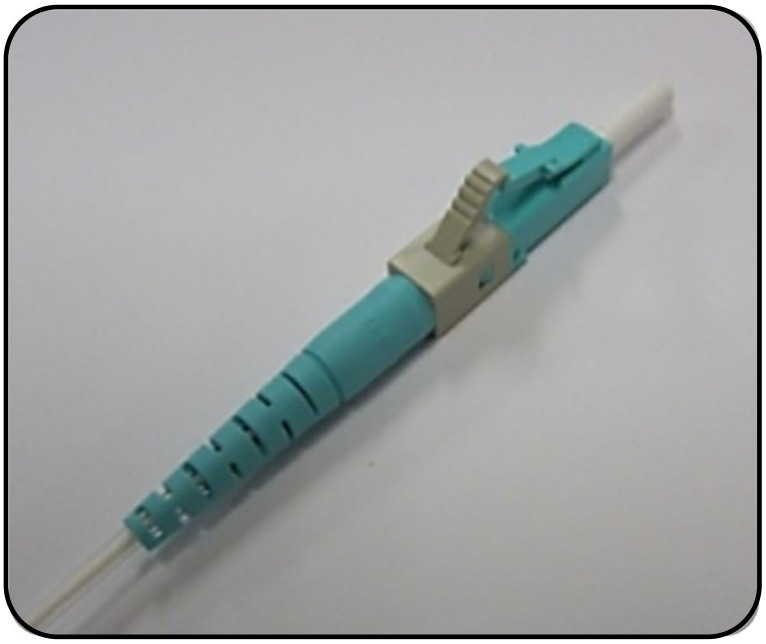
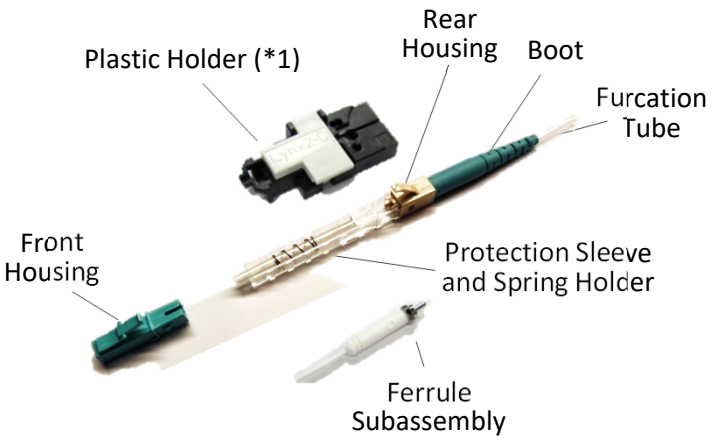
Siemon OptiFuse LC Instructions





(*1) 1 pc will splice 100 connectors

Parts

⚠ Wear safety glasses to protect your eyes when handling optical fiber.

⚠ Never look into the end of a microscope or optical cable connected to an optical output device that is operating. Laser radiation is invisible, and direct exposure can severely injure the human eye.

⚠ Alcohol is flammable, causes irritation and is harmful if swallowed or inhaled. Keep alcohol away from heat, sparks, skin, and avoid contact with eyes.

Safety Precautions

1. Improper assembly will result in a loss of performance. Please read instructions given in this operation manual and the operation manual of the fusion splicer.
2. Never touch the fiber stub. It has been inspected at the factory.
3. The product is sensitive to dirt or dust. Do not take out any parts from the package until it is to be used.
4. The quality of the splice will be effected by the fiber cleaved surface condition. Use of a high quality cleaver is critical to a quality fiber splice.
5. Do not remove the dust cap until the connector has been completely assembled in order to avoid end face contamination and high insertion loss.

Handling Precautions

Below are examples of the tools used to terminate the OptiFuse connectors, typically the precision cleaver, buffer strippers and other support items are included in the Fusion Slicer kit.

Fusion Splicer	Fiber Cleaver	Buffer Stripper
	 Cleave length: 10mm	

Note: Compatible Fusion splice models are listed on page 6.

Tools and Equipment

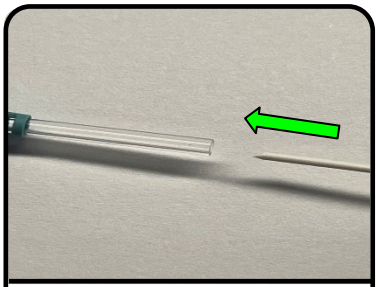
Following the specific instructions provided by the fusion splice manufacture, set fiber type to be spliced and the splice sleeve heater setting.

