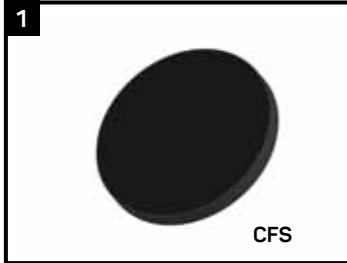


Canusa Foam Seal (CFS)

Seal patch for casing foaming holes

Product Description



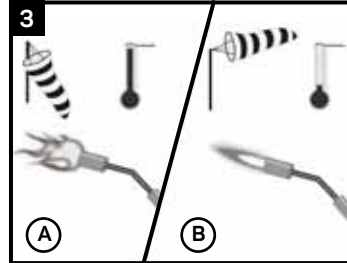
The Canusa Foam Seal (CFS) is a cross-linked casing foaming hole patch.

Equipment List



Propane tank, hose, torch & regulator; Sandpaper (40-60 grade) or wire brush; Knife, roller, rags & ethanol (min. 94%) cleanser; Temperature measuring device, grater, triangular scraper; Standard safety equipment; gloves, goggles, hard hat, etc.

Flame Intensity

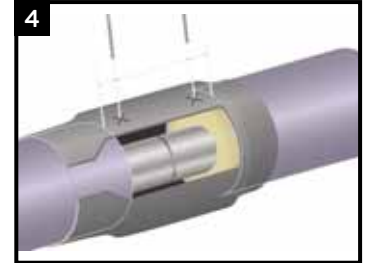


Adjust the flame according to outside conditions.

- 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.

Foaming



Drill one foaming hole over the pressure testing hole. Drill the other foaming hole, if required (as close as possible to the cutback).



Foam the joint according to the manufacturer's guideline using standard vent plugs to seal the foaming holes.

Plugs



After the foam has hardened, remove the vent plugs and weld the standard weldable plugs.

Foam Hole Preparation



Using a grater, sand down the plugs bringing them flush to the surface of the casing.

Casing Surface Preparation



De-grease the surface of the casing using a grease and lint free rag soaked in ethanol.



Roughen the surface around the plug using 40-60 grade sandpaper or wire brush.



Use a grease and lint-free rag to remove any polyethylene or sand particles caused by roughening the surface.

Pre-Warm

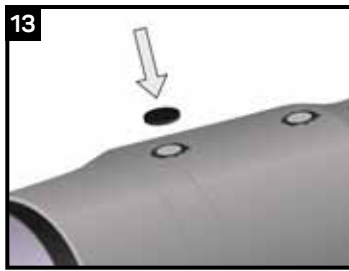


Pre-warm the casing surface around the foaming hole to 40°C. Check the temperature using a temperature measuring device.

CFS Installation



Heat the adhesive side of the CFS with a medium intensity flame until the adhesive turns glossy thus indicating that the adhesive has been activated.



Place the CFS onto the pre-cleaned and pre-warmed section of casing directly over the centre of the foaming hole.



Using a gloved hand or roller, pat down the CFS for about 5 seconds, or until the entire CFS surface makes good contact with the casing.



Using a medium flame, heat the backside of the CFS until the adhesive oozes from the edge of the patch.



Using a roller and a gentle flame, smooth out the CFS surface.



The CFS has been fully installed when adhesive can be seen around the entire circumference.

Repeat steps 12-16 to patch the other foaming hole.

Installation Complete



The CFS has been fully installed when adhesive can be seen around the entire circumference. Visually inspect that the patch for any breaks or holes.

Backfilling Guidelines

After shrinking is complete, the Canusa Foam Seal (CFS) should be left for as much time as possible prior to backfilling (minimum 30 minutes to 1 hour). This ensures that the adhesive has cooled enough and that sealing is achieved. To prevent damage to the CFS, use selected backfill material (no sharp stones or large particles).

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. 99060-029

IG_CFS_rev013