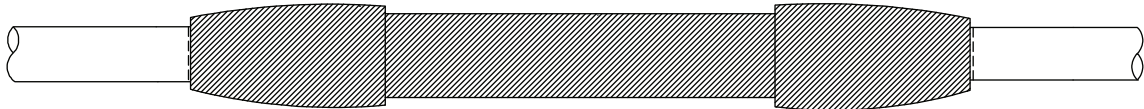




Saves Your Energy

**INSTALLATION INSTRUCTION PEM1498ENG
2015-03**

ENGLISH



**COLD SHRINK ALL-IN-ONE JOINT FOR SINGLE CORE XLPE INSULATED CABLES
WITH Cu WIRE SHIELD**

$U_o/U = 18/30$ kV $U_m = 36$ kV

CJAI011.3603C / 70-240 mm²

GENERAL INFORMATION

- Check that the kit is suitable for the cable type.
- Check the materials listed in the bill of materials for completeness.
- Read the installation instructions carefully before starting the installation.
- Install carefully and make sure the materials are clean during the installation.
- Clean the working place after the installation.

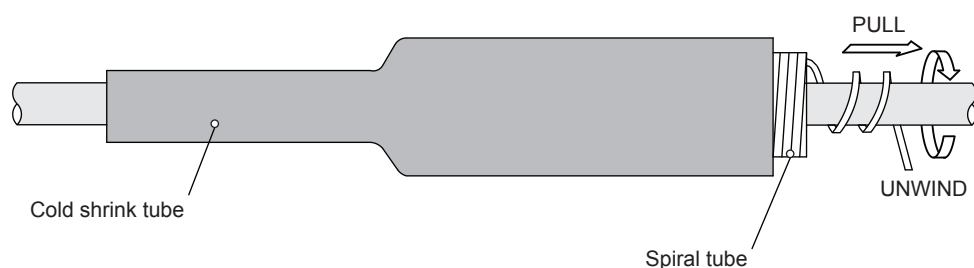
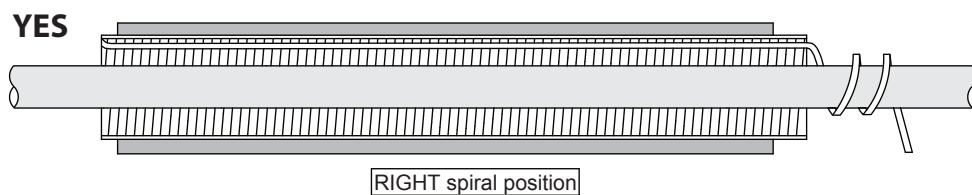
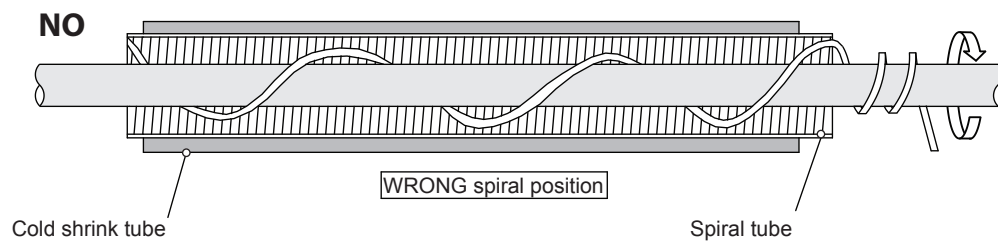
LEGAL NOTICE

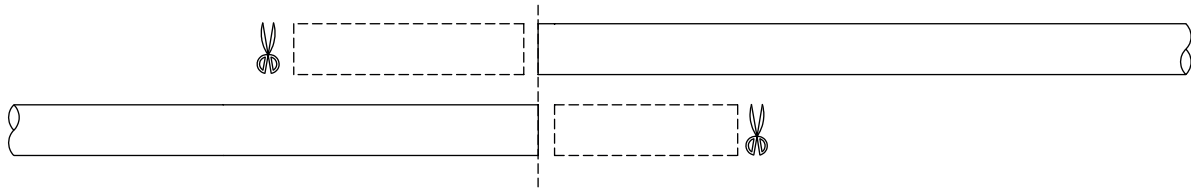
- The product must be installed only by a competent person with sufficient training in installation practices and with sufficient knowledge of good safety and installation practices in respect of electrical equipment. If local legislation contains provisions in respect of such training or sufficient knowledge in respect of installation of electrical equipment such provisions shall be fulfilled by the said person.
- Ensto accepts no liability concerning claims resulting from misuse, incorrect installation or ignored national safety regulations or other national provisions.
- **WARNING:** Failure to follow the installation instructions may result in damage to the product and serious or fatal injury.

