



**AQUACURE PP: POLYPROPYLENE COATED FELT LINER (TPO)**

**PRODUCT DESCRIPTION**

Polyester felt liner with Polypropylene coating custom sized for pipe rehabilitation conforming to ASTM F1216 and ASTM F1743. To accommodate the requirement for liners of varying thicknesses, multiple layers of polyester felt are employed. Applied Felts is certified under the current ISO 9001 Quality Standard.

**DIMENSION AVAILABILITY**

	HOT CURE INVERSION	AMBIENT/WARM CURE INVERSION	HOT CURE DRAG-IN	AMBIENT/WARM CURE DRAG-IN
<b>DIAMETER</b>	6 to 120 inch	4 to 9 inch	6 to 72 inch	4 to 9 inch
<b>THICKNESS</b>	3mm to 80mm	3mm to 6mm	4mm to 60mm	4mm to 6mm
<b>LENGTH</b>	ANY	ANY	Up to 300 feet	Up to 300 feet
<b>COATING WEIGHT</b>	400GSM (NOMINAL)			
<b>LINER DESIGN</b>	Liner undersized <10%			
	Liner features a welded or stitched seam. Stitched liners only available up to 24in diameter.			
	Liner can negotiate pipe bends up to 45°			
	General sizing listed above; other custom sizes available			

**INSTALLATION METHODS**

LINER TYPE	RESIN TYPE		CURING REGIME				
	EPOXY	POLYESTER/VINYLESTER	HOT WATER <194°F	STEAM <266°F	AMBIENT	WARM WATER <100°F	WARM AIR ACCELERATED
HOT CURE INVERSION	✓	✓	✓	✓	✗	✗	✗
AMBIENT/WARM CURE INVERSION	✓	✓	✗	✗	✓	✓	✓
HOT CURE DRAG-IN	✓	✓	✓	✓	✗	✗	✗
AMBIENT/WARM CURE DRAG-IN	✓	✓	✗	✗	✓	✓	✓

**TEST SPECIFICATIONS**

	CHARACTERISTIC	TEST	STANDARD
<b>ROLL</b>	Density and density distribution at various applied pressures.	Compression measured at increasing pressure.	ASTM D5199
	Load at break in machine and cross directions.	Tensile testing - Maximum Resistive Force.	ASTM D5035
	Secant Modulus in machine and cross directions (resistance to stretch)	Tensile testing - Maximum Resistive Force vs Extension %.	ASTM D5035
	Coating adhesion and ability to weld.	Peel strength of welded tape.	ASTM D903
<b>LINER</b>	Density, Gauge of liner under various applied pressures.	Compression test of sample of all layers.	ASTM D1777
	Felt weld strengths.	Each weld is sampled and destructively tested.	ASTM D5035
	Sealing tape weld strengths.	Each weld is sampled and destructively tested.	ASTM D5035

**Note:** Liners are manufactured to internal standard or customer specifications. All liners are tested to the requirements declared above and adhere to the declared ASTM standards. Test data is available upon request.





### AQUACURE PP: POLYPROPYLENE COATED FELT LINER (TPO)

CURING TEMPERATURE MAX 266°F

DIAMETER (in)	LINER THICKNESS (mm)	MINIMUM INVERSION PRESSURE (psi)	MAX COLD INVERSION PRESSURE (psi)	IDEAL CURING PRESSURE (psi)	MAX HOT PRESSURE (psi)	RESIN AMOUNT (Gallon/ft)	PINCH ROLLER GAP (mm)
4	3	9	13	11	11	0.06	8.2
5	3	6	10	8	9	0.09	8.1
6	3	5	9	7	8	0.10	8.0
6	4.5	8	13	10	11	0.15	11.9
8	3	4	7	5	6	0.14	7.9
8	4.5	6	10	7	9	0.21	11.7
8	6	7	13	10	11	0.27	15.7
8	7.5	9	16	12	14	0.36	19.8
9	4.5	5	9	6	8	0.23	11.7
9	6	7	12	8	10	0.31	15.5
10	4.5	4	8	6	7	0.28	11.6
10	6	6	10	8	9	0.35	15.4
10	7.5	7	13	9	11	0.45	19.4
12	6	4	9	6	8	0.42	15.3
12	7.5	5	11	7	9	0.55	19.2
12	9	7	13	9	11	0.68	23.1
15	7.5	4	9	6	8	0.69	18.9
15	9	5	10	7	9	0.82	22.8
15	10.5	6	12	8	11	0.95	26.8
18	9	4	9	6	8	0.99	22.6
18	10.5	5	10	7	9	1.15	26.4
18	12	6	12	8	10	1.31	30.4
18	13.5	7	13	9	11	1.47	34.4
21	9	4	7	5	7	1.16	22.4
21	10.5	4	9	6	8	1.35	26.2
21	12	5	10	6	9	1.54	30.1
21	13.5	6	11	7	10	1.72	34.0
21	15	6	12	8	11	1.91	38.0
24	9	3	7	4	6	1.33	22.3
24	10.5	4	8	5	7	1.54	26.1
24	12	4	9	6	8	1.76	29.9
24	13.5	5	10	6	9	1.97	33.7
24	15	5	11	7	9	2.19	37.6

1. Suitable only for Applied Felts liners designed for and to be installed by inversion.
2. Roller gap setting is for guidance only. Impregnation equipment differs: Rubber wrappings on rollers, positional hysteresis and flexing of rollers cause roller gap settings to vary between different equipment. Roller gap setting for any given equipment should be reasonably repeatable.
3. We strongly recommend the resin addition be monitored and controlled by adjustment of the roller gap settings, as necessary. Ultimately, it is the correct resin addition which is imperative, not the roller gap.
4. All information is provided by Applied Felts in good faith, but without warranty. All calculations should be verified.

