

42kV Cold Shrinkable Straight Joint (Three-Core)

Installation Instructions

Important:

1. Please cut off the power of the system before installation, maintenance, and disassembly, and make sure that the product rating (42kV and below) is consistent with the application.
2. Check all spare parts specifications, verify the quantity is as listed, and ensure that it matches the cable or product.
3. This product must be installed and operated by well-trained electricians, and the installation should comply with Installation regulations for cold-shrinkable cable accessories with rated voltage 35kV and below.
4. Read the installation manual carefully before installation, prepare the tools required for installation, and keep them clean throughout the installation process.

Required installation tools: Cable stripping tools, terminal crimping tools.

Part Description:

Voltage Rating	Part Number	Cable Insulation O.D. Range
42kV	T-42-CSCJ-A	30.0-35.5
	T-42-CSCJ-B	35.0-41.0
	T-42-CSCJ-C	40.5-48.5
	T-42-CSCJ-D	48.0-58.0

Product accessories list:

42kV Cold Shrinkable Straight Joint (Three-Core)					
No.	Description		No.	Description	
1	Cold Shrinkable Straight Joint		9	Sandpaper belt	
2	Grounding braid		10	Gloves	
3	Copper Shielding Mesh		11	Silicone lubricant	
4	PVC tape		12	Paper towel	
5	Mastic tape		13	Constant-force spring	
6	Splicing Connector		14	Installation instructions	
7	Semi-conductive tape		15	Packing list	
8	Armour tape				

Installation Instructions:

STEP 1

- Prepare cable using dimensions as shown in Fig.1.

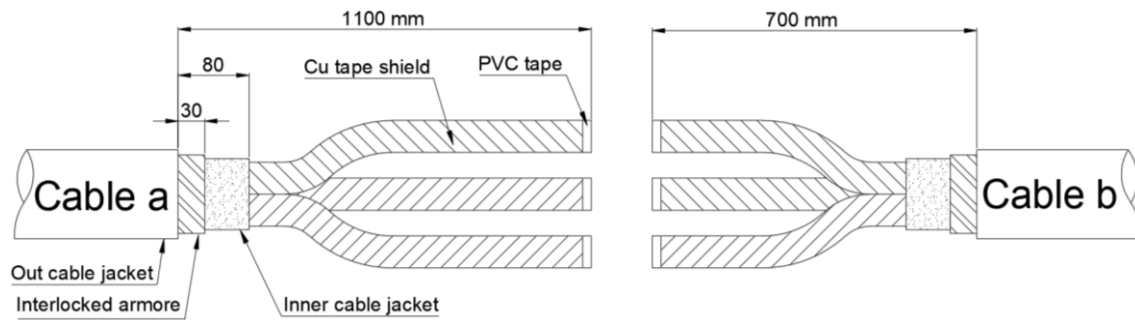
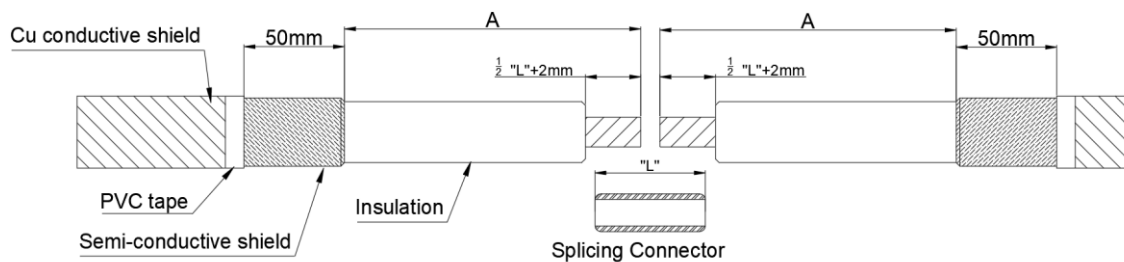


Fig.1

STEP 2

- Remove the $A + 50\text{mm}$ Cu conductive shield downward from the end of the cable, and fix the end of the Cu conductive shield with PVC tape to avoid loose Cu conductive shield
- Remove the A mm of the semi-conductive shield of the cable at both ends. Polish thoroughly the insulation by using fine sandpaper belt.
- Remove the $L / 2 + 2\text{mm} + 2\text{mm}$ cable insulation at both ends of the cable. (L = length of connector)
Chamfer the insulated end of the cable.