Next, utilizing the specific instructions provided by the fusion splice manufacturer perform an arc test.

*Fiber for arc testing is not provided with the connector and should match the fiber setting on the splicer.

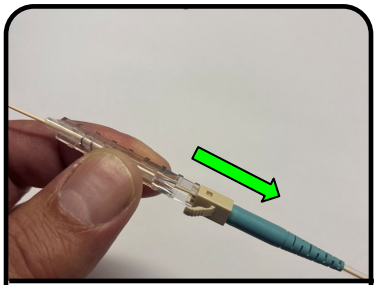
Fusion Splicer Setup

Siemon OptiFuse LC Instructions



Feed fiber into the Furcation Tube.

1



Slide housing assembly down fiber.

2

Remove approx. 35mm of buffer coating from the 900 micron TB, or plastic coated 250 micron fiber with buffer strippers. Ensure that the plastic coating (acrolite) is removed from the fiber.

3a

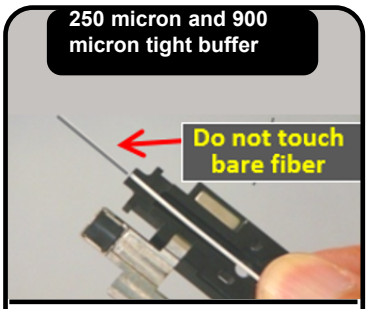
Remove approx. 40mm of the 900 loose tube buffer.

Next remove approx. 35mm of the plastic coated 250 micron fiber. Ensure that the plastic coating (acrolite) is removed from the fiber.

3b

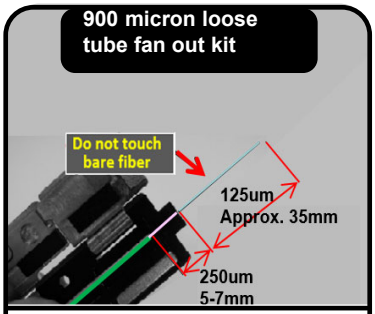
Clean the fiber with a lint free cleaning wipe.
Note: Fiber should only be cleaned before cleaving operation.

4



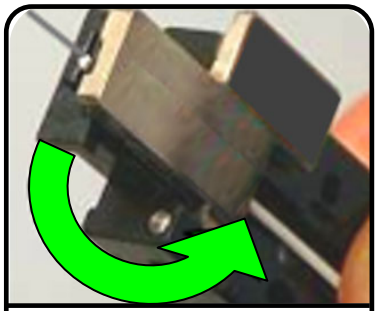
Set the fiber in the holder with the tight buffer or plastic coating flush with the end of the holder

5a **Note: Compatible Fusion splice fiber holders are listed on page 6.**



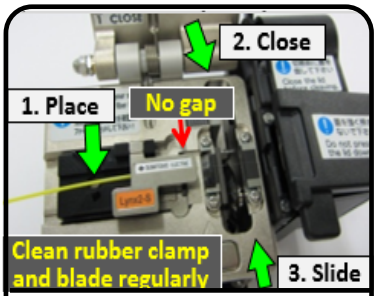
Set the fiber in the holder with buffer tube 5-7mm from the holder end and the plastic coating flush with the end of the holder.

5b **Note: Compatible Fusion splice fiber holders are listed on page 6.**



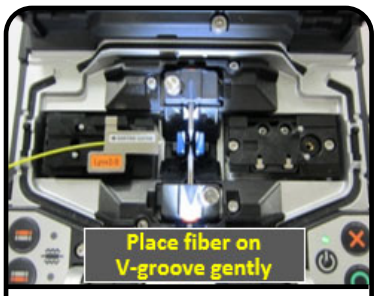
Confirm fiber is in proper position in holder. Carefully close the cover(s) to the holder to secure the fiber in place.

