

CCS-DHEC

Wrap-around sealing end cap for retrofitting pipe ends of pre-insulated pipes.

Adhesive: High temperature high viscosity sealant coating.

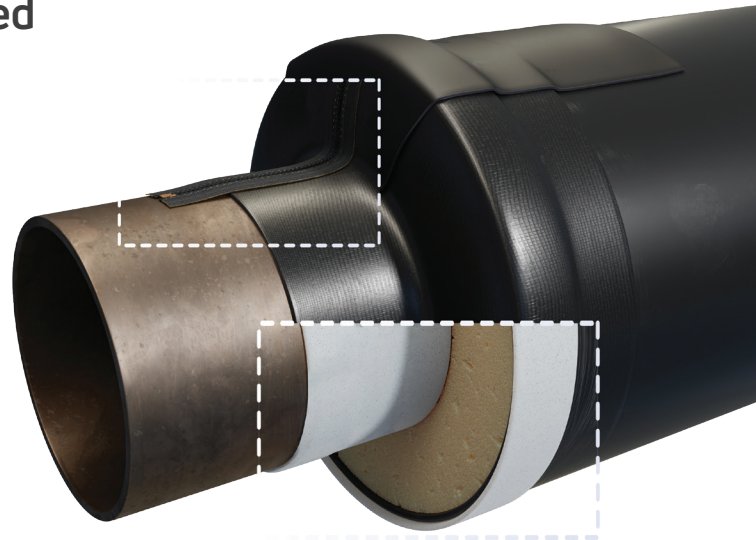
Backing: Heat-shrinkable, radiation cross-linked, high density polyethylene with fibre glass reinforcement.

CCS-DHEC is a heat-shrinkable pipe end seal preventing water ingress in the pipe insulation between casing and service pipe resp. front end photo degradation during transport, storage and construction of the pipelines.

CCS-DHEC is used for pre-insulated pipes carrying fluids at continuous operating temperatures of up to 110°C (230°F) . It is the perfect end seal at all house connections and man holes protecting the integrity of the thermal insulation.

CCS-DHEC is zipper-closed, its wrap-around design allows installation after welding or repairing similar applications. The fibre glass reinforced woven structure generates a high expansion ratio to accommodate the diameters of jacket and service pipe. The elastomeric adhesive is specially designed for performance at high temperature conditions. The uncoated edge prevents the sleeve from slipping off the casing pipe during installation.

The installation is carried out directly on the prepared and preheated pipe surface. CCS-DHEC is wrapped around the transition and zipper-closed. Heating with a regular gas torch lets the high shrink ratio backing shrink and tightly fit one outlet onto the pipe jacket and the other onto the service pipe. During recovery, the adhesive softens and flows to form an intimate bond, providing and maintaining a waterproof seal of the pipe front end.



Applications



Pre-Insulated Pipes



Repairs & Rehabilitation



End Seal



High Temperature

Product Features/Benefits

High Shrink Ratio Backing

- Copes easily with the transition of jacket and service pipe. Accommodates easily to dimensional variations and pipe ovality. One product covering several different pipe sizes, i.e. simple inventory & logistics.

High Performance Against Water Ingress

- In case of transport, storage and construction: assures permanent waterproof seal keeping thermal insulation intact all time long! In case of leakage: limits insulation degradation to one pipe length, i.e. reduced repair costs!

Wrap-around System with Zipper Closure

- Allows for installation after welding of service pipe ("just-in-time" or as repair), i.e. simple and cost effective!

No Special Equipment Required

- Keeps installation costs low.

Ordering Information

CCS-DHEC type products are available:

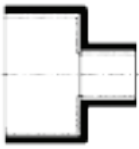
- as Uni-sleeve (pre-cut sleeve with zipper closure & protective closure pre-attached)

Example: CCS-DHEC-128-48

CCS-DHEC <u>XXX/YYY</u>	
max. O.D. jacket pipe ↑	↑ min. O.D. service pipe
Standard Ordering options CCS-DHEC	
110-26, 128-48, 163-60, 186-70, 200-76, 225-89, 250-108, 280-133, 315-168, 400-219, 560-273, 710-355, 900-457, 1200-610	

Bigger sizes on request - Please contact your Covalence representative.

Operating Characteristics	Test Method	Typical Values
Max. operating temperature		110 °C
Compatible		PE outer jacket Steel, Copper
Min. preheat temperature		60°C
Recommended pipe preparation		Cleaning & Abrading
Soil stress restrictions		None
Backing Properties		
Bursting strength	ISO 3303	2500 N
Cold crack	ISO 4675	-60°C
Thermal ageing	ISO 188	
Bursting strength @ 150°C, 7 days	ISO 3303	> 2000 N
Adhesive Properties		
Softening Point	ASTM E28	150°C
Shear strength	ASTM D-1002 @ 50 mm/min	30 N/cm ²
Peel strength	ASTM D-1000 @ 50 mm/min	30 N/cm
Sleeve Properties		
Special functional tests are described in the technical specification RUD 6050.		
Thickness		
Backing (as supplied)		0.051 in. (1.3 mm)
Backing (fully free recovered)		0.128 in. (3.25 mm)
Adhesive (as supplied)		0.039 in. (1.0 mm)



Application Table

Selection of CCS-DHEC in function of service & casing pipe combination

Service pipe OD (mm)	Casing Pipe OD (mm)														
	90	95	110	125	128	140	150	163	180	186	200	225	250	266	280
27															
34	110/26*														
42															
48			128/48												
54															
60						163/60									
70								186/70							
76										200/76					
89											225/89				
108												250/108			
114															
133															
139															
168															280/133
193															

* CCS-DHEC-110/26: conical cut sleeve, see special installation instruction CCS-DHEC/C

Service pipe OD (mm)	Casing Pipe OD (mm)														
	297	315	334	355	400	450	500	560	630	710	800	900	1000	1100	1200
168															
193	315/168														
219															
273			400/219												
324															
355						560/273									
406															
457								710/355							
508															
610										900/457					
711															
813															1200/610
914															
1016															

For proper product installation, see latest installation instruction.
Bigger sizes on request - Please contact your Covalence representative.



Quality Management system registered to ISO 9001

**Seal For Life Industries
Stopaq B.V.**

Stadskanaal, the Netherlands

Tel: +31 599 696 170

**Seal For Life Industries
B.V.**

Westerlo, Belgium

Tel: +32 14 722 500

**Seal For Life Industries
US LLC**

San Diego, USA

Tel: +1 858 633 9785

**Seal For Life Industries Mexico
S de R.L. de C.V.**

Tijuana, Mexico

US Tel: +1 858 633 9785
MX Tel: +1 52 664 547 4300

**Seal For Life
India Private Ltd.**

Baroda, India

Tel: +91 2667 264 721

Further information is available on our website www.sealforlife.com, or by sending an inquiry to info@sealforlife.com

Seal for Life 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 Seal for Life'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. Seal for Life's liability is stated in the standard terms and conditions of sale. Seal for Life 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