

Product Name: 4 mm Flex Liner

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
General		
Typical dry Thickness (mm)	3.7-4.2 mm	
Typical finished Thickness (mm)	3.0 – 3.5 mm	Depends on installation pressures, pipe diameter, and number of bends (45° & 90°)
Sizes available (in.)	3-4", 4-6"	3-4" & 4-6" Transition available in 328'
Resins		
Epoxy (2:1)	YES	Compatible with cold, warm, hot and heat assist variants of resin
Epoxy (4:1)	YES	Compatible with cold variant of resin
Vinyl Ester	NO	Not recommended – contact representative for guidance
Install Design		
Maximum Depth of Install (ft)	3" → 43' 4" → 22' 6" → 4'	Depth assumes flooded conditions with typical thickness (3.2mm), fully deteriorated pipe and 5% ovality, and 50% long term retention of mechanical properties. If install expected to exceed recommended max depth, product may still work however it is up to installer to ensure structural install for a particular depth. Contact product representative for assistance.
Can be used across Transitions?	YES	Transitions are sized one size up. 4" liner can transition to 6"
Remote Start Allowed?	NO	
Install with Infiltration Allowed?	Situational	Thin material may not retain enough resin in high I&I situations to form structurally sound liner. Contact representative to discuss specific application.
Resin per FT	Varies by size, resin type	Epoxy Resins: 3" size on size – 0.75 lbs./ft 3-4" & 4" size on size – 1 lbs./ft 4-6" – 1.2 lbs./ft Above values are the minimum resin consumption values to meet ASTM-F1216 standards.
Installation		
Wet Out Gap Setting	10 mm	When using the Electric Wet Out Roller System **DO NOT USE FLOOR ROLLER FOR RISK OF RESIN SHY FINAL PRODUCT**
Typical Inversion Pressures (psi)	5-12	Depends on installation length, pipe diameter, and number of bends (45° & 90°)
Maximum Inversion Pressure (psi)	20	Pressures exceeding this limit run the risk of tearing the liner or excessive "thinning" around bends
Max Curing Pressures (psi)	15	Pressures exceeding this limit run the risk of tearing the liner or excessive "thinning" around bends
Stretch Factor (At recommended inversion pressures)	5-6%	Highly dependent on inversion pressure, length of install, and pipe diameter. Stretch will be limited to about 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)
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Please contact your representative at 1-866-336-2568 if you have any questions.