6 **Note: If using holder with two covers, close front cover 1st and rear cover 2nd**



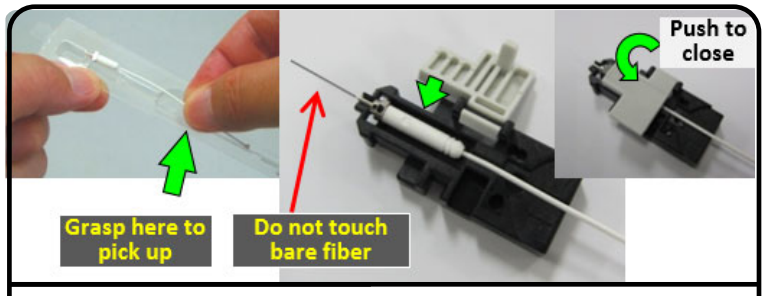
Utilizing a fusion splicing quality precision cleaver (typically included with fusion splicer kit), place fiber holder into cleaver and cleave fiber. Cleave length must be 10mm

7



Place fiber holder into the left side of the fusion splicer.

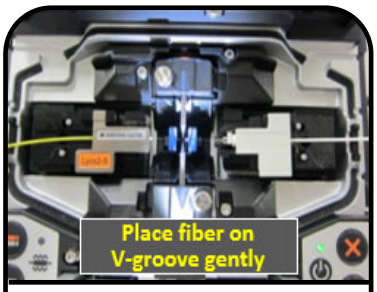
8



Carefully pick up Ferrule Subassembly by the plastic stub and place into connector holder and close the cover to secure connector in place.

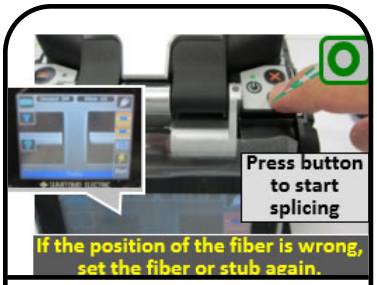
9

Siemon OptiFuse LC Instructions



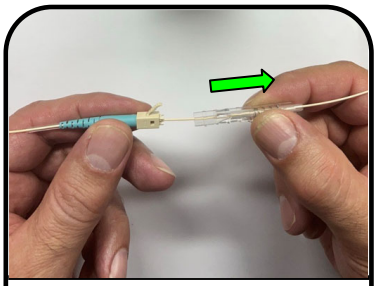
Place connector holder into the right side of the fusion splicer.

10



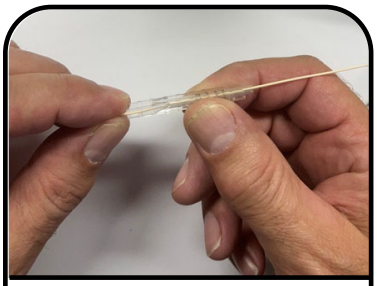
Activate fusion splicer.

11



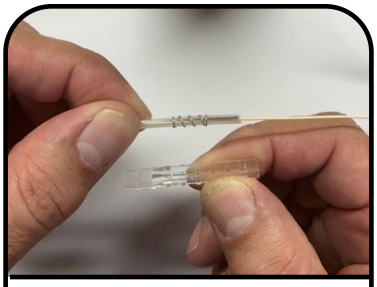
Separate Protection Sleeve and Spring Holder and slide down fiber

12



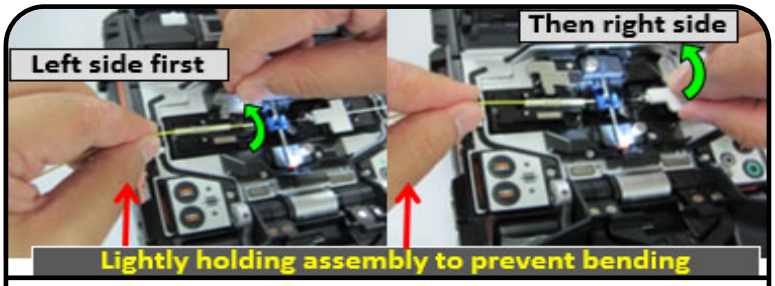
While holding the fiber separate Protection Sleeve and Spring Holder from the splice sleeve and spring.

13



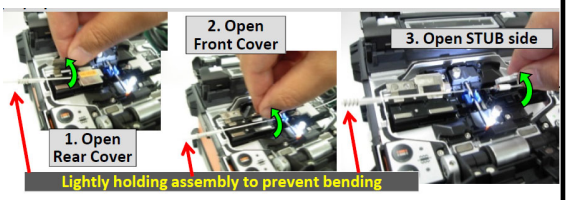
Once removed, discard the Protection Sleeve and Spring Holder.

