

2.2.41 Pekaplast Relining System

Procedure

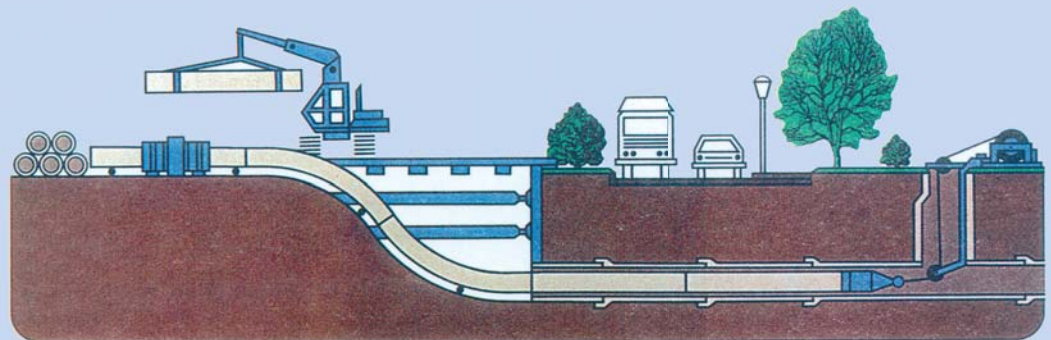
Procedure Category Renovation/Relining Procedure

Licencer/Producer KRT Engineering + Handel GmbH, Sempach

Supplier KRT Kanalsanierungs-Technik AG

Brief description Flexible HDPE corrugated pipes are drawn into existing piping via an inspection shaft. The HDPE corrugated pipes are delivered in sections or rolls. Prior to insertion, sections of pipe are welded together into lengths. The ends are secured into the shafts (by packing or anchor points) and the annular gap between old and new piping must be plugged. To secure the joints, the section of the pipe in question must remain uncovered.

Schematic diagram



Materials HDPE Pipes corrugated

Dimensions External diam. / Internal diam.: 75/64 – 90/78 – 110/96 – 125/110 – 140/120 – 160/140
238/200 – 290/250 – 345/297 – 397/347

HDPE Pipes smoothed
Dimensions: All dimensions of individual wall thicknesses :

Standards and Guidelines As for rebuilding

First application Switzerland 1987

Area of Application

Nature of Damage

- Damaged surfaces or pipe walls
- Localised damage, such as splits, perforations, fragmenting, or open or damaged sleeve joints

KRT Sewer Rehabilitation Technology

Restrictions *See Factory Instructions for HDPE Pipes*

Pipe material *All materials*

Cross-Section *Circular profiles*

Dimensions *Circular profiles NW 80 mm to NW 400 mm*

Maximum Range *Dependant on various factors*

Curves/U-Bends *Dependant on various factors*

Preparatory Work

Installation *Installation via existing inspection shafts*

Excavations *Necessary in the area where joints occur*

Pipe Cross-Section *High pressure cleaning, restoration of the original cross-section by boring or grinding (sizing)*

Lateral Connections *Grind back existing connections*

Ground Water *Plugging of the annular space in exceptional cases*

Water Treatment *Resolution on a case by case basis.*

Ventilation *In accordance with SUVA¹ safety regulations*

Final Tasks

Inspection Shafts *Secure into shaft using shaft packing, or anchoring points*

Lateral Connections *Lateral connections should be tightly jointed with saddle pieces and constructed in the open.*

Subsequent Treatment *None*

Acceptance *Inspection with pipe remote cameras / video recording*

Quality Assurance *Sealing test using air in accordance with VSA guidelines*

Remarks *Large reduction in cross-section
Slope to be taken into consideration*

Status *January 2000*