# Aqua-Shield™ AQW-WAB System

## Dual, Two-piece protective sleeves with separate closures (W-A-B Option)

### Product Description

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Factory Supplied Cut-to-Length

Closure

Aqua-Shield™ AQW is typically shipped in bulk rolls. The adhesive is protected from contamination by an inner liner. Closures are shipped either in bulk rolls or pre-cut.

### Storage & Safety Guidelines

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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 prolonged 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.

### Equipment List

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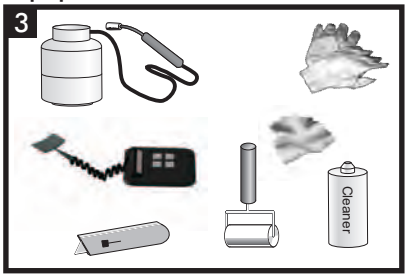


Propane tank, hose, torch & regulator
Appropriate tools for surface abrasion
Knife, roller, rags & approved cleaner
Digital thermometer with suitable probe
Standard safety equipment; gloves, goggles, hard hat, etc.

### Flame Intensity & Torch Size

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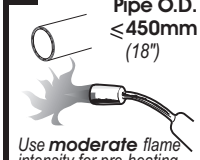
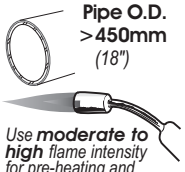
| Pipe O.D. ≤450mm (18") | Pipe O.D. >450mm (18") |
|---|---|
|  Use **moderate** flame intensity for pre-heating and shrinking. |  Use **moderate to high** flame intensity for pre-heating and shrinking. |
| Minimum Torch Size: **150,000 BTU/hr.** | Minimum Torch Size: **300,000 BTU/hr. >1500mm (60") use 2 torches.** |

### Surface Preparation

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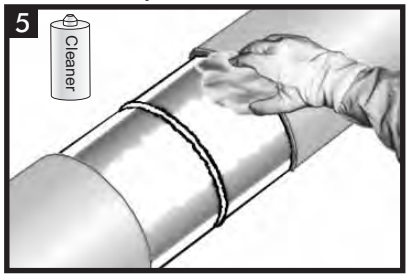


Ensure that the coating edges are beveled to 30°. Clean exposed steel and adjacent pipe coating with cleaner to remove the presence of oil, grease, and other contaminants if present.

| 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") |

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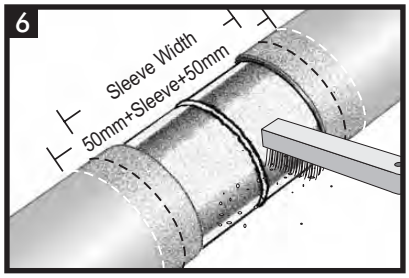


Ensure that the pipe is dry before cleaning. The steel joint area must be cleaned to a minimum of a wire brush finish. It is recommended to lightly abrade (with a hand tool) the pipe coating adjacent to the weld area to a distance of 50mm (2") beyond each end of the sleeve width.

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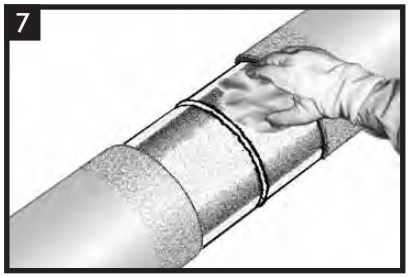

Wipe clean or air blast the steel and pipe coating to remove foreign contaminants.

### Pre-Heat

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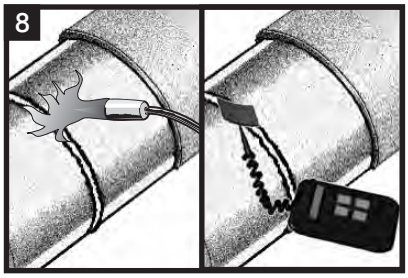

Pre-heat the steel joint area using propane torches such that no moisture is visible (typically temperatures of 40-60°C *(100-140°F)* are recommended on sleeve area). On pipe diameters greater than **1220mm (48")**, use two torches on opposite sides. Apply the sleeve rapidly to minimize loss of pre-heat.

