

# LINERS TO MEET THE DEMAND FOR EVERY APPLICATION

HammerHead Trenchless carries seven types of liners for CIPP applications to best meet customer needs, unique projects and curing methods. Our liners are constructed of the highest quality material for reliable and consistent installation. Our liner and resin systems are compliant with industry installation standards including ASTM F1216 – Standard practice for rehabilitation of existing pipelines and conduits by the inversion and curing of resin-impregnated tube, Uniform Plumbing Code (UPC), International Plumbing Code (IPC), NSF International (NSF14), IAPMO, and ICC-ES.

## **HELIAM® SCRIM LINER**

Scrim reinforced liner that minimizes longitudinal stretch and assures accurate inversion lengths. This liner can be used for all curing methods. Used in applications 3 to 10 inches in diameter with both straight shot applications and single bends of up to 45°. 5¾" HELIAM Scrim available for 6" undersized cast-iron and clay pipe.

## **HELIAM® TRANSITIONAL SCRIM LINER**

Scrim reinforced liner is designed to seamlessly combine two diameter sizes of various lengths sewn together to create a liner that is capable of transitioning from 4" to 6". The scrim reinforced liner minimizes longitudinal stretch and assures accurate inversion lengths allowing it to navigate 4" to 6" diameter transitions smoothly. This liner can be used for all curing methods.

## **ALPHADUCT LINER**

Invertible, seamless glass textile liner designed and developed for use with LED, ambient, and hot water curing methods. This liner can be used in applications 3 to 18 inches in diameter and is available in 2, 3, 4 & 5 mm thickness. Alphaduct liner is extremely flexible for installs with single or multiple bends up to 90° and host pipe configurations that require multiple diameter transitions (for example, 6"-9" or 8"-12"). The tube has a polyurethane coating compatible with all HammerHead supplied resin systems.

# **HH FLEX LED LINER**

Proprietary synthetic polyester fiber liner with polyurethane coating designed specifically for use with the BlueLight curing system. Used in applications from 2 to 6 inches in diameter to minimize wrinkling and installs through single or multiple bends up to 90° and/or where the host pipe configuration includes single diameter transitions  $(3 - 4^{\circ}, 4 - 6^{\circ})$  and  $6 - 8^{\circ}$ . The 2" diameter liner is designed for size on size, no transitions.

## **CURING METHOD**















AMBIENT HOT WATER BLUELIGHT



# IT'S ALL HERE

## **HH FLEX LINER**

Flexible polyester needle-punched felt liner with polyurethane coating and sewn seam used in applications where the host pipe is 4 to 8-inch diameter with bends of 45° and 90°. Ambient or heat cure using hot water circulation is recommended.

## **WOVO/BRAWOLINER**

Highly flexible, premium, woven, seamless PET premium liner with polyurethane coating used in applications from 2 to 8-inch diameter to minimize wrinkling and install through single or multiple bends up to 90°. Ambient or heat cure using hot water circulation is recommended.

## **WOVO/BRAWOLINER 3D**

Premium, woven, seamless PET premium liner with polyurethane coating used in applications to minimize wrinkling and install through single or multiple bends up to 90° and/or where the host pipe configuration includes diameter transitions. Ambient or heat cure using hot water circulation is recommended. Available in 3 to 4, 4 to 6 and 6 to 9-inch transitions.

## **CURING METHOD**





**AMBIENT** 

**HOT WATER** 





AMBIENT

HOT WATER





**AMBIENT** 

HOT WATER

Liner	Diameter*									Bends		Transitions**	Pre-Wetout Liner	Cure Method
	2"	3"	4"	5"	53/411	6"	8"	10"	12"	45°	90°			
HELIAM® Scrim Liner		X	Х	Х	Х	Х	Х	Х		X			X	Ambient, Hot Water, BlueLight
HELIAM® Transitional Scrim Liner			Х			Х				Х		X		Ambient, Hot Water, BlueLight
Alphaduct Liner		Х	Х	Х		Х	Х	Х	Х	Х	Х	X		Ambient, Hot Water, BlueLight
FLEX LED Liner	Х	Х	Х			Х				Х	Х	X (except 2")	X	BlueLight
Flex Liner			Х	Х		Х	Х			Х	Х	X		Ambient, Hot Water
Wovo/Brawoliner	Х	Х	Х	Х		Х	Х			Х	Х			Ambient, Hot Water
Wovo/Brawoliner 3D		Х	Х	Х		Х	Х			Х	Х	X		Ambient, Hot Water









\*For 12"-18" diameter contact HammerHead

\*\*Single diameter transitions



**REHAB & REPLACEMENT. REDEFINED** 

Get it ALL at:

hammerheadshop.com