Cable a-1

Cable b-1

Fig.2

Section	T-42-CSCJ-A	T-42-CSCJ-B	T-42-CSCJ-C	T-42-CSCJ-D
A(mm)	200	200	200	220

STEP 3

- The other two phases were processed in the same way.

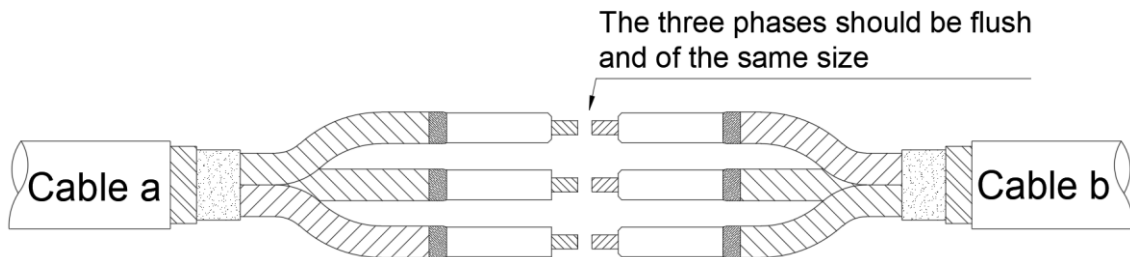


Fig.3

NOTE: Ensure that all parts of the cable are not damaged. If there is any irreparable damage, a new cable needs to be made .If there is any impurity or slight damage on the surface of the insulation, it can be polished with fine sandpaper.

STEP 4

- Clean the surface of the cables within the stripping range.(include insulation 、semi-conductive shield 、Cu conductive shield 、inner jacket 、armor.)
- The long end cable is sheathed into the cold shrinkable joint, and the shorter cable is sheathed into the Copper Shielding Mesh. (Note: pay attention to the pulling direction when inserting the cold shrinkable joint.)
- The two ends of the product are covered with packaging bags to prevent dust from entering.

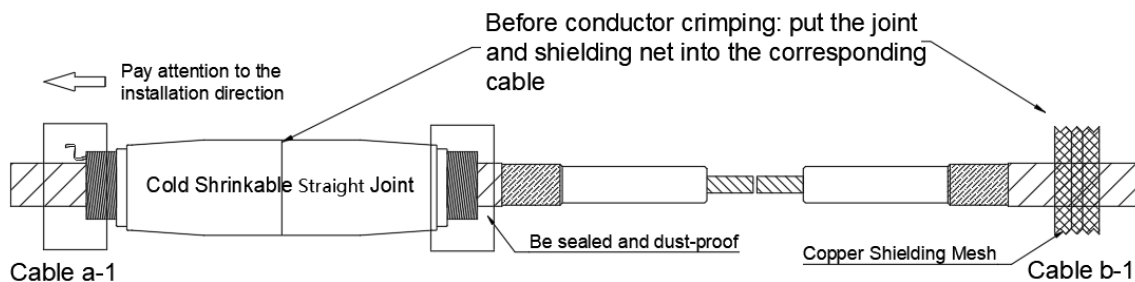


Fig.4

STEP 5

- The other two phases were processed in the same way.

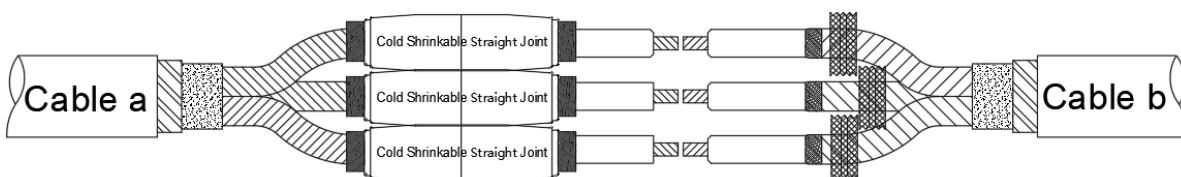
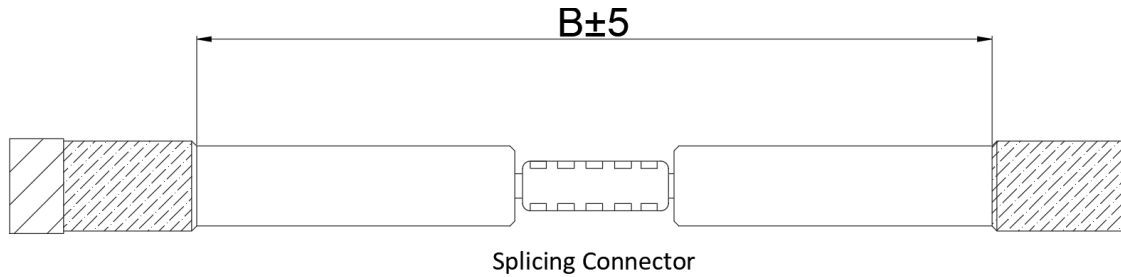