GENERAL INSTRUCTION FOR COLD SHRINK

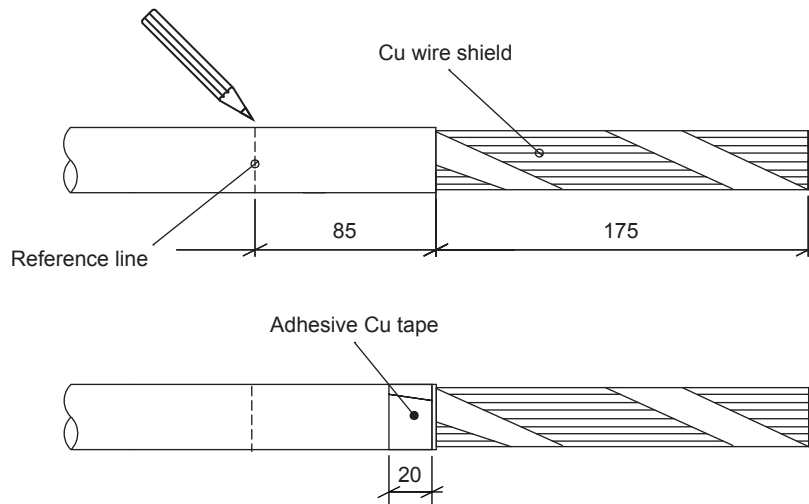
- Ensure the cold shrink tubing is placed upon the cable core prior to installing the connector/lug, for ease of assembly.
- When using cleaning solvents, ensure there is no residue remaining after cleaning. Solvent or other residue will impair the joint performance.
- Ensure that the plastic tape is straightened within the tube. If it is wrapped around the conductor, rotate the cold shrink assembly counter clockwise, to ensure the tape is straight, before attempting to withdraw the tape.
- Once you have correctly placed the cold shrink tube, the plastic spiral may be withdrawn with a steady pulling action. Take care to ensure the unwound spiral is not tightening around the cable. The excess spiral can be cut if required, as it is withdrawn.
- Double check the position of the tube as it begins to shrink. There is only a limited time to adjust the position of the tube

