

# i4

## Bend insulation kit

### Composition of the i4 kit:



- 1 drilled flexible elbow muff
- 1 steel bend
- 1 centerring

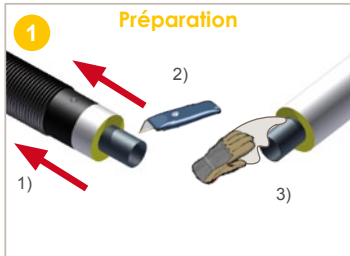


- 1 box of Polyol
- 1 box of Isocyanate
- 1 mixing spatula

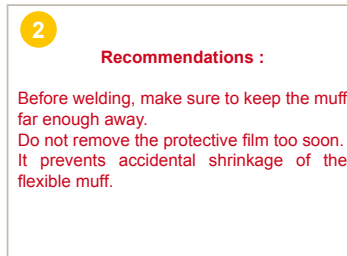


- 2 vent plugs
- 2 female closure plugs
- 2 male closure plugs
- 2 closure patches (FOPS)



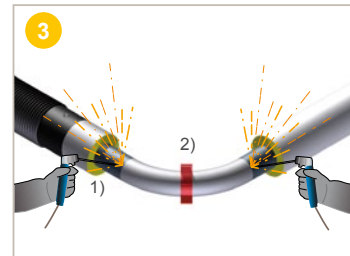


- 1) Slide along the flexible PE muff.
- 2) Scrape the PUR foam off the front (all signs of damp PUR foam must be removed from the ends).
- 3) Clean the ends of the pipes or parts with a cloth to remove any water, mud or sand.

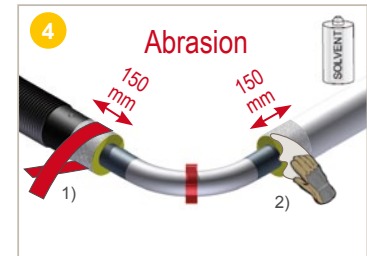


### Recommendations :

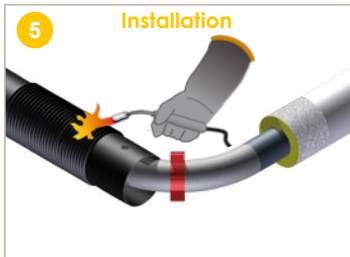
Before welding, make sure to keep the muff far enough away.  
Do not remove the protective film too soon. It prevents accidental shrinkage of the flexible muff.



- 1) Weld the steel curve at the ends of the 2 pipes.
- 2) Place the centerring in the middle of the steel curve with an elastic and/or an adhesive tape, to stop the centerring from moving while assembling the flexible PE bend.

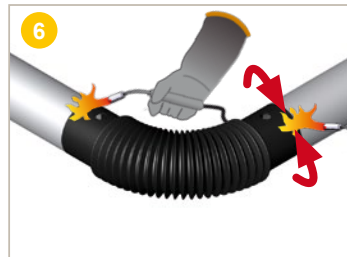


- 1) Roughen the surface (150 mm on each side) with abrasive paper or a wire brush.
- 2) Clean and degrease the roughened surfaces with a cloth dipped in ethanol (min. 94 %).



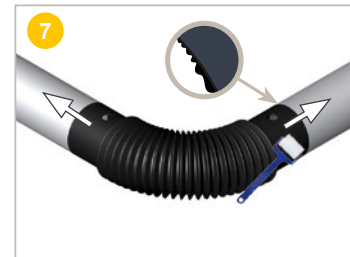
Warm the flexible part of the muff slightly and carefully slide the flexible bend onto the steel bend.

⚠ The injection holes must be at the top

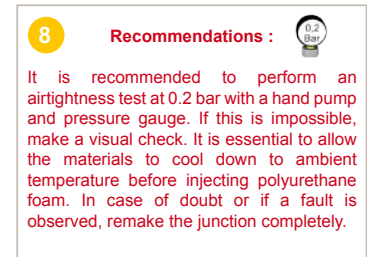


⚠ The heat-shrinkable ends of the flexible bend must stick well out of the ends of the casings. Pull back the 2 heat-shrinkable ends of the flexible PE muff around its entire circumference.