Fig.5

STEP 6

- Insert the cable conductor into the Splicing Connector and confirm size B. If any problem exists, check and adjust the cable stripping size
- The oxide layer on the conductor surface shall be polished ,and crimping. Grind the surface indentation of the connector to make it flat, and grind off the sharp corner near the insulation edge of the cable near the connector.



Section	T-42-CSCJ-A	T-42-CSCJ-B	T-42-CSCJ-C	T-42-CSCJ-D
B(mm)	400	400	400	440

Fig.6

STEP 7

- The other two phases were processed in the same way.

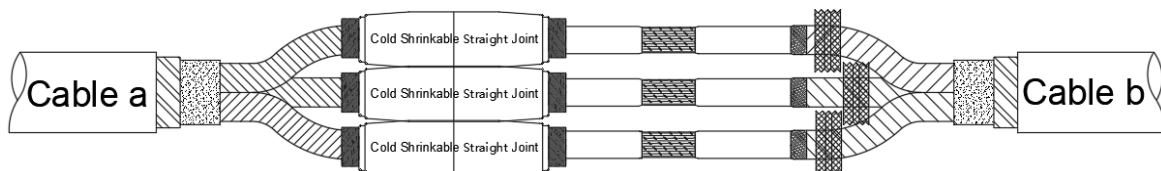


Fig.7

STEP 8

- Measure 30mm from one end of the semi-conducting layer and make a mark.
- Measure 350mm from 1/2 of the length of the B after crimping, and make a mark (Fig 8).

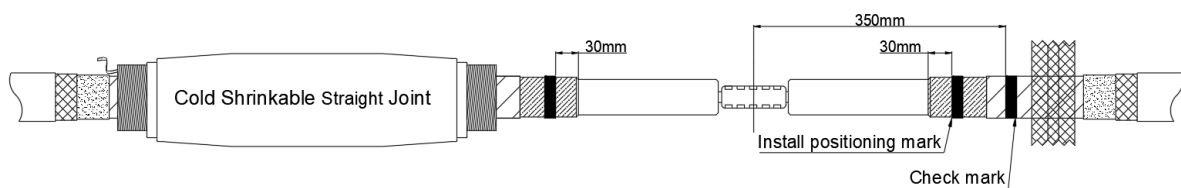


Fig.8

STEP 9

- The semi-conductive tape shall be wrapped on the connector, and wrapped to a diameter slightly smaller than the outer diameter of the cable insulation. (Note: The semi-conductive tape shall be wrapped firmly and shall not be warped)

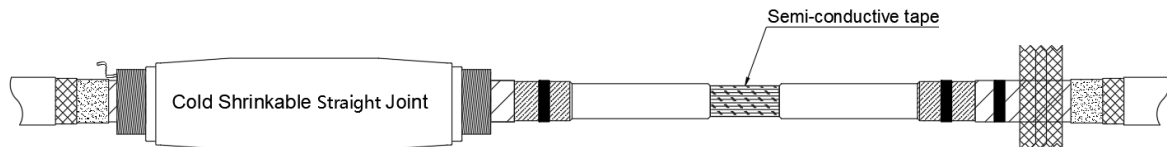


Fig.9

STEP 10

- The other two phases were processed in the same way.

