

SAERTEX-LINER® ENVIRONMENT

FOR STYRENE-FREE PIPE LINING



SAERTEX-LINER® ENVIRONMENT is the styrene-free option in our GRP pipe liner product range. With no styrene emissions, this liner is ideal for the trenchless rehabilitation of wastewater and stormwater pipes in high-traffic public spaces and residential areas. It is available in two design options:

- Type S+: strong mechanical properties for numerous applications
- Type S+ XR: suitable for pressure lines up to 478 psi

HIGH PERFORMANCE

STYRENE-FREE = NO ODOR

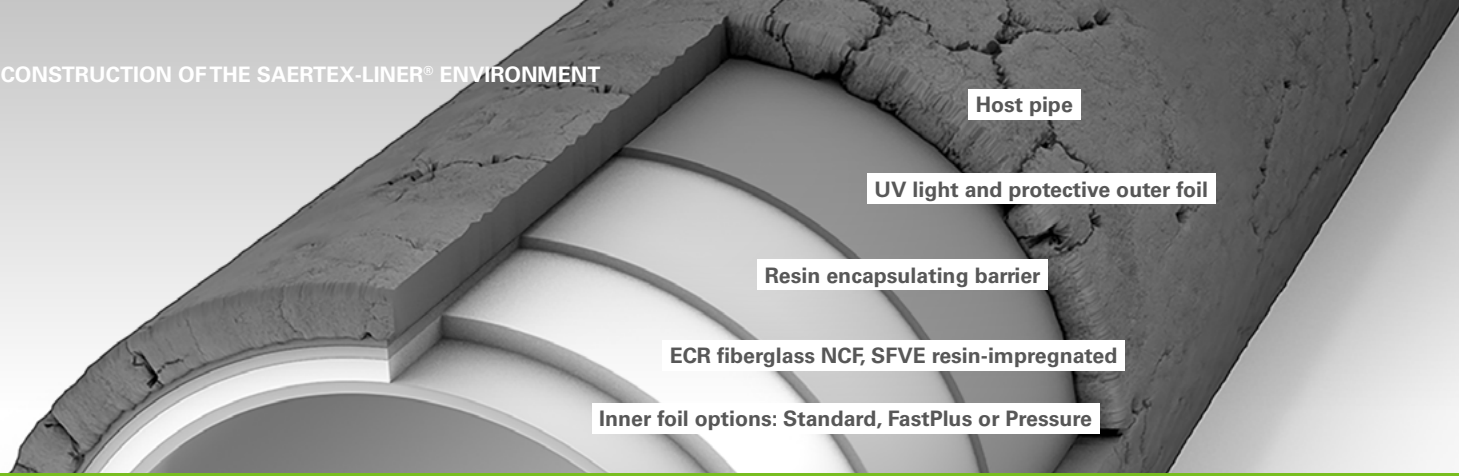
SAERTEX-LINER® ENVIRONMENT is impregnated with styrene-free vinyl ester resin, making it ideal for UV-CIPP rehabilitation work performed in high-traffic areas and other public spaces.

INSTALLATION-FRIENDLY CONSTRUCTION

The construction of SAERTEX-LINER® ENVIRONMENT allows higher pulling forces and prevents the liner from overstretching. Its low weight makes for easier handling, and the lower wall thicknesses shorten curing times. The FastPlus option saves even more installation time because the inner foil stays in place after curing.

A STYRENE-FREE GRP LINER WITH IMPRESSIVE MECHANICAL PROPERTIES

SAERTEX-LINER® ENVIRONMENT offers impressive mechanical properties that make it suitable for many applications, such as a long-term circumferential E modulus of 1,370,605 psi and an excellent preliminary retention factor of 72% after 2000 hours of testing.



Host pipe

UV light and protective outer foil

Resin encapsulating barrier

ECR fiberglass NCF, SFVE resin-impregnated

Inner foil options: Standard, FastPlus or Pressure

FOR STYRENE-FREE GRP PIPE LINING

1 Select your UV-CIPP product application.

PRODUCT APPLICATION	SAERTEX-LINER® ENVIRONMENT
Utilization	Municipal wastewater and stormwater
Resin type	SFVE
Temperature and chemical resistance	+
Styrene-free	yes

2 Engineered to match profile, dimensions and application requirements.

DESIGN	TYPE S+		TYPE S+ XR
Host pipe profile	All profiles	Circular	Circular
Application	Gravity	Pressure	Pressure
Operating pressure [psi]		up to 14	up to 478
Fully structural*	●	●	●
Diameter [inch]	8–60	10–48	10–48
Structural wall thickness [mm]	3–12	4–12	4.3–12.3

3 Outer foils are standard. Inner foil can be selected based on application.

FOILS			
Outer foils:			
– Protective foil for ease of installation, UV light protection	●	●	●
– Resin encapsulating barrier	●	●	●
Inner foil with barrier function:			
– Standard	●		
– FastPlus**	Optional		
– Pressure		●	●

MECHANICAL CHARACTERISTICS***	TYPE S+	TYPE S+ XR
Short-term circumferential E modulus [psi]	1,878,235	2,973,270
Long-term circumferential E modulus [psi]	1,370,605	2,320,600
Short-term bending E modulus [psi]	2,175,565	≥ 2,436,630
Short-term bending stress [psi]	33,355	≥ 39,160
Long-term bending stress [psi]	23,930	30,455
Retention factor (acc. to DIN EN 761):	72 %	78 %

See a virtual lining project!



* Design classification for pressure applications | Class IV AWWA M28

** FastPlus available for 8–60 inch diameter range and max wall thickness of 12 mm

*** Long-term characteristics: for Type S+ after 2,000 h testing; for Type S+ XR after 10,000 h testing

SAFETY TESTED

PROVEN RESULTS

SAERTEX-LINER® ENVIRONMENT type S+ still retained excellent mechanical characteristics after 2000 hours of testing, meeting the requirements of a wide range of typical rehabilitation projects (as of 4/2021). Contact us for the current status of the 10,000 hour test.

FASTPLUS INNER FOIL:

A TIME-SAVING OPTION THAT PROVIDES EXTRA PROTECTION

This rugged inner foil remains inside the liner after curing and saves your team installation time. FastPlus also makes it easier to introduce the UV source, even under difficult installation conditions.