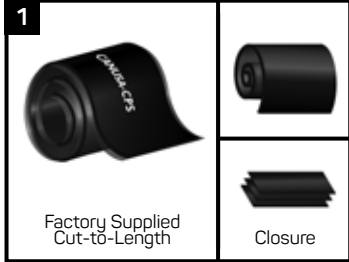


Aqua-Shield® AQW

Two-piece protective bulk roll with separate closure

Product Description



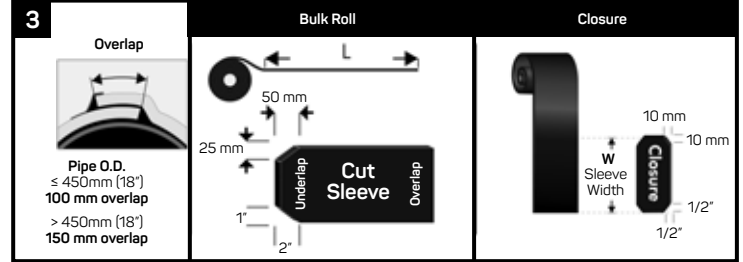
Aqua-Shield® AQW is typically shipped in pre-cut lengths, but is also available in bulk rolls. Closures are shipped pre-cut with the sleeves. The adhesive is protected from contamination by an inner liner.

Equipment List



Propane tank, hose, torch & regulator; Appropriate tools for surface abrasion and cleaning (60-80 grit sand paper and a power wire or hand wire brush); Knife, roller, clean white rags & approved cleaner; Digital thermometer with suitable probe; Standard safety equipment; gloves, goggles, hard hat, etc.

Product Preparation Guidelines



As a guideline, cut the required lengths of Sleeve material (L) and Closure material (W) from the bulk roll as follows

$$L = \text{Coated Pipe circumference} + \text{overlap dimension}$$

$$W = \text{Sleeve Width}$$

Refer to chart below for pipe O.D. and overlap dimensions

Ensure that the sleeve and closure are not damaged or contaminated. Trim corners as shown (optional).

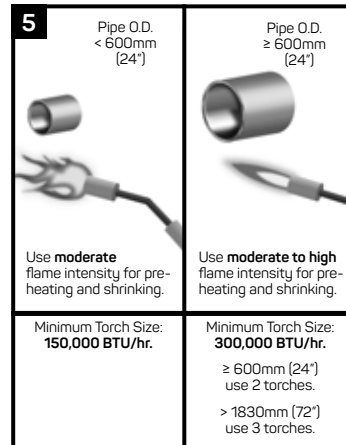
Surface Preparation



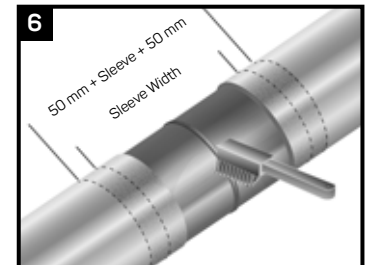
Clean exposed steel and adjacent pipe coating with an approved cleaner and a clean white rag to remove the presence of oil, grease, and other contaminants.

Pipe O.D.	Overlap
< 450 mm (18")	100 mm (4")
450 mm - 1500 mm (18"-60")	150 mm (6")
1500 mm - 3800 mm (60"-150")	300 mm (12")
>3800 mm (150")	600 mm (24")

Flame Intensity & Torch Size



Surface Preparation

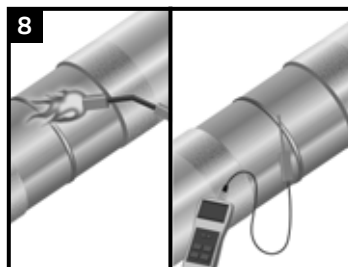


Ensure that the pipe is dry before cleaning. The bare steel joint area must be cleaned to a minimum of St2, wire brush finish. Remove all loose rust, mill scale, loose coating, etc. Lightly abrade the pipe coating adjacent to the weld area with 60-80 grit sand paper, to a distance of 50mm (2") beyond each end of the sleeve width.

Pre-Heat



Wipe clean or air blast the steel and pipe coating to remove foreign contaminants.



Pre-heat the joint area using propane torches to 105-140°F. The bare steel area should be heated to 140°F. If the pipe is Polyurethane coated, it should be heated to 140°F as well. If the pipe is tape coated, do not heat the tape coating to more than 110°F or damage may occur. In cold or windy conditions, the preheat temperatures for steel and Polyurethane may be increased to 160°F.

On pipe diameters greater than 24" , use two torches on opposite sides. On pipe diameters of 72" and larger, a third torch is recommended. Apply the sleeve rapidly to minimize loss of pre-heat.

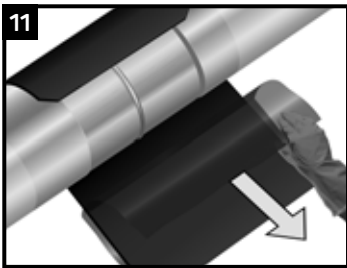


If required, changes in profile at butt-weld straps and bell & spigot details can be filled with an approved filler tape sealant prior to sleeve application.