14

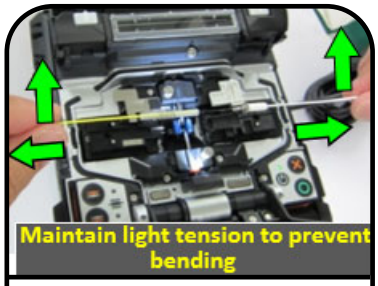


Carefully open the left side of the fiber holder and then repeat on the connector holder on the right side.

Note: If using left side holder with two covers, open rear cover 1st and front cover 2nd

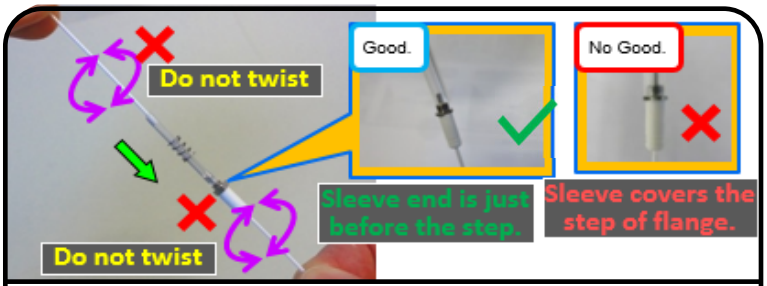


15



Carefully pick up the spliced fiber and connector.

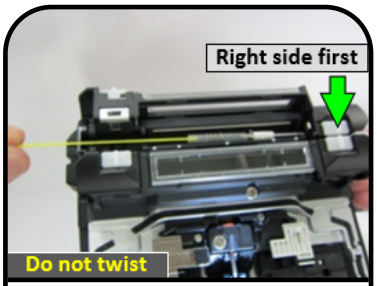
16



Carefully slide the heat shrink protection sleeve up to the step of the metal flange as shown above. Ensure it does not cover the step.

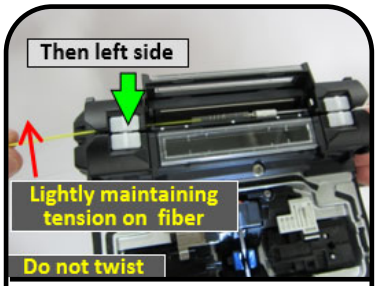
Note: Buffer (900 um tight buffer 900 fan out kit) or plastic coating(250um) should be under heat shrink sleeve

17



Carefully set the fiber in the heater with the right side first.

18



Continue placing the fiber into the left side while lightly maintaining tension on the fiber.

19

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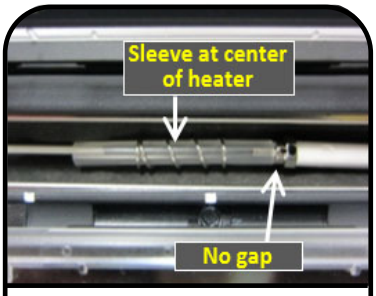
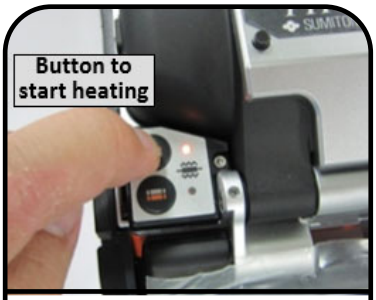


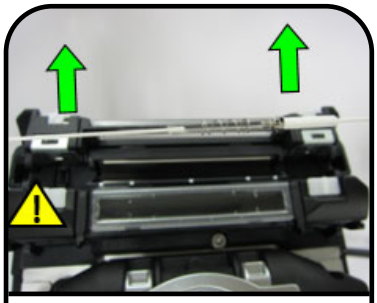
Confirm the position of the fiber in the heater before activating heater.

20



Activate the fusion splice sleeve heater.

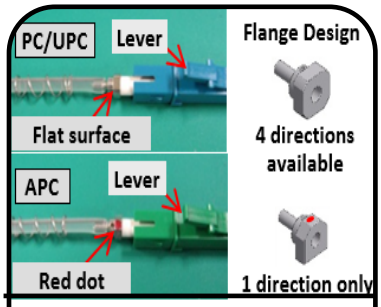
21



Carefully remove the fiber from the heater.