SPIRAL POSITION BEFORE BEGINNING THE SHRINKING OF THE TUBE

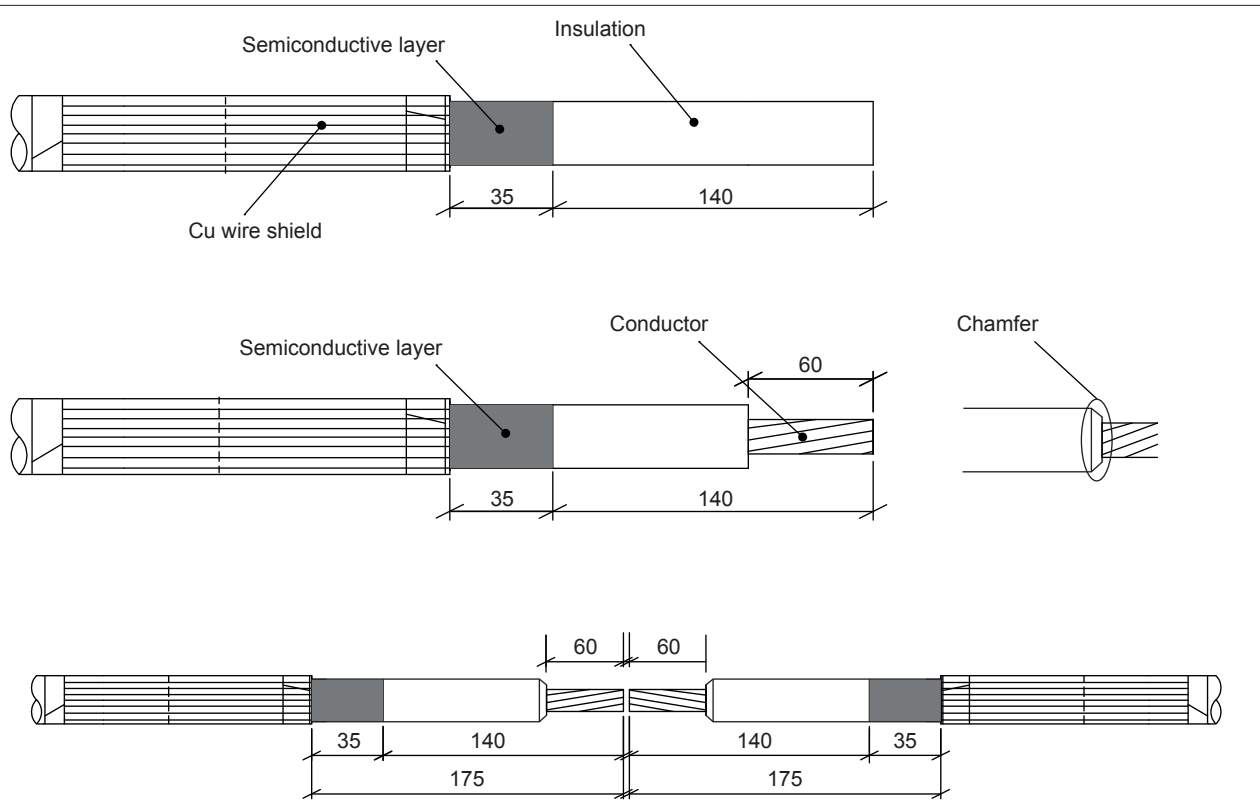




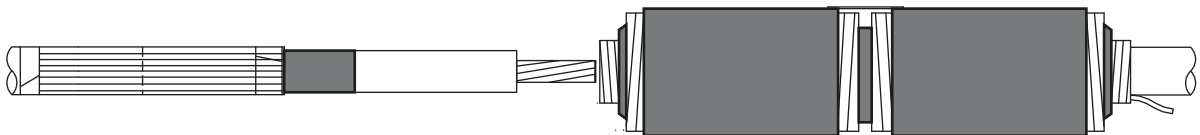
1. Check the length of each core according to the final installed position.



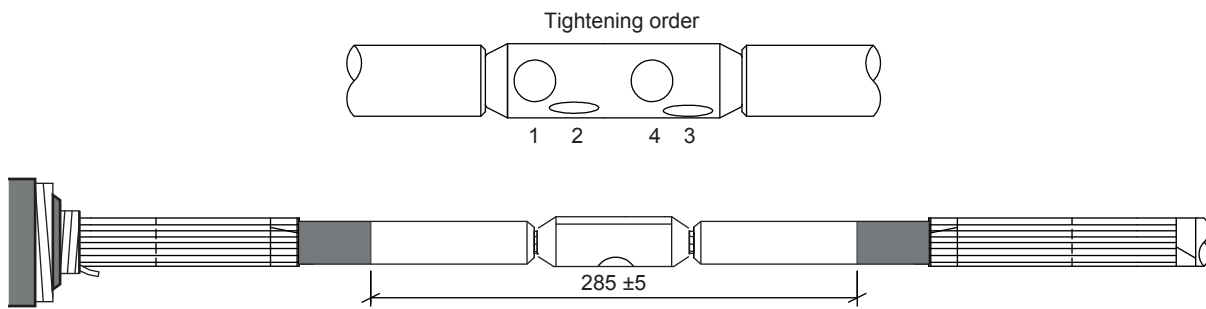
2. Remove the outer sheath for a distance of 175 mm.
- Do not damage the wire shield.
- Make a reference line 85 mm from the outer sheath cut.
- Apply a strip of adhesive Cu tape on the cable outer sheath 20mm from the outer sheath cut.
- Fold back the screen wires and secure them temporarily with PVC tape.



3.
 - Remove the swelling tape.
 - Using a suitable tool remove the semiconductive layer for a distance of 140 mm measured from the cable end.
 - If necessary, remove any remaining of the semiconductive layer with a piece of glass.
 - Use the grinding paper included in the kit to smooth the insulation.
 - Remove the insulation for a length of 60 mm.
 - Use the grinding paper to do a chamfering to the sharp insulation edge.