### Underlay Installation

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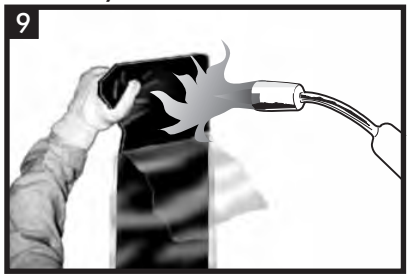

Partially remove the release liner and **gently** heat the underlap approximately 150mm (6") from the edge.

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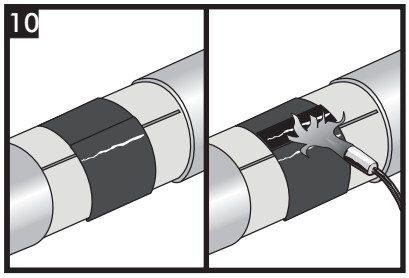

Remove the remaining release liner and loosely wrap the underlay sleeve around the pipe, ensuring the overlap is sufficient. Centre the closure on the overlapping sleeve and apply by warming with the torch and pressing down firmly.

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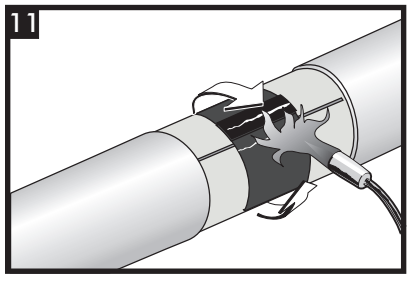

Using the appropriate torch, use broad strokes and heat circumferentially around the pipe to recover and adhere the underlay sleeve.

## Sleeve Installation

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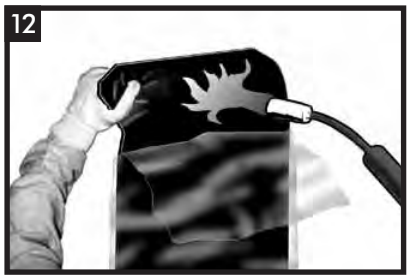

Partially remove the release liner and gently heat the underlap approximately 150 mm (6") from the edge.

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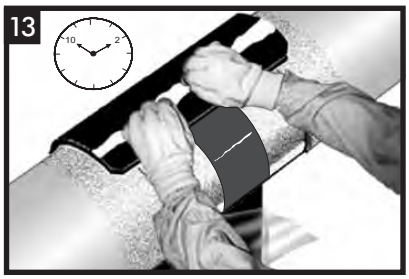

Centre the sleeve over the joint so that the sleeve overlaps between the 10 and 2 o'clock positions. Press the underlap firmly into place.

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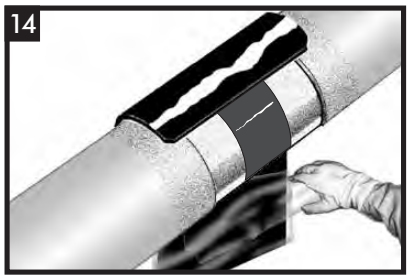

Remove the remaining release liner and the hold-down strip tape on the underlap of the closure.

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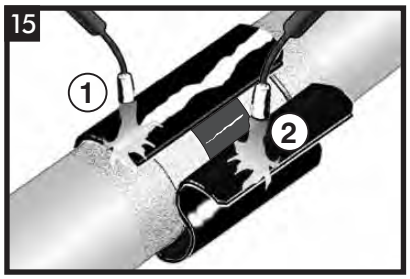


Wrap the sleeve loosely around the pipe, ensuring the appropriate overlap. Gently heat the backing of the underlap and the adhesive side of the overlap. Press the overlap into place.

