rear Housing Up to the Spring**

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**OR**

- For SC FuseLite® Connector, Go to Step 30A
- For LC FuseLite® Connector, Go to Step 30B
Visual Installation Instructions
FuseLite® SC/LC Connectors on 250-900 µm Tight-Buffered Fiber

Slide the Inner Housing Over the Dust Cap Antenna
Align the Two Red Dots

Compress and Snap Together

Slide the Outer Housing Over the Dust Cap Antenna

Align SC Key Feature with Red Dot

Snap Outer Housing onto Inner Housing

Snap Off Antenna from Dust Cap

FINISHED FuseLite® SC Connector

Slide the Rear Housing Up to the Spring

Slide the Inner Housing Over the Dust Cap Antenna
Align the Two Trigger Components

Compress and Snap Together
Snap Off Antenna from Dust Cap

FINISHED FuseLite LC Connector.

CORNING
Visual Installation Instructions
FuseLite® SC/LC Connectors on Buffer Tube Fan-Out Kits

Tools Required
SC or LC FuseLite® Connectors
Fusion Splicer (OptiSplice® Ribbon Fusion Splicer Shown Here)
Connector Holder (SOC-HLD-CON-SCLC)
Fiber Holder (SOC-HLD-900-OS)
Cleaver
Dual-Hole Miller Tool
Fiber Optic Cleaning Fluid
Lint-Free Wipes
Permanent Marker

1. SC
   - Strip the 900 µm Buffer with Larger Notch
   - Two-Hole Miller Stripper (900 µm and 250 µm)
   - Place a Mark ≥ 44 mm from the End of the Fiber

1A. SC
   - Insert Rear SC Housing and Protection Sleeve onto the Field Fiber. Proceed to Step 2

1B. LC
   - Insert Rear LC Housing and Protection Sleeve onto the Field Fiber. Proceed to Step 2

2. SC
   - Strip the 900 µm Buffer with Larger Notch
   - Place a Mark 4 mm Beyond the Buffer Tube on the 250 µm Coating

3. LC
   - Strip the 250 µm Coating with the Smaller Notch Starting at the Mark

CORNING

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Visual Installation Instructions
FuseLite® SC/LC Connectors on Buffer Tube Fan-Out Kits

1. Load the Field Fiber Holder into the Splicer (on the Right Side).
2. Gently Press Down the Lever Until it Stops, then Release.
4. Clean with Fiber Solution (Wipe Twice).
5. Place Fiber in the Fiber Holder Groove, Align 900 µm Buffer Flush with Raised Channel.
6. Close Fiber Holder Lid, Keeping Fiber in Place.
7. Place Holder in Cleaver, Slide to the Right Until it Hits the Positive Stop.
8. Gently Press Down the Lever Until it Stops, then Release.
9. Load Ferrule Assembly into the Connector Holder; Dot Facing Out.
10. Fiber Should Be in “V-Groove.”
11. Next Select the Connector Holder and Ferrule Assembly.
12. Load Ferrule Assembly into the Connector Holder; Dot Facing Out.
13. Close the Holder Arm.

CORNING
Visual Installation Instructions
FuseLite® SC/LC Connectors on Buffer Tube Fan-Out Kits

18. Load the Connector Holder into the Splicer (on the Left Side)
19. Fiber Should be in “V-Groove”
20. Close the Splicer Door
21. See OptiSplice® One or OptiSplice Ribbon Fusion Splicer Instructions for Completing the Splice
22. Open the Oven in Preparation
23. Open the Splicer Door
24. Open the Connector Holder Arm First
25. Open the Fiber Holder Door Next
**Visual Installation Instructions**

**FuseLite® SC/LC Connectors on Buffer Tube Fan-Out Kits**

26

Hold Both Sides and Lift Straight Out
Keep Tension on the Splice

27

Center Sleeve Over the Splice

28

Center and Place Splice in Oven

29

Close Lid and Wait for “Bong” Sound

30

Remove from Oven
CAREFUL; OVEN WILL BE HOT

31

For SC FuseLite® Connector, Go to Step 31A

31A

Slide the Rear Housing Up to the Spring

31

For LC FuseLite Connector, Go to Step 31B

OR

For SC FuseLite® Connector, Go to Step 31A
Visual Installation Instructions
FuseLite® SC/LC Connectors on Buffer Tube Fan-Out Kits