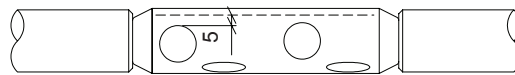


4.
 - Before connector installation place the All-in-One body on the cable outer sheath.

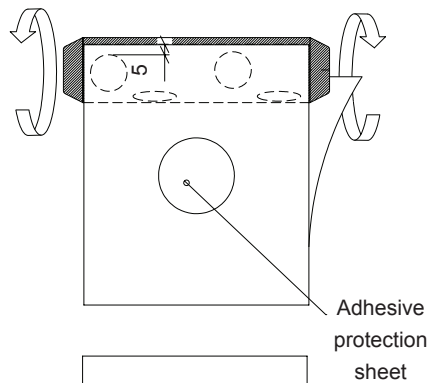


5. Pre-tighten all the screws.
- Check the measurement 285 ± 5 mm between semiconductor layers before breaking the screws.
- Tighten the screws in order 1, 2, 3 and 4 until the shear head breaks off.
- After tightening remove all sharp edges from the shear head screw.

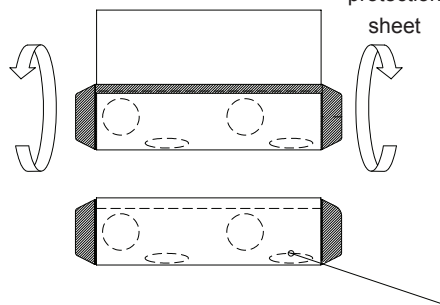
- 1 - Clean the connector.



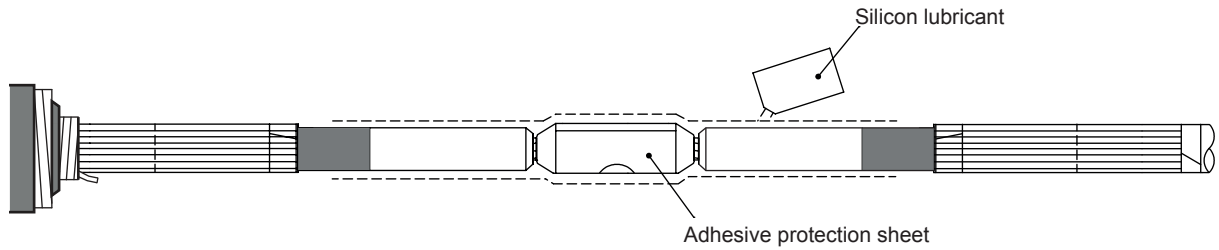
- 2 - Remove the protective foil
- Place the sheet 5 mm from the first two screw holes.
 - Continue to wrap the whole sheet on the connector.



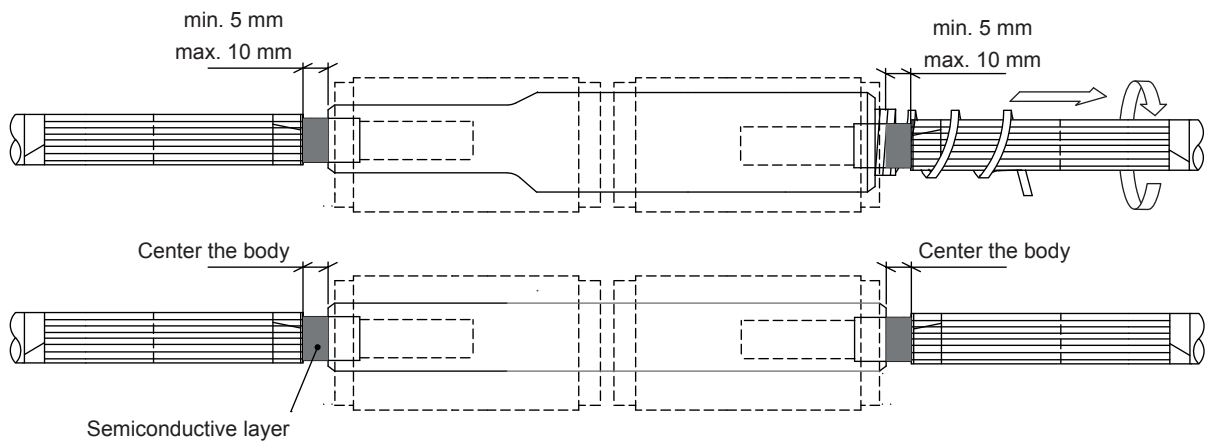
- 3 - When wrapping is completed there should be two sheet layers on all the screw holes.