Note: connector assembly may be hot even after the cooling by fan has completed its cycle.

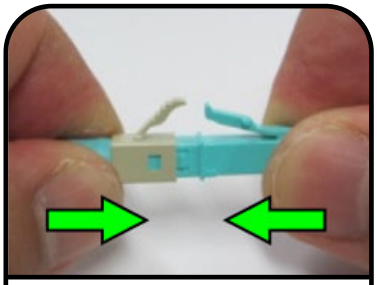
22



UPC
Align flat surface with the lever on the housing for UPC

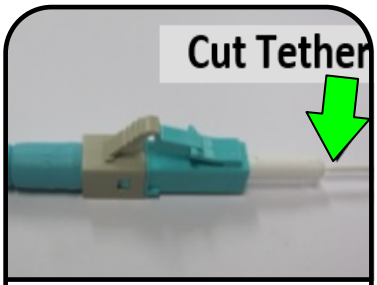
APC
Align red dot with lever on the housing for APC

23



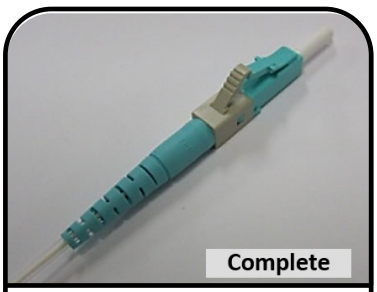
Carefully push the front housing into the rear stopper.

24



Cut the tether off of the dust cap.

25



The connector is now complete.

26

Trouble shooting guide

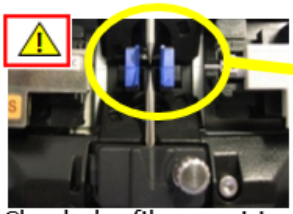
Below are some common causes of termination problems.

Legend

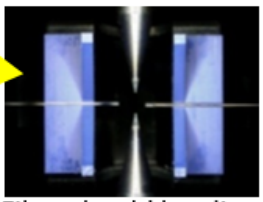
Caution Use extra care when performing this action.

Prohibited Refrain from performing, can result in damage.

Place the fiber



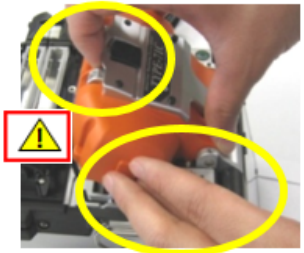
Check the fiber position on V-groove.



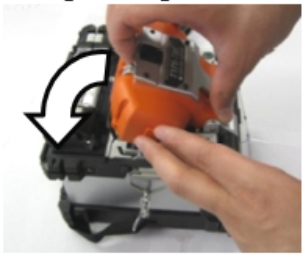
Fiber should be aligned along the V-groove

Do not place the fiber outside of V-groove or the fiber may break.

Close the cover



Hold the cover with both hands and close gently.



Do not slam the cover or the fiber may break

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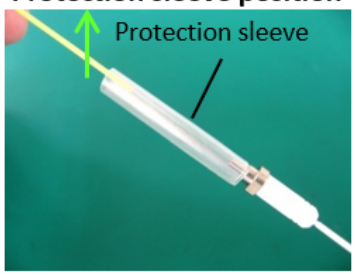
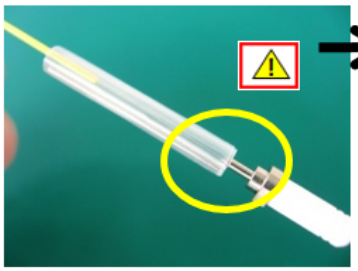
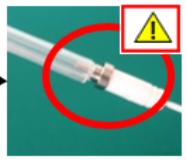
Protection sleeve position





Raise the fiber end up so that the protection sleeve slides toward the ferrule.



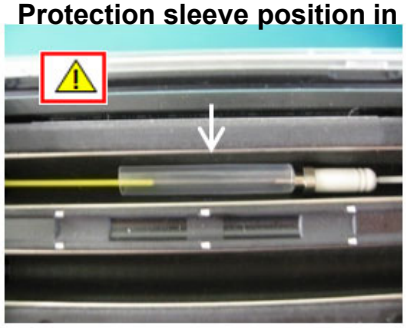
Ensure the splice sleeve is over the step and up against the flange, if necessary carefully guide the sleeve into position.

