

# COVALENCE® FCWS-F

## Product Information

**Product description:** The FCWS-F is a wrap-around heat-shrinkable sleeve, with a specially designed zipper closing system, allowing a fast and simple installation. FCWS-F products are used for protection of flanges, adaptors, collars and couplers. The fiberglass-reinforced woven backing gives the FCWS-F a high mechanical resistance as well as a high recovery capacity. In addition to the sleeve, a cardboard sheet is supplied to keep the flange nuts & bolts clean, allowing easy re-entry and disassembly when necessary.

Construction: two-layer system.

- **First layer:** Visco-elastic sealant.
- **Second layer:** Fiberglass reinforced, radiation cross-linked, polyethylene backing.

FCWS-F is installed using standard gas torches. The installation is carried out directly on the cleaned and prepared pipe surface and flange. After preheating, the corrugated cardboard sheet is wrapped around the flange to be sealed. The heat-shrinkable sleeve is positioned centrally over the flange and closed, using the zipper closure. When heated above 125°C (257°F), the sleeve shrinks tightly around the substrate. During recovery, the adhesive softens and flows to form a tight bond. The bond strength builds up during cool down and is fully retained after completion of the job.

### Features:

- Backing with integrated fiberglass reinforcement.
- 65% shrink ratio – conforms to high transitions.
- High mechanical resistance backing.
- No primer required.
- Specially formulated sealant.
- Sealing adhesive automatically flows and repairs minor mechanical damages.
- Low preheat sensitivity & proven functionality.
- Zipper closure system.
- No special equipment required.

### Benefits:

- Tough and long lasting. Provides a high recovery capacity.
- Reduces inventory & logistics costs.
- Resists abrasion, impact and penetration.
- No drying time and easy application.
- Ensures a strong bond & tight seal to virtually any substrate. Maintains its elasticity and sealing characteristics over a wide temperature range.
- "Self-healing effect."
- Simple & fast installation.

## Product properties

### Backing

Property	Test method	Typical value
Burstring strength	DIN 30672	3500 N

### Adhesive

Property	Test method	Typical value
Softening point	ASTM E-28	92° C (198°F)
Shear strength	DIN 30672	8 N/cm <sup>2</sup>

### Installed sleeve

Property	Test method	Typical value
Peel strength	DIN 30672 @ 100 mm/min EN12068 @ 10 mm/min	25 N/cm  0,9 N/mm

## Product thickness

Backing as supplied	1.30 mm (0.051 in)
Adhesive as supplied (mm)	1.2 mm (0.047 in)

## Ordering information

Covalence® FCWS-F type products are available as a kit containing

- A sleeve (pre-cut sleeve with zipper closure)
- A corrugated cardboard sheet

### Example FCWS-F-DN1600-600

Designation	Standard ordering options
DN1600	Outside pipe diameter DN50 (2.375) – DN2000 (80")
600	Sleeve width (mm) 12 (300 mm), 17" (425 mm), 24" (600 mm)

## General Information

<b>Installation guide</b>	For proper product installation, see latest installation instruction.
<b>Handling</b>	Handle with care. Keep boxes upright.
<b>Storage</b>	Store indoor, clean and dry, away from direct sunlight in a cool place below +50°C. Unlimited shelf life.
<b>Documentation</b>	Extensive information is available on our website. Application instructions and other documentation can be obtained by contacting our head office, from our local distributor or by sending an email to <a href="mailto:info@sealforlife.com">info@sealforlife.com</a>
<b>Certified staff</b>	Application of the described coating system should be carried out by certified personnel.

## Product selection guide

Max operating temperature	50°C (122°F).
Compatible line coatings	PE, PP, FBE, Coal Tar, Tape, Asphalt & Plastics
Min. preheat temperature	50°C (122°F)
Recommended pipe preparation	ST3