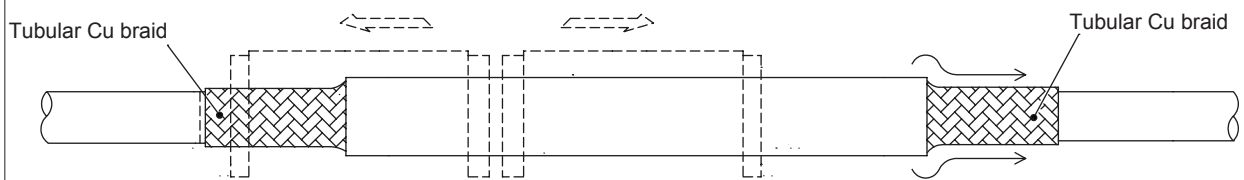
6. Apply the adhesive protection sheet on the connector.



7.
 - Clean the cable insulation and the semiconductive layer with a cleaning tissue starting from the insulation and move towards the semiconductive layer. Take care that no semiconductive particles are deposited on the insulation. At last clean the connector.
 - Apply a thin and even layer of silicon lubricant first on the cable insulation and then onto the semiconductive layer and at last on the connector.

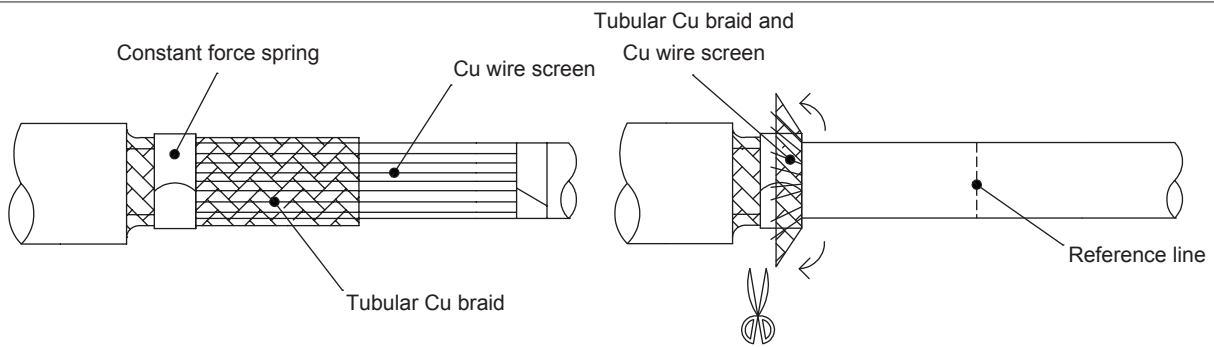


8.
 - Place the end of the All-in-One body 5-10 mm from the cable outer sheath cut on the semiconductive layer
 - Gently pull out the spiral from the inner tube by rotating it counter clockwise. Pay attention to positioning when the body starts to shrink down and adjust the position to 5-10 mm from the outer sheath cut. After spiral removal center the body according to the picture.



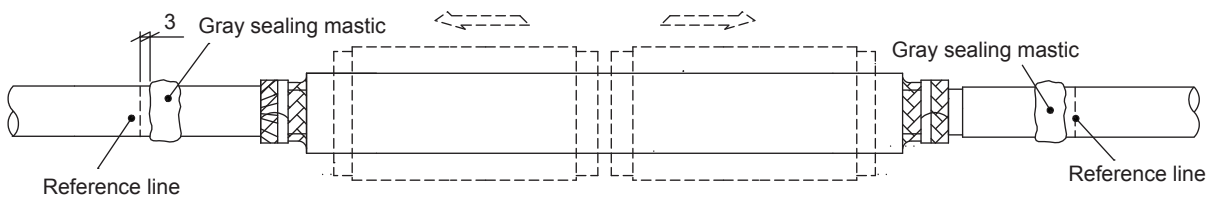
9.
 - Fold the tubular Cu braid on the cable outer sheath.

! To ease the installation the two outer protection tubes can be moved along the body seam.