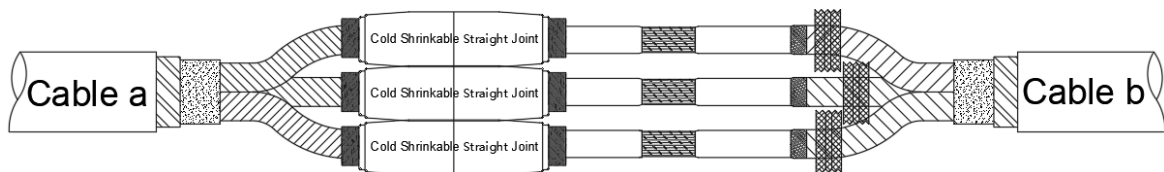


Fig.10

STEP 11

- Clean thoroughly the insulation by using paper towel then apply the silicone lubricant around the dotted line area.

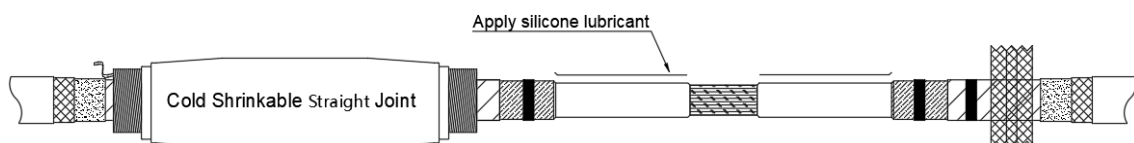


Fig.11

STEP 12

- Align one end of the cold-shrink joint product with the installation positioning tape (30mm) and pull the support wire from the other end to shrink the product.

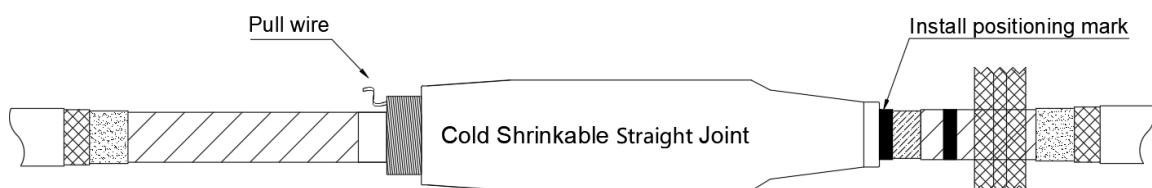


Fig.12

STEP 13

- Confirm and check the dimension (350mm) when installing to the halfway position. Adjust it immediately if there is any deviation.

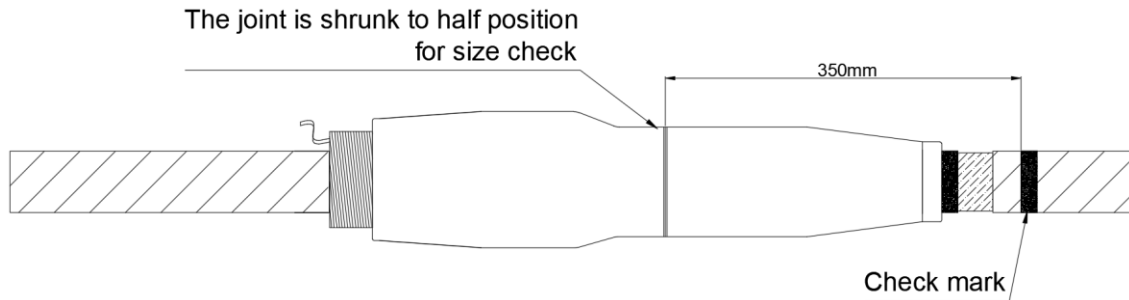


Fig.13

STEP 14

- Remove the PVC tape from the cable after complete the installation.
- Wrap semi-conductive tape and mastic tape around the product port to make a tapered transition between the product and the cable. The dimensions are shown in the figure below.

