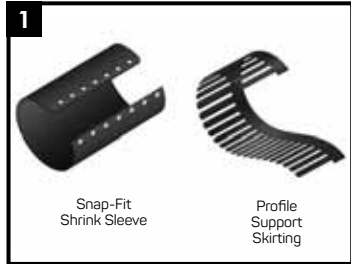


Casing Seal Kit (CSK)

High shrink sleeve for sealing the ends of casing/carrier pipe transitions

Required Kit Components



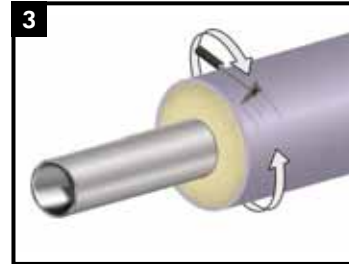
Canusa Casing Seal Kits - CSK are shipped in pre-cut sizes with a snap-fit closure and a polypropylene profile support skirting. The adhesive is protected from contamination by an inner release liner.

Equipment List

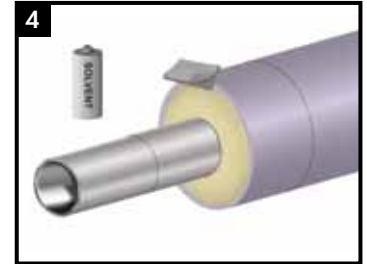


Propane tank, hose & regulator. Appropriate tools for surface abrasion. Knife, roller, rags & approved solvent cleanser. Temperature measuring device. Hammer, small flat-head screw driver, needle-nose pliers. Standard safety equipment; gloves, goggles, hard hat, etc.

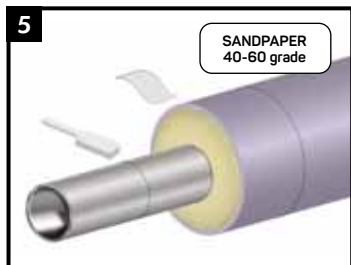
Surface Preparation



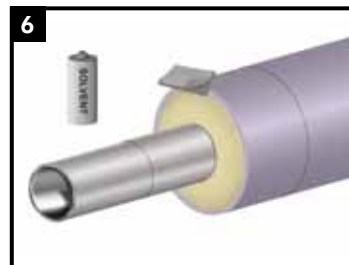
Using a triangular scraper, clean the edges of the casing pipe to remove any burrs and dirt from the sealing area.



Clean all exposed steel and adjacent casing pipe with a solvent cleanser to remove the presence of oil, grease and other surface contaminants.

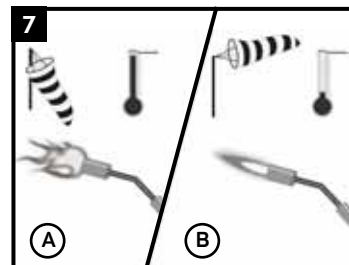


Using a wire brush or sandpaper (40-60 grade), remove all loose surface rust and dirt from the carrier and casing pipes.



Clean all exposed steel and adjacent casing pipe with a solvent cleanser to remove the presence of oil, grease and other surface contaminants.

Flame Intensity

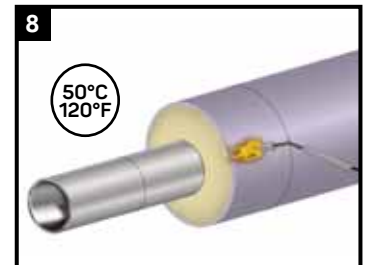


Adjust the flame according to outside conditions.

- Use bluish-yellow flame for low wind, higher temps.
- Use blue flame for high wind, lower temperatures.

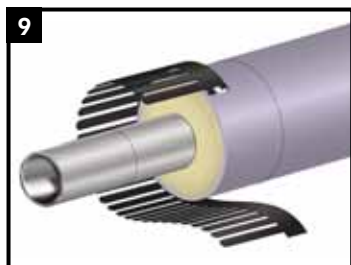
Always aim the torch perpendicular to the pipe and move in a circumferential direction.

Pre-Heat

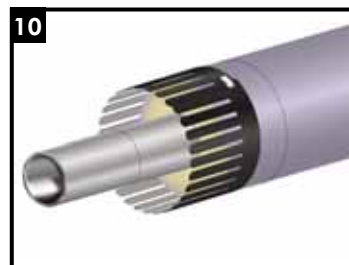


Pre-heat the casing and carrier pipes to 50°C (120°F) using an appropriate heating device to remove any surface moisture. Use a temperature measuring device to ensure the correct temperature has been reached.

Profile Support Skirting



Place the profile support skirting on the casing pipe with the fingers pointing towards the carrier pipe. Using the tape provide, attach the profile support skirting to the casing pipe. Wrap the profile support skirting tightly around the pipe.