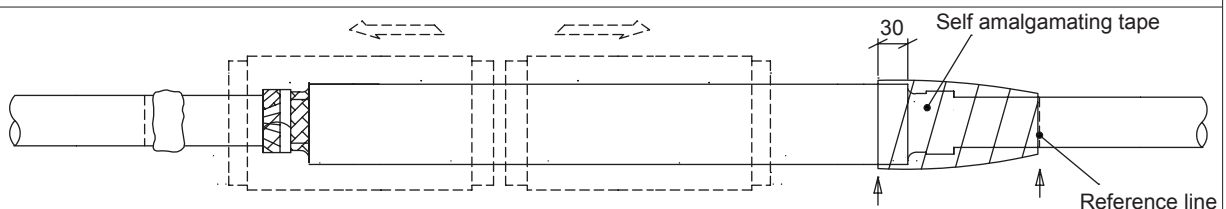


10. Place the constant force spring on the adhesive Cu tape, above the Cu tubular braid and fasten it entirely on the cable.
- Fold back the Cu tubular braid and the Cu wire screen. Cut off the excess Cu tubular braid and the Cu wire screen, as shown in the picture.

! To ease the installation the two outer protection tubes can be moved from side to side.

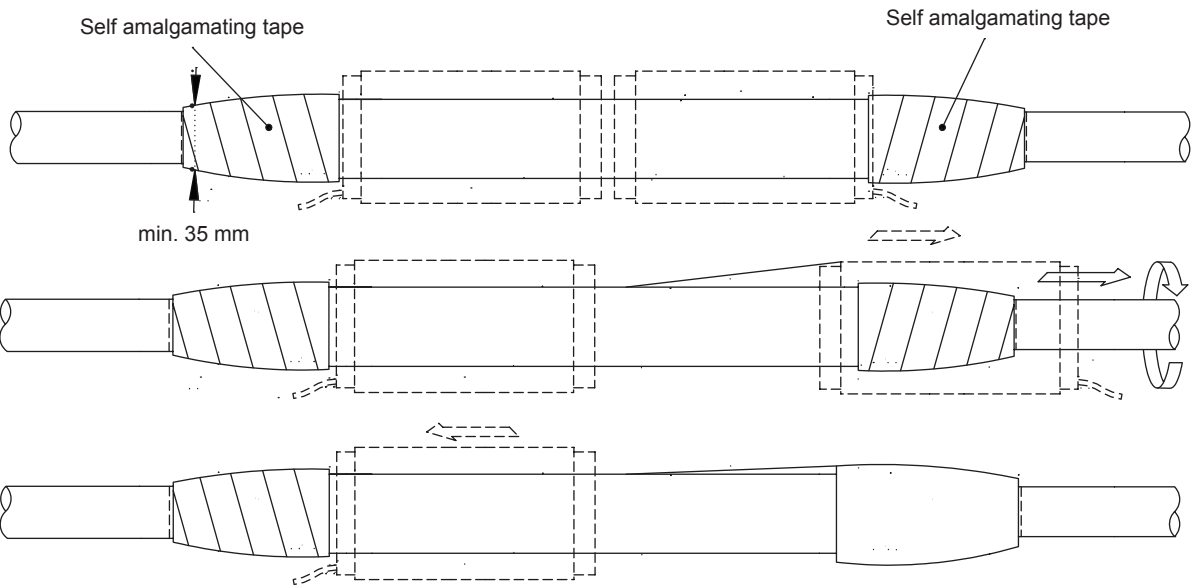


11. On both cables, about 3 mm from the reference line, apply one strip of gray sealing mastic firmly on the cable.

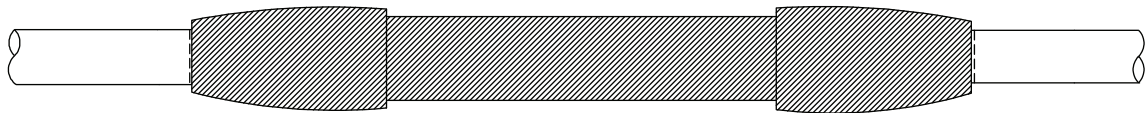


12. Apply self-amalgamating tape 30 mm on the joint body and proceeding to the reference line to cover the earthing connection and to secure the joint body position
- The tape is applied by stretching it to half of its original width and with 50% overlap and use one roll on each side.

! To ease the installation the two outer protection tubes can be moved from side to side.