Do not shake!

Do not twist!

The fiber will **break** from stress.

Protection sleeve position in heater



Set the heat shrink protection sleeve **at center of heater**.

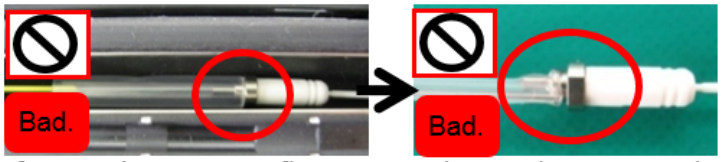
After heating

If protection sleeve is not centered in the heater uneven shrinking of sleeve can result in a bubble. This in turn will cause stress on the fiber resulting in a fracture.

Post heating protection sleeve problems

Gap at flange step before heating process

Gap at flange step after heating process

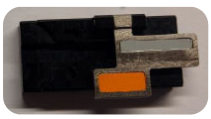


If no gap is present at flange step, glue can become stuck to the flange. This in turn will cause stress on the fiber resulting in a fracture.

If Protection Sleeve exhibits any of the above mentioned ⊘ conditions.

Please **retry** using another new connector.

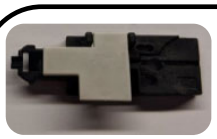
Siemon Holders



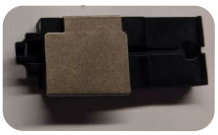
FT-F-LHLDL-29M Cable holder,900 micron tight buffered, metal

FT-F-CHLDU-29M Cable holder, 900 micron breakout kit, 250 micron coated fiber, metal

Fiber Holder (left side)



FT-F-FHLDU-LSP Ferrule holder, SC,LC plastic (performs 100 splices)



FT-F-FHLDU-LSM Ferrule holder, LC, SC, metal

FT-F-FHLDF-LSM Fitel, ferrule holder, LC, SC, metal

Ferrule Holder (right side)

Siemon OptiFuse LC Instructions

Fusion Splicer Compatibility Chart

Manufacturer Fusion Splicer	Manufacturer Fusion Splicer Model #	Fiber Cable Holder	Siemon Ferrule Holder	Slice Sleeve Heater Setting
AFL	70S	Splicer manufactures holder	FT-F-FHLDU-LSM	FUSE900
AFL	62C+	Splicer manufactures holder	FT-F-FHLDU-LSP or FT-F-FHLDU-LSM	FUSE900
AFL	21S	Splicer manufactures holder	FT-F-FHLDU-LSP	FUSE900
Fitel S153	S153	Splicer manufactures holder	FT-F-FHLDF-LSM	60mm
OFS	NJ001 M4	Splicer manufactures holder	FT-F-FHLDF-LSM	40mm other
INNO	View 3	Splicer manufactures holder	FT-F-FHLDU-LSP	40mm
Fiber Fox	Mini 6S	Splicer manufactures holder	FT-F-FHLDU-LSP	40mm
Sumitomo	TYPE-Q102-CA and T56	Splicer manufactures holder or Siemon FT-F-CHLDU-29M , FT-F-LHLDL-29M	FT-F-FHLDU-LSP or FT-F-FHLDU-LSM	LYNX
Sumitomo	T-400S , Lynx Connectorizer	Splicer manufactures holder or Siemon FT-F-CHLDU-29M , FT-F-LHLDL-29M	FT-F-FHLDU-LSP or FT-F-FHLDU-LSM	LYNX
Sumitomo	TYPE-Q102-M12	Splicer manufactures holder or Siemon FT-F-CHLDU-29M , FT-F-LHLDL-29M	FT-F-FHLDU-LSP or FT-F-FHLDU-LSM	LYNX

Splice Sleeve Heater settings were validated with splicers shown in initial testing, any manaufacture changes to splice settings are at the descresion of the fusion splice manufacture and do not reflect Siemon

Comply with the following for safe installations:

A. Use caution when installing or modifying telecommunications circuits.

B. Never touch uninsulated wire terminals unless the circuit has been disconnected.

C. Never install this device in a wet location.

D. Never install wiring during a lightning storm.

c UL us LISTED

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