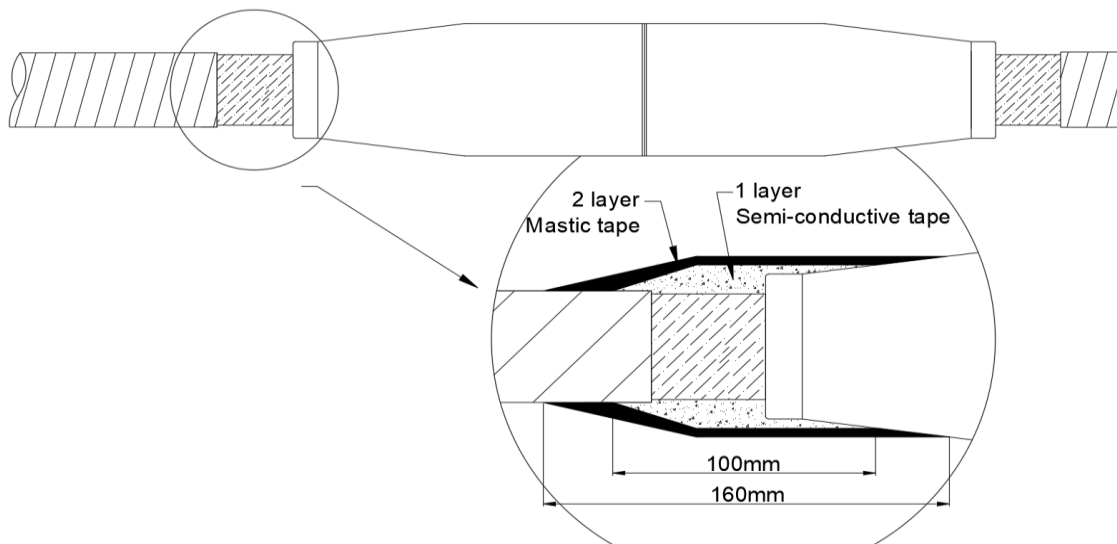


Fig.14

STEP 15

- The other two phases were processed in the same way.
- Straighten the Copper Shielding Mesh on the cold shrink joint, bind it on the cold shrink joint with PVC tape, fix the Copper Shielding Mesh on the Cu conductive shield with two constant-force springs, and wrap the constant-force spring with PVC tape for three layers.

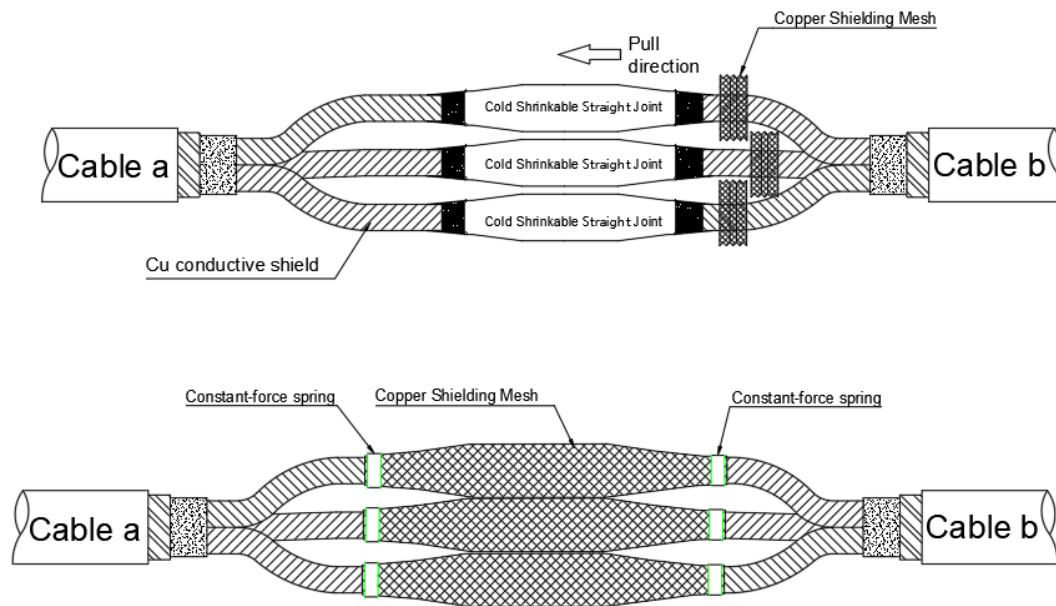


Fig.15

STEP 16

- Use PVC tape to bind the three-phase cables together

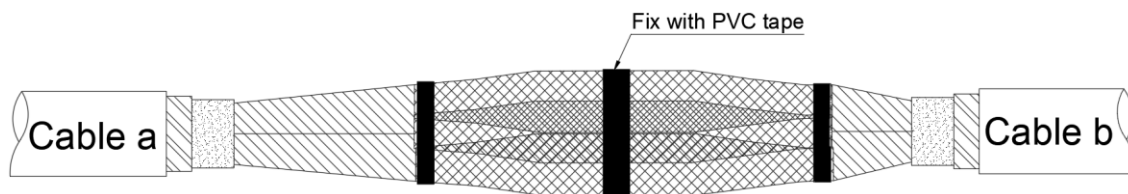


Fig.16

- Polish the inner jacket at both ends , wrap 1 layer mastic tape between this area(200% elongation , semi-lapped winding).