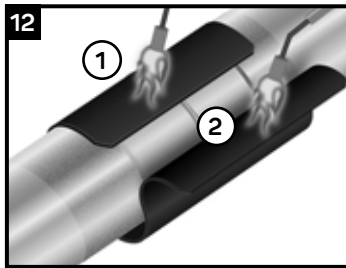
Sleeve Installation



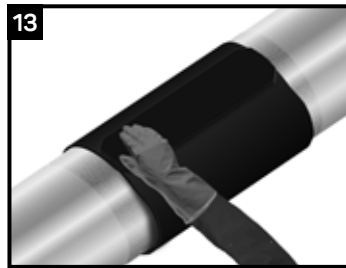
Partially remove the release liner and gently heat the underlap approximately 150mm (6") from the edge. Sleeve temperature shall be at least 18°C (65°F) at time of installation.



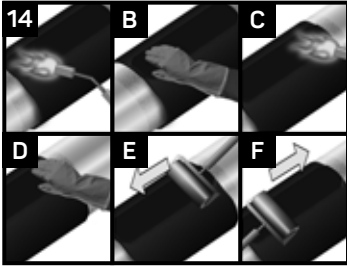
Centre the sleeve over the joint so that the sleeve overlaps between the 10 and 2 o'clock positions. Press the underlap firmly into place and remove the remaining release liner.



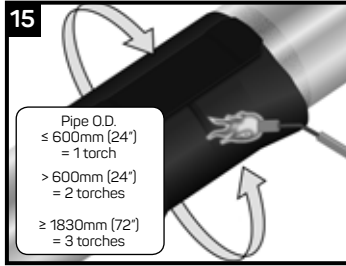
Wrap the sleeve loosely around the pipe, ensuring the appropriate overlap. Gently heat the backing of the underlap and the adhesive side of the overlap. Press the overlap into place.



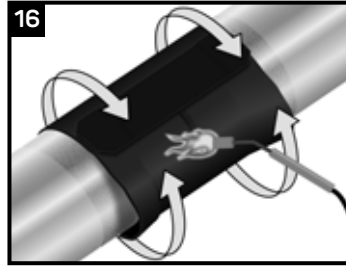
Remove any release liners from the closure. Centre the closure on the overlapping sleeve. Press down firmly.



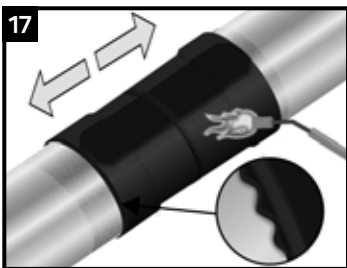
Gently heat the closure and pat it down with a gloved hand. Repeating this procedure, move from one side to the other. Smooth any wrinkles by gently working them outward from the centre of the closure with a roller.



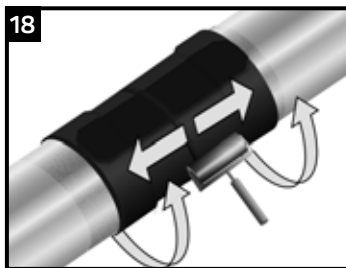
Using the appropriate sized torch, begin at the centre of the sleeve and heat circumferentially around the pipe. Use broad strokes. If utilizing two torches, operators should work on opposite sides of pipe.



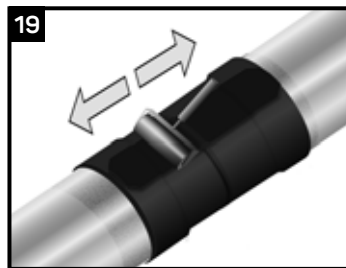
Continue heating from the centre toward one end of the sleeve until recovery is complete. In a similar manner, heat and shrink the remaining side.



Shrinking has been completed when the adhesive begins to ooze at the sleeve edges all around the circumference. Finish shrinking the sleeve with long horizontal strokes over the entire surface to ensure a uniform bond.

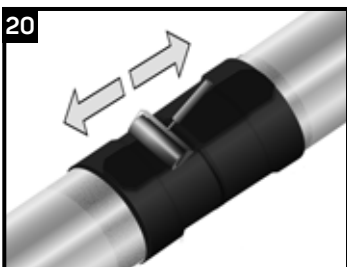


While the sleeve is still hot and soft, use a hand roller to gently roll the sleeve surface and push any trapped air up and out of the sleeve, as shown above. If necessary, reheat to roll out air.



Continue the procedure by also firmly rolling the closure with long horizontal strokes from the weld outwards.

Inspection



Visually inspect the installed sleeve for the following:

- Sleeve is in full contact with the steel joint.
- Adhesive flows beyond both sleeve edges.
- No cracks or holes in sleeve backing.

Backfilling Guidelines

After shrinking is complete, allow the sleeve to cool prior to backfilling. To prevent damage to the sleeve, use selected backfill material, (no sharp stones or large particles) otherwise an extruded polyethylene mesh (Canusa's WrapidShield-PE) should be used.

Storage & Safety Guidelines

To ensure maximum performance, store Canusa products in a dry, ventilated area. Keep products sealed in original cartons and avoid exposure to direct sunlight, rain, snow, dust or other adverse environmental elements. Avoid storage at temperatures above 35°C (95°F) or below -20°C (-4°F). Product installation should be done in accordance with local health and safety regulations.

These installation instructions are intended as a guide for standard products. Consult your Canusa representative for specific projects or unique applications.

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Quality Management system registered to ISO 9001

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