

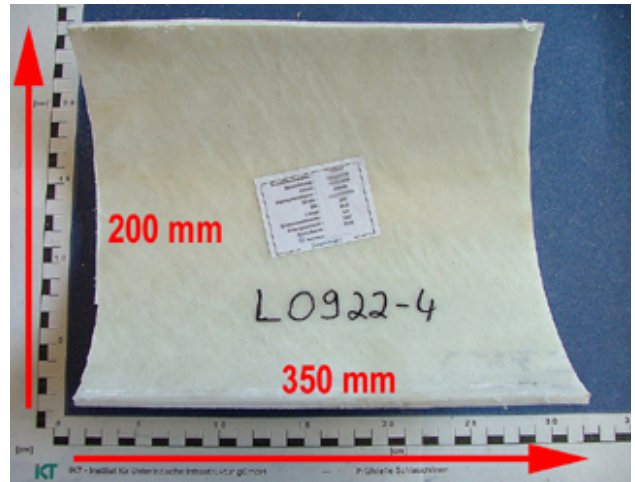
# CIPP liners: Site samples

CIPP liners: Site samples



IKT is accredited with the DAkkS National Accreditation Body for tests on CIPP liners and plastics

A **representative sample** of an installed liner needs to be taken on-site before testing in the IKT laboratory. Samples of CIPP liners which are cured by UV light (“UV-curing liners”) should be packed in light-tight film or foil before being taken out of the manhole.



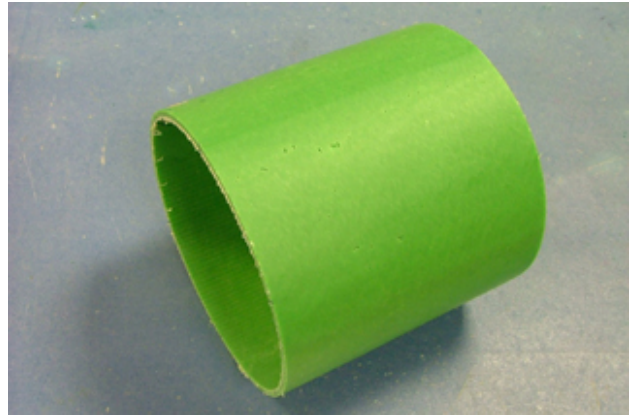
Site sample of CIPP liner: 200 mm x 350 mm

## CIPP liners larger than DN 200

The necessary dimensions of such liner samples are:

- Total wall thickness **up to 10 mm**:  
Sample must measure not less than 200 mm x 350 mm
- Total wall thickness **greater than 10 mm**:
  - Circumferential direction: 20 x total wall thickness
  - Longitudinal direction: 350 mm

## CIPP liners up to DN 200 and sewer lateral liners



Sewer lateral liner site sample

A complete circular ring should be taken for the vertical-compression test if on-site circumstances permit this.

Necessary sample length:

**Pipe diameter + 50 mm**

Examples:

- Pipe DN 150: Sample length = 200 mm
- Pipe DN 200: Sample length = 250 mm


## DSC analysis



Sample for DSC analysis: 20 mm

diameter necessary

A round liner sample of approx. **20 mm diameter** is sufficient as a sample for DSC analysis performed on epoxy resins.

IKT gGmbH Erdstrich 1 D-15906 Gehrassendorf T: +49 203 17905-0 F: +49 203 17905-86		<b>APS Sample data sheet</b> (Bitliner Testing Institutes Workgroup) <b>for materials testing of CIPP liners</b>			
<input type="checkbox"/> <b>Initial test</b>		<input type="checkbox"/> <b>Repeat test</b>		to Test Report No.:	
Supervised by (Name):		Sampling Date: Time:		Sampling continued (compare with management performance) Block capital: Signature:	
<b>Specimen identification</b>					
Client material-testing Client:		Material ID:			
Construction project:		Line designation:			
Company performing Manufacturer (CIPP):		Specimen designation:			
Material		Condition of old pipe		Date of installation	
Pipe geometry		Sampling point		Sampling position	
<b>Required short-term properties as per client's information</b>					
Resisting modulus of elasticity $E_{[MPa]}$		Circular mod. of elast. $E_{[MPa]}$			
Bending stress $\sigma_{[MPa]}$		Initial ring stiffness $S_{[kN/m]}$			
Structural load bearing wall thickness $t_{[mm]}$		Max. creep strain $\epsilon_{[‰]}$			
Reduction factor for continuous loads $K_c$		Density $\rho_{[kg/m^3]}$			

Sample data sheet

## Sample data sheet Materials testing of CIPP liners

Please enclose this form when you send us your samples. This ensures that your sample can be correctly identified.

Please complete a sample data sheet for each individual site sample you send us.

Sample data sheet for CIPP liners

Testing CIPP liner



To  
IKT - Institute for Underground Infrastructure  
Exterbruch 1  
45886 Gelsenkirchen  
Germany



by e-mail: [CIPP@ikt.institute](mailto:CIPP@ikt.institute)

Please send us an offer for testing CIPP liner samples

Name of project site: \_\_\_\_\_  
Expected number of specimen: \_\_\_\_\_  
Expected period of project site: \_\_\_\_\_

Request for quotation CIPP  
liners

## Request for quotation Materials testing of CIPP liners

Do you require standard or expanded-scope tests?

We will provide a quotation tailored to your needs, to ensure that your QA requirements are met.

Request for quotation CIPP liners



CIPP liner test standards

## CIPP liner test standards

The minimum scope of testing for CIPP liners consists of the three-point bending test for determination of modulus of elasticity and bending stress, and the water tightness test.

Further tests are available, as defined in the ZTV Materials Testing (CIPP liner test standards), which make it possible to determine the quality of CIPP liners even more precisely.

CIPP liner test standards

## Taking of a sample



CIPP liner: Taking a sample in a manhole

## Contact

Deutsches  
Institut  
für  
Bautechnik

DIBt

The IKT is a DIBt-accredited

test centre for building  
products

**Dieter Homann**

**Dipl.-Ing.**

T: 0209 17806-24

E: homann@ikt.de



IKT is accredited with the  
DAkkS National Accreditation  
Body for tests on CIPP liners  
and plastics