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

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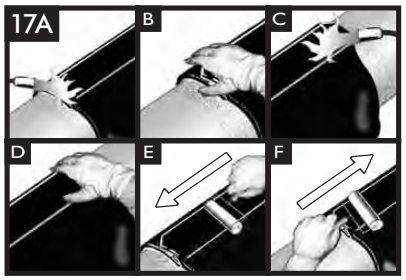


Gently heat the closure and pat it down with a gloved hand. Repeating this procedure, move from one side to the other. Smooth any wrinkles by gently working them outward from the centre of the closure with a roller.

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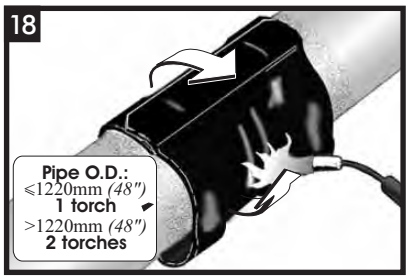


Using the appropriate torch, begin at the centre of the sleeve and heat circumferentially around the pipe. Use broad strokes. If utilizing two torches, operators should work on opposite sides of pipe.

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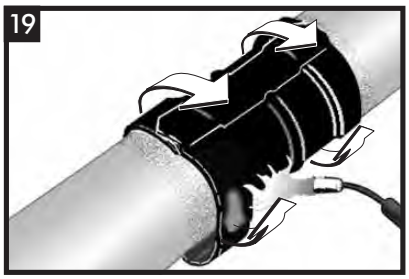

Continue heating from the centre toward one end of the sleeve until recovery is complete. In a similar manner, heat and shrink the remaining side.

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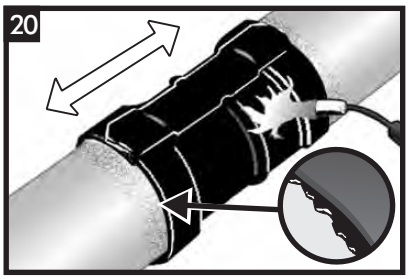

Shrinking has been completed when the adhesive begins to ooze at the sleeve edges all around the circumference. Finish shrinking the sleeve with long horizontal strokes over the entire surface to ensure a uniform bond.

## Inspection

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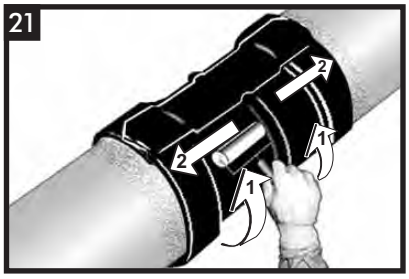


While the sleeve is still hot and soft, use a hand roller to gently roll the sleeve surface and push any trapped air up and out of the sleeve, as shown above. If necessary, reheat to roll out air.

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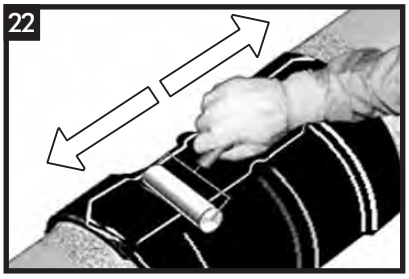

Continue the procedure by also firmly rolling the closure with long horizontal strokes from the weld outwards.

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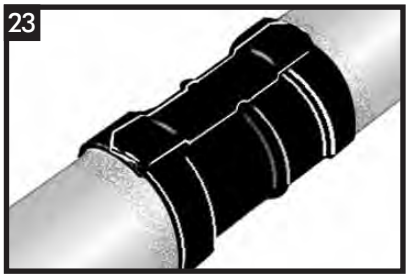

Visually inspect the installed sleeve for the following:

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

## Backfilling Guidelines

24 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 or other suitable shield should be used.