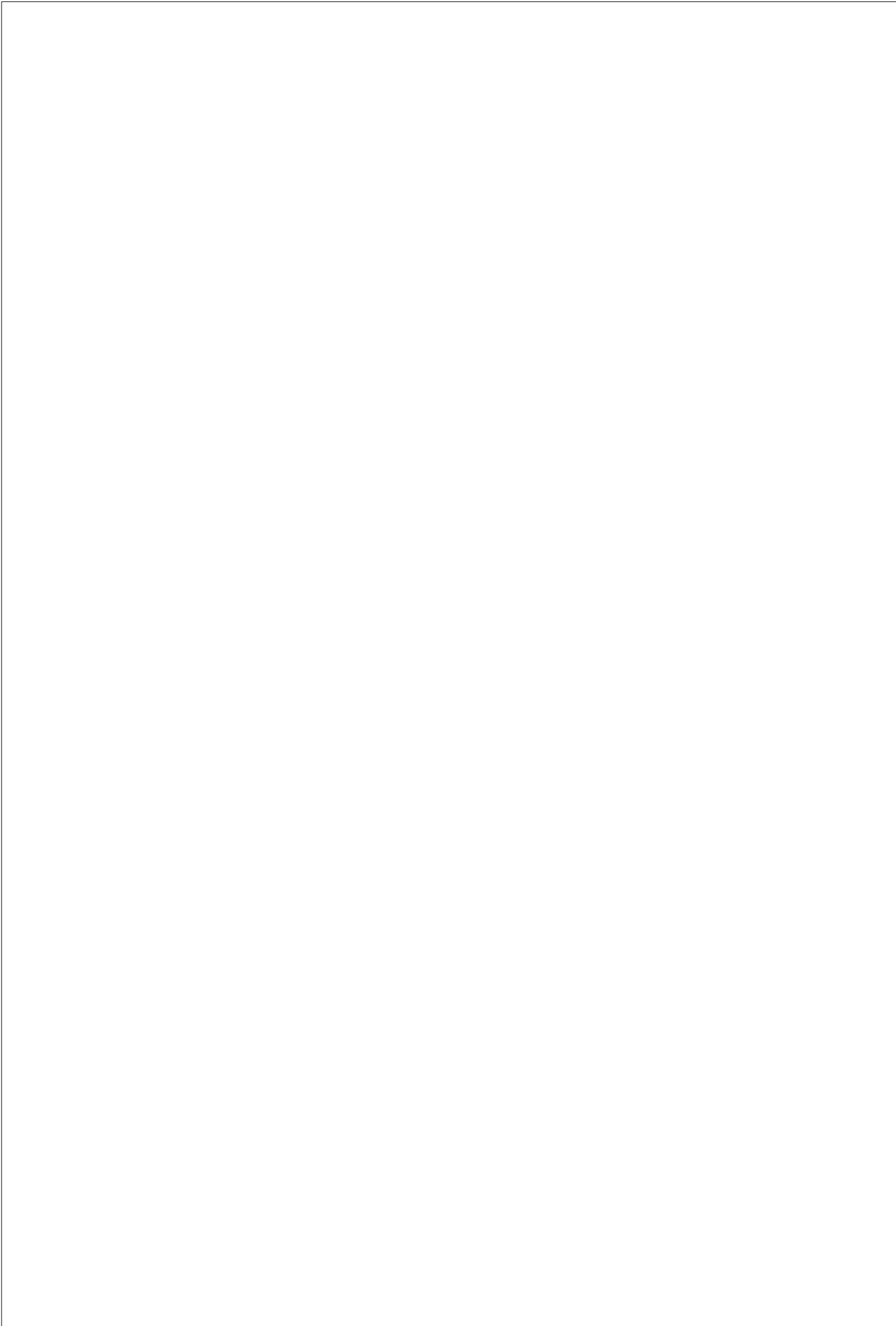


- 13. Place the sealing tube above the self-amalgamating tape so that the cotton strip is straight.
- Pull out the spiral gently by turning it counter clockwise. Pay attention to positioning when the body starts to shrink down and adjust the position if needed.
- Repeat on the opposite side.



- 14. Place the join in its final position.
- The joint is ready to use.

A large, empty rectangular box with a thin black border, occupying the majority of the page. It is intended for the student to write their notes during the lecture.





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