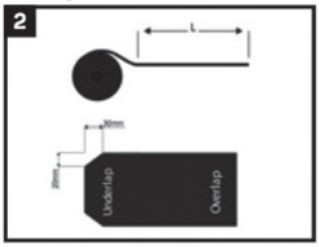
Installation Guide SuperSeal

Heat schrinkable sleeve for protection of pre-insulated pipe joints

Product Description

Canusa SuperSeal sleeves are shipped in **bulk rolls (SuperSeal - B)** or **pre-cut with a preattached closure (WS Configuration).** Separate closure tape is required for bulk material. The adhesive is protected from contamination by an inner liner.

Cutting Sleeve (Bulk Rolls)

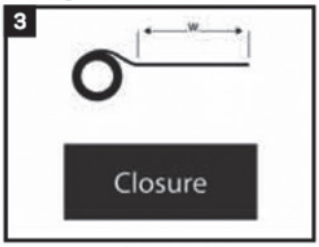


Cut the required length (L) of sleeve material from the bulk roll.

SuperSeal - B (L=circumference of joint casing + 120 mm)
Corner cuts: Underlap~20 X 30 mm

To ensure that the sleeve is ready for installation, make sure that there is no dirt or moisture on the sleeve and that the sleeve is not damaged.

Cutting Closure (Bulk Rolls)



Cut the required length (W) of closure material from the bulk roll.

Closure (W=sleeve width less 5mm):

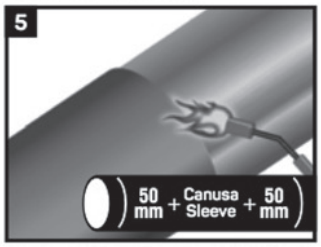
- 100 mm wide – up to PE 225
- 150 mm wide – up to PE 400
- 200 mm wide – PE 450 and above

To ensure that the closure seal is ready for installation, make sure that there is no dirt or moisture on the closure seal and that the closure seal is not damaged.

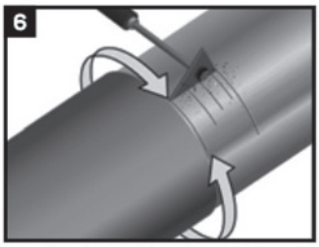
Equipment List

Propane tank, hose, torch & regulator Appropriate tools for surface abrasion: 40-60 grade sandpaper, knife, roller, triangular scraper, rags & approved solvent cleanser Digital thermometer with suitable probe Standard safety equipment; gloves, goggles, hard hat, etc.

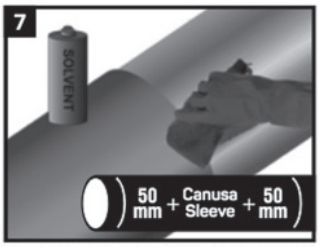
Surface Preparation



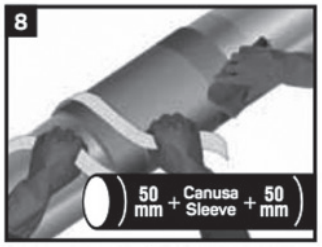
Dry the surface of the casing and jacket pipe (width of sleeve + 50 mm on each side) with moderate flame intensity. Clean the surface with a dry, grease and lint-free rag to remove any grease or dirt.



Clean the edges of the casing to remove any sharp corners and burrs, foam and dirt, using a triangular scraper.



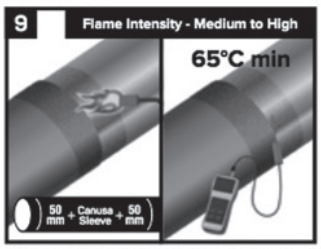
De-grease the surface (width of sleeve + 50 mm on each side) using a grease and lint-free rag soaked in ethanol (min. 94%) or other suitable solvent.



Roughen the surface (width of sleeve + 50 mm on each side) using 40-60 grade sandpaper.