Slide the Inner Housing Over the Dust Cap Antenna
Align the Two Red Dots

Compress and Snap Together

Slide the Outer Housing Over the Dust Cap Antenna

Align SC Key Feature with Red Dot

Snap Outer Housing onto Inner Housing

Snap Off Antenna from Dust Cap

Slide the Rear Housing Up to the Spring

Slide the Inner Housing Over the Dust Cap Antenna
Align the Two Trigger Components

Compress and Snap Together

Snap Off Antenna from Dust Cap

FINISHED Fuselite SC Connector

FINISHED Fuselite LC Connector
Visual Installation Instructions
FuseLite® SC/LC Connectors on Jacketed Cable (2.0/3.0 mm)

**Tools Required**
- SC or LC FuseLite® Connectors
- Fusion Splicer (OptiSplice® Ribbon Fusion Splicer Shown Here)
- Connector Holder (SOC-HLD-CON-SCLC)
- Cleaver
- 3-Hole Jonard Tool
- Fiber Optic Cleaning Fluid
- Lint-Free Wipes
- Permanent Marker

**1A** SC

1
2
3
Insert Rear SC Housing and Spring onto the Field Fiber. Proceed to Step 2

**1B** LC

3
2
1
Insert Rear Housing and Spring onto the Field Fiber. Proceed to Step 2

**2**

Ring Cut the Outer Jacket at approximately 45mm, Remove Jacket

**3**

Place Heat-shrink over Aramid Yarn, Folding the Yarn back over the Jacket

**4**

With the Heat-shrink Flush against the end of the Jacket, Trim Yarn the Same Length as Heat-shrink

**5**

Heat-shrink will Remain until Needed

**Visual Installation Instructions**
FuseLite® SC/LC Connectors on Jacketed Cable (2.0/3.0 mm)
Moisten Wipe with Fiber Cleaning Fluid

Clean with Fiber Solution (Wipe Twice)

Place Handler into the Cleaver

Align Edge of Heat-shrink with the Magnet of the Handler

Close the Lid of the Handler

Place Cable with Heat-shrink in 4.8 mm Handler

Strip First the 900 µm coating then the 250 µm coating

Two-Hole or Similar Stripping Tool (900 and 250 µm)

Be Sure Fiber goes Across the Blade to the Other V-Groove

Stripped and Clean Fiber Ready to be Cleaved

Visual Installation Instructions
FuseLite® SC/LC Connectors on Jacketed Cable (2.0/3.0 mm)
Visual Installation Instructions
FuseLite® SC/LC Connectors on Jacketed Cable (2.0/3.0 mm)

16. Close the Holder Arm

17. Next, Select the Connector Holder and the Ferrule Assembly

18. Slowly Press the Lever Down Fully Against the Fiber and Release

19. Fiber Should Be in V-Groove

20. Load the Handler into the Splicer (on the Right Side)

21. Load the Connector Holder into the Splicer (on the Left Side)

22. Ferrule Assembly

23. Fiber Should Be in the V-Groove

24. See OptiSplice® One or OptiSplice Ribbon Fusion Splicer Instructions for Completing the Splice
Visual Installation Instructions
FuseLite® SC/LC Connectors on Jacketed Cable (2.0/3.0 mm)

Open the Oven in Preparation

Open the Connector Holder Arm First

Open the Fiber Holder Door Next

Hold Both Sides and Lift Straight Out

Center and Place Splice in Oven

Close Lid and Wait for “Bong” Sound

Remove From Oven
CAREFUL; OVEN WILL BE HOT

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Visual Installation Instructions
FuseLite® SC/LC Connectors on Jacketed Cable (2.0/3.0 mm)

