

**Product Name:** 4.5mm Flex Liner (Hi-Pile)

**Product Description:** Flexible Liner for transitions

**Typical Applications:**

Use this material if looking for the easy inversion characteristics of the 2mm (low pile) flex liner but if extra thickness is required due to the application depth or operating characteristics. Works well in systems with multiple 45° or 90° bends where transitions are NOT encountered. Materials flexibility allows for ease of inversion as well as molding to the host pipe and leaving little to no void.

**Performance Limits** *\*\* If product is utilized outside the limits defined below, warranty coverage is voided \*\**

Characteristic	Spec	Comments
<b>General</b>		
Typical dry Thickness (mm)	5.9 – 6.2 mm	
Typical finished Thickness (mm)	4.0 – 5.0 mm	Depends on installation pressures, pipe diameter, and number of bends (45° & 90°)
Sizes available (in.)	3, 4, 6	Custom sizes are available. Contact your local sales representative to determine product suitability for your application
<b>Resins</b>		
PLI Epoxy (2:1)	YES	Compatible with cold, warm, hot and heat assist variants of resin
PLI Epoxy (4:1)	YES	Compatible with cold variant of resin
PLI Vinyl Ester	YES	Contact PLI representative for guidance
<b>Install Design</b>		
Maximum Depth of Install (ft)	3" → 70' 4" → 40' 6" → 16' 8" → 9'	Depth assumes flooded conditions with fully deteriorated pipe and 10% ovality, if install expected to exceed recommended max depth, product may still work however <b>requires PLI approval prior to installation.</b>
Can be used across Transitions?	NO	
Remote Start Allowed?	YES	Tab cal tube to liner using tabbing adhesive <b>HH-66</b> . Refer to training manual for correct tabbing procedure.
Install with Infiltration Allowed?	Situational	High INI situations may impact the structural integrity of any installed liner. <b>Contact PLI representative to discuss specific application.</b>
Resin per FT	Varies by size, resin type	<b>Epoxy Resins:</b> 3" – .85 lbs/FT, 4" – 1.25 lbs/FT, 6" – 2.05 lbs/FT <b>Contact PLI representative for Poly Vinyl Ester values.</b>
<b>Installation</b>		
Wet Out Gap Setting	9.5 mm	When using the WRT Wet Out Roller System <b>**DO NOT USE FLOOR ROLLER FOR RISK OF RESIN SHY FINAL PRODUCT**</b>
Typical Inversion Pressures (psi)	8-12	Depends on installation length, pipe diameter, and number of bends (45° & 90°)
Maximum Inversion Pressure (psi)	15	Pressures exceeding this limit run the risk of tearing the liner or excessive "thinning" around bends
Max Curing Pressures (psi)	12	Pressures exceeding this limit run the risk of tearing the liner or excessive "thinning" around bends
Stretch Factor (at recommended inversion pressures)	1.5%-3%	Highly dependent on inversion pressure, length of install, and pipe diameter. Stretch will be limited to about 1.5% if the inversion rate is well controlled (slow). The larger the diameter and the longer the run, the more the material will stretch with speed.
Maximum Heat Assist Temperature (°F)	220°F	Liner can be cured ambient, hot water or Steam (Do Not exceed 220°F at the liner)

Please contact your representative at 1-866-336-2568 if you have any questions.