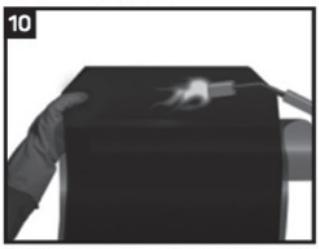
Clean the roughened surface to remove any polyethylene or sand particles, using a dry grease and lint-free rag.

Pre-Heat

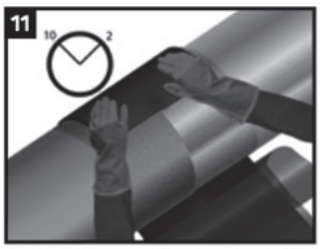


Using medium to high intensity flame, pre-heat and activate the surface to be covered with heat shrink sleeve and **min 50 mm** on each side of the sleeve to a minimum temperature of 65°C. The flame shall be kept perpendicular to the surface of the pipe and casing during pre-heating. Check the temperature around entire circumference of the pipe with a touch probe.

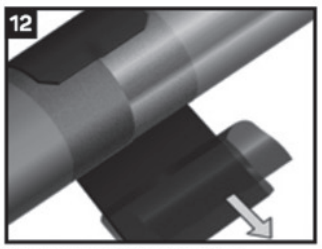
Sleeve Installation



Partially remove the release liner from the sleeve (~15 cm from the edge) and gently heat the adhesive along the underlap with a torch.



Centre the sleeve over the area to be sealed, so that the sleeve overlaps between the 10 and 2 o'clock positions. Press the underlap firmly into place.



Remove the remaining release liner.

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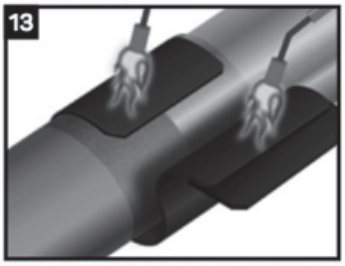
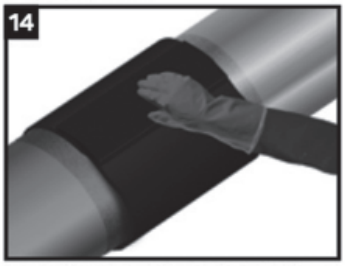
Sleeve Installation



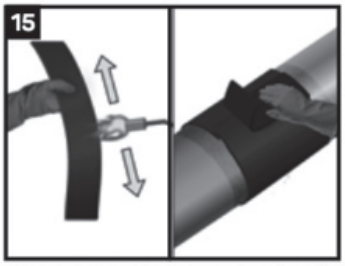
Wrap the sleeve loosely around the pipe, ensuring the appropriate overlap. Gently heat the backing of the underlap and then gently heat the adhesive side of the overlap.

*Sleeve with pre-attached closure shown.

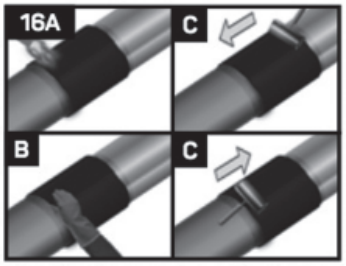
Closure Application: Pre-Attached



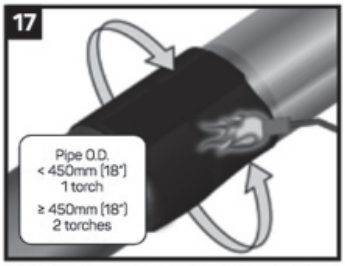
Pre-cut sleeves with pre-attached closure: Heat the adhesive side of the closure to activate the adhesive before pressing it firmly into place.



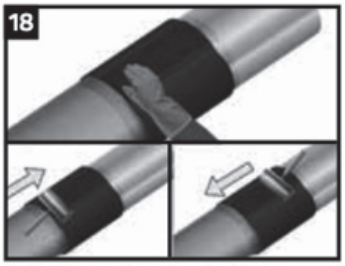
Bulk sleeve roll with separate closure: Heat the adhesive side of the closure to activate the adhesive before centering the closure over the overlap and pressing it firmly down into place.