⚠ Remember to remove the protective film before shrinking the heat-shrinkable muff.

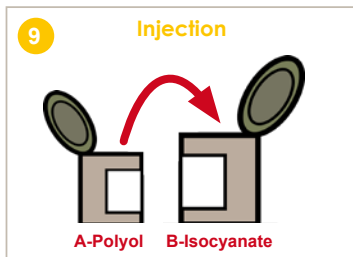


Smooth and evacuate the air bubbles with a roller.  
After shrinking and return to ambient temperature, check that the muff and the casing are firmly bonded together. Shrinking is complete when the adhesive projects out of each end of the muff.



### Recommendations :

It is recommended to perform an airtightness test at 0.2 bar with a hand pump and pressure gauge. If this is impossible, make a visual check. It is essential to allow the materials to cool down to ambient temperature before injecting polyurethane foam. In case of doubt or if a fault is observed, remake the junction completely.



Take components **A** and **B** out of the kit boxes and check the diameters.

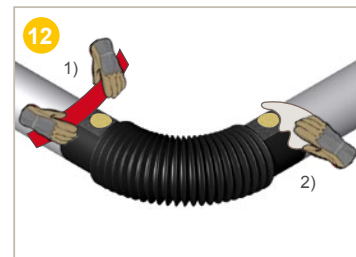
⚠ Check the kit use-by date. Pour component **A** into component **B**, **mix** together using the spatula supplied. The mixture is ready when it is homogeneous, with no signs of different colours.



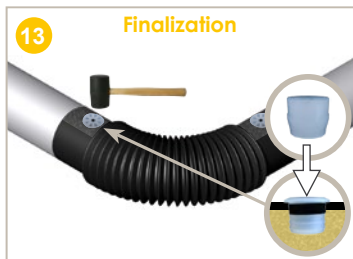
**Pour** the mixture into one of the 26 mm diameter HDPE muff injection holes. Make sure to pour in all of the mixture, using the spatula supplied.



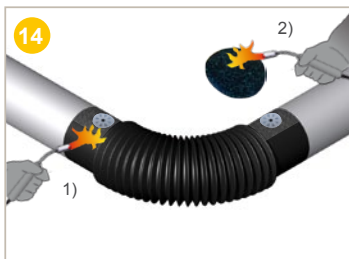
1) **Push** the 2 vent plugs fully into the 2 injection holes.  
2) As soon as the expanded mixture has hardened, **remove** the plugs using the 2 tabs provided. **Clean off** any excess PUR foam.



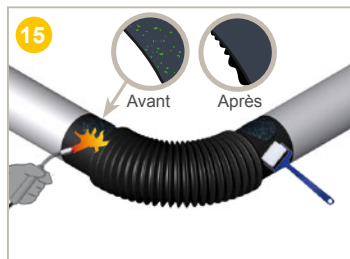
1) **Roughen** the surfaces to be covered (hole  $\varnothing$  + 50 mm on each side) with abrasive paper or a wire brush.  
2) **Clean** the roughened surface to remove any polyethylene or sand particles with a dry cloth (or blow off with the flame).



1) **Press** the female closure plugs by hand fully into the HDPE muff injection holes.  
2) Then **knock** the male closure plugs into the female closure plugs with a mallet.



1) Use a blowtorch to **warm** the surfaces to be covered (hole  $\varnothing$  + 50 mm on each side) up to at least 65 °C.  
**Check** the temperature on all surfaces with a thermometer.  
2) **Heat** slightly (2 to 3 seconds) the 1st closure patch (FOPS) on the side opposite the coloured dots and then glue it onto the plug.



1) Finalise the bonding by **warming** until the coloured dots of the FOPS disappear.  
2) While the closure patch (FOPS) is still hot and malleable, use the application roller to **smooth** and **evacuate** the air bubbles. **Repeat** the operation with the **2nd** closure patch.

The system is correctly installed when:

- The closure patches (FOPS) are in contact with the surfaces to be protected.
- The adhesive is visible all around the closure patches.