**32**
SC
For SC FuseLite® Connector, Go to Step 32B

**32**
LC
For LC FuseLite Connector, Go to Step 32A

**32A**
OR
Slide the Spring Over the Heat-shrink

**33A**
Pull Yarn Back so it’s Not Under the Spring

**34A**
Spring Remains Up Against the Back of the Metal Body

**35A**
Slide the Rear Housing Up to the Spring

**36A**
Pull Yarn Out From Under the Rear Housing

**37A**
Slide the Inner Housing Over the Dust Cap Antenna. Align Trigger Components and Press Together

**38A**
Slide Boot Up Over the Aramid Yarn. Be Sure Threads Capture the Aramid Yarn
Visual Installation Instructions
FuseLite® SC/LC Connectors on Jacketed Cable (2.0/3.0 mm)

39A: Trim Aramid Yarn if Necessary. Termination Complete

32B: Slide the Spring Over the Heat-shrink

33B: Pull Yarn Back so it’s Not Under the Spring

34B: Spring Remains Against the Back of the Metal Body

35B: Slide the Rear Housing Up to the Spring and Pull Yarn Out

36B: Slide the Inner Housing Over the Dust Cap and Snap Together

37B: Slide Boot Up Over the Aramid Yarn. Aramid Yarn is Captured in Threads

38B: Slide the Shroud over the Dust Cap Aligning the Key With the Red Dot

39B: Snap the Shroud to the Inner Housing. Termination Complete
Safety Precautions

Optical Fiber Precautions

**WARNING:** Cleaved or broken glass fibers are very sharp and can pierce the skin or damage the eyes easily. Do not let pieces of fiber stick to your clothing or drop in the work area where they can cause injury later. Use tweezers to pick up pieces of fiber and place them on a loop of tape or approved “Fiber Optic/Sharps” disposal container.

Chemical Precautions

**CAUTION:** Fiber Cleaning Fluids contain hydrocarbons. Apply in rooms having normal room ventilation. For prolonged and/or repeated use, gloves are recommended. Avoid eye contact. Keep away from open flames and ignition sources. If ingested, do not induce vomiting. Consult a physician. In case of eye contact, flush eyes with water for 15 minutes.

Personal Protection Equipment (PPE) Precautions

**CAUTION:** Corning recommends the use of safety glasses (spectacles) conforming to ANSI Z87 for eye protection from accidental injury when handling chemicals, cables, or working with fiber. Pieces of glass fiber are very sharp and have the potential to damage the eye.

**CAUTION:** The wearing of cut-resistant safety gloves to protect your hands from accidental injury when using sharp-bladed tools is strongly recommended. To minimize the chance of injury from sharp-bladed tools, always cut away from yourself and others. Dispose of used blades and armor scrap properly.

Laser Precautions

**CAUTION:** Never look directly into the end of a fiber that may be carrying laser light. Laser light can be invisible and can damage your eye. Viewing it directly does not cause pain. The iris of the eye will not close involuntarily as when viewing a bright bulb. Consequently, serious damage to the retina of the eye is possible. Should accidental eye exposure to laser light be suspected, arrange for an eye examination immediately.

Cable Handling Precautions

**CAUTION:** Fiber optic cable is sensitive to excessive pulling, bending, and crushing forces. Consult the cable specification sheet for the cable you are installing. Do not bend the cable more sharply than the minimum recommended bend radius. Do not apply more pulling force to the cable than specified. Do not crush the cable or allow it to kink. Doing so may cause damage that can alter the transmission characteristics of the cable; the cable may have to be replaced.

**CAUTION:** The typical filler rod color in the cable described in this procedure is black. Careful attention should be taken to avoid accidental cutting of live buffer tubes; particularly white and black tubes. In mid-span applications, Corning recommends coiling all tubes and filler rods in the slack storage area of the splice closure; especially for cables with fiber counts above 96 fibers. Avoid cutting any filler rods unless necessary for storage space considerations. When in doubt regarding the buffer tube color code and filler rod replacements, contact Corning Engineering Services for assistance prior to cutting.

**WARNING:** Care must be taken while handling fibers during mid-span access procedures to avoid causing large deviations in optical power throughput on fibers carrying communications traffic. Interruption of system traffic may result from neglect in handling of fibers.