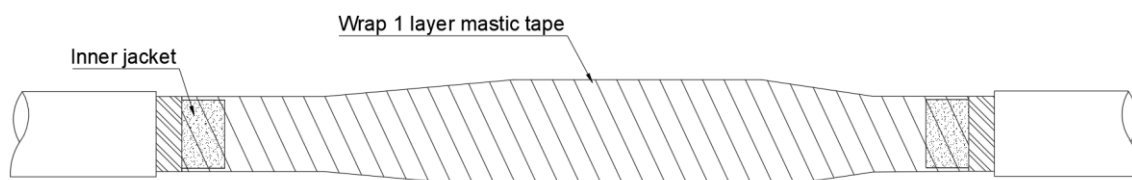


Fig.17

- Lay the grounding braid on the armor layer of the cable at both ends, fix with two constant-force springs.

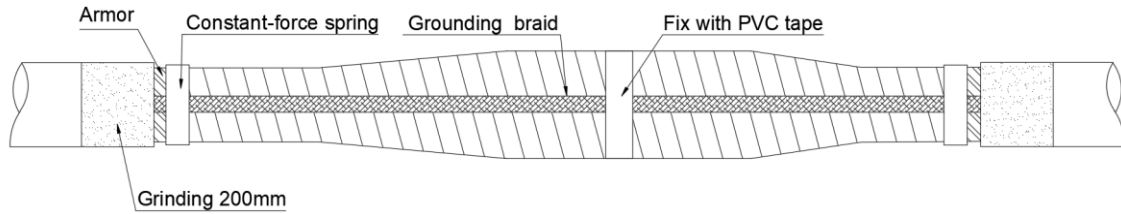


Fig.18

- From the outer jacket of the cable: the 200mm area needs to be polished and cleaned, wrap 1 layer mastic tape as shown Fig.19 (200% stretched, semi-lapped winding).

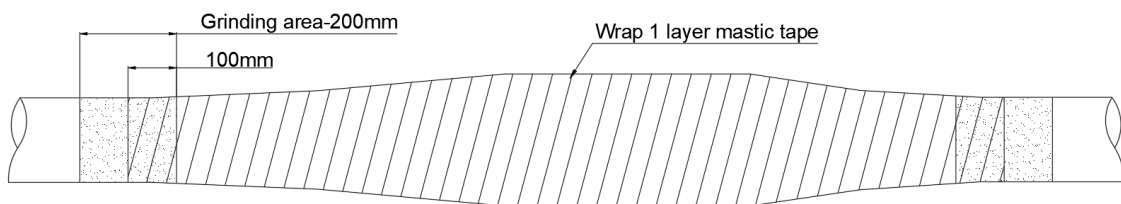


Fig.19

- Wrap 2 layers of armour tape in a semi-lapped manner on the outer layer of the mastic tape, and fix it with PVC tape.

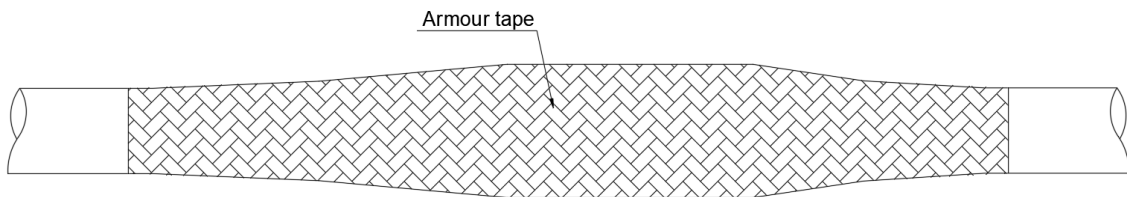


Fig.20

- The cable can only be moved after the armor is not cured. At this point, the installation of the Cold Shrinkable Straight Joint is completed.

The waste generated during the installation, use and replacement of this product should be sorted and should not be discarded at will.

This installation manual cannot cover all the instruction details, nor can it completely solve various problems encountered during the construction process, so when encountering difficulties or special problems during the specific construction process, please contact us in time.

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