Finish wrapping the profile support skirting around the casing pipe. Use the supplied tape to firmly attach it to the casing pipe.

Sleeve Preparation



Remove the release liner from the sleeve.

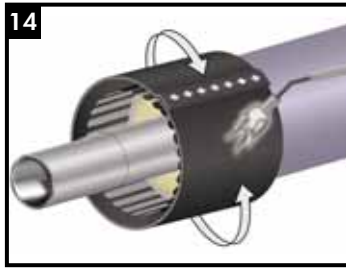
Sleeve Installation



Centre the two middle clips on the edge of the casing pipe and wrap the sleeve around the joint to match the insert holes over the clips.



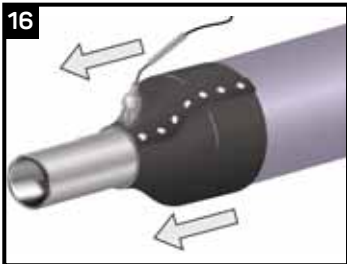
Insert the clips through the holes, push down the closure area to conform to the joint profile. Insert the flat-head screwdriver into the clips and flatten clips with gentle blows from a hammer (use needle-nose pliers if clips become bent or irregularly shaped).



Using broad strokes, heat the sleeve circumferentially around the pipe starting with the end of the casing pipe.

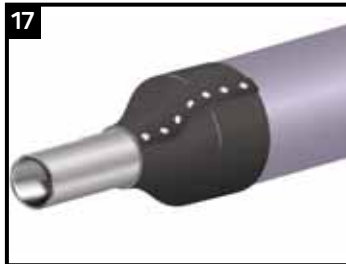


Continue heating from the centre towards the far end of the casing pipe until sleeve recovery is complete and adhesive has oozed out from the side of the sleeve.



In a similar manner, heat and shrink the sleeve around the carrier pipe until sleeve recovery is complete.

Inspection



Visually inspect the sleeve to ensure:

- it has conformed to the casing profile
- it is not damaged
- adhesive has oozed out from all sides.

Backfilling Guidelines

After shrinking is complete, allow the sleeve to cool to below the intended operating temperature of the pipeline before 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.

Product Selection Guide

The product selection chart shown here is intended as a guide for standard products. Consult your Canusa representative for specific projects or unique applications.

Available Sizes and Dimensions	Casing DN Size	CSK Sleeve*	Size Range (mm) supplied/recovered	Layflat Length mm
	63	CSK-90/40-525-BK	90/40	280
	90, 110	CSK-125/50-525-BK	125/50	400
	125, 140	CSK-165/65-525-BK	165/65	520
	160, 180	CSK-200/80-525-BK	200/80	640
	200, 225	CSK-250/100-860-BK	250/100	925
	250, 280	CSK-320/130-860-BK	320/130	1010
	315, 355	CSK-370/150-860-BK	370/150	1155
	400	CSK-450/180-860-BK	450/180	1400
	450	CSK-500/200-860-BK	500/200	1555

* 525 and 860 mm sleeve widths are available.

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 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.

Canusa-CPS A division of Shawcor Ltd.

Head Office

25 Bethridge Road
Toronto, ON, Canada M9W 1M7
Tel: +1 416 743 7111
Fax: +1 416 743 5927

Canada

Dome Tower St. 2200,
333-7th Avenue SW
Calgary, AB, Canada T2P 2Z1
Tel: +1 403 218 8207
Fax: +1 403 264 3649

Americas

5875 N. Sam Houston Pkwy W.,
Suite 200
Houston, TX, USA 77086
Tel: +1 281 886 2350
Fax: +1 281 886 2353

Middle East

Plot # 37-WR43, Sector no.: ICAD III
Musaffah South, PO Box 2621
Abu Dhabi, The United Arab Emirates
Tel: +971 2 204 9800

Europe, Africa & Russia

Dellaertweg 9-E, Gebouw
"Le Carrefour"
2316 WZ Leiden,
The Netherlands (NL)
Tel: +31 71 80 802 70
Fax: +31 71 80 802 71

Asia-Pacific

101 Thomson Road,
#11-03 United Square
307591 Singapore
Tel: +65 6749 8918
Fax: +65 6749 8919

Quality Management system registered to ISO 9001

Canusa warrants that the product conforms to its chemical and physical description and is appropriate for the use stated on the installation guide when used in compliance with Canusa's written instructions. Since many installation factors are beyond our control, the user shall determine the suitability of the products for the intended use and assume all risks and liabilities in connection therewith. Canusa's liability is stated in the standard terms and conditions of sale. Canusa makes no other warranty either expressed or implied. All information contained in this installation guide is to be used as a guide and is subject to change without notice. This installation guide supersedes all previous installation guides on this product. E&OE

Part No. 99060-001
IG_CSK_rev012