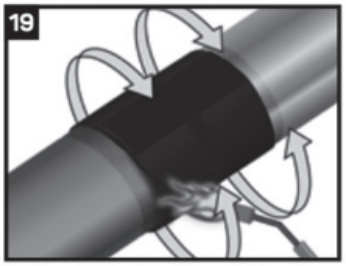
Heat the closure with a moderate flame intensity and pat it down with a gloved hand or a roller across its entire length. Make sure that the closure is firmly attached to the underlying sleeve and it is not lifting anywhere. Smooth any wrinkles by gently working them outward from the center of the closure with a roller or by patting the closure down.



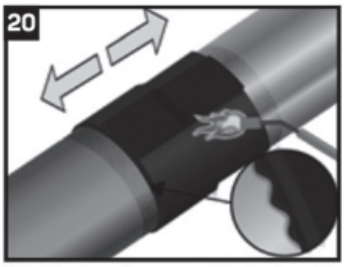
Using the appropriate torch, begin at the centre of the sleeve and heat circumferentially around the pipe. Use broad strokes. If utilizing two torches, operators should work on opposite sides of pipe.



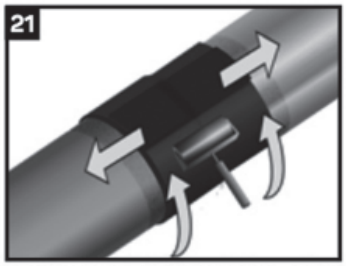
As the sleeve is being shrunk, the closure shall be occasionally patted down with a gloved hand or rolled to ensure that it is well bonded to the sleeve and it is not lifting anywhere.



Continue heating from the centre toward one end of the sleeve until recovery is complete. In a similar manner, heat and shrink the remaining side. At the same time continue to pat down or roll the closure to ensure its conformity to the sleeve along its entire width.

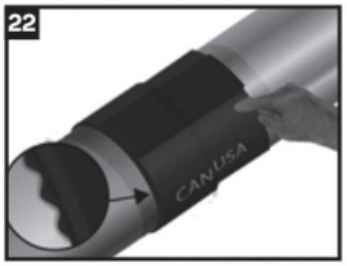


Shrinking has been completed when the adhesive begins to ooze at the sleeve edges all around the circumference. **Make sure the edges of the sleeve are not lifting anywhere around the circumference of the pipe.** Finish shrinking the sleeve with long horizontal strokes over the entire surface to ensure a uniform bond.

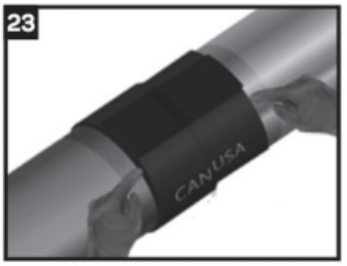


While the sleeve is still hot and soft, use a hand roller to gently roll the sleeve surface and push any trapped air up and out of the sleeve, as shown above. If necessary, reheat to roll out air. At the same time, the closure shall also be patted down with a gloved hand or rolled to ensure its full conformance to the underlying sleeve.

Quality Check



After shrinking, press down on the sleeve to ensure adhesive flow over the entire surface. Special attention should be given along the circumference between 4 and 8 o'clock and along the overlap area. **In order to avoid a channel formation at the step down, the sleeve should be pressed down and/or rolled. This will ensure adhesive flow at the step down, thus eliminating channel formation.** The shrinking has been completed when an adhesive ooze begins at the sleeve edges all around the circumference.



As a final check, ensure that the sleeve follows the entire contour of the surface and that there are no cold spots or burning of the sleeve. **Make sure the edges of the sleeve are not lifting anywhere around the circumference of the pipe.** This can be checked by feeling the edges all around the circumference of the sleeve. If there is edge lifting, the edge should be reworked with additional heat.

Recommendations

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After shrinking the sleeves, they should be left for as much time as possible prior to backfill (min. 1 hour, depending on ambient temperature). This ensures that the adhesive has cooled enough to reach the required peel and shear strength and that permanent sealing has been attained.

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