

**PROTECTO 401™ VS. POLYURETHANE**

Test	Protecto 401	Two Component Polyurethane Lining
SALT SPRAY 5% solution ASTM B 117-85	No undercutting at scribe. No damage to panel. 24 months duration	1- 1/2" undercutting at scribe. Damage to panel. 3-3/4 months duration. Test Terminated
TAP WATER IMMERSION 120° F Rated using ASTM D714-87	No undercutting at scribe. No damage to panel. 24 months duration.	3/4" scribe undercut. 2-1/2 months duration. Test Terminated
SODIUM HYDROXIDE IMMERSION 25% solution 140° F Rated using ASTM D714-87	No effect. 24 months.	Softened film, discoloration and etched surface 2-1/2 months, Test Terminated
CATHODIC DISBONDMENT Attached Cell Method ASTM G-95 30 Days/Average 3 samples	0.17 mm disbondment	10.0 mm disbondment
IMPACT RESISTANCE ASTM G-1418-month-old linings. Applied to abrasive blasted Ductile Iron Pipe (non-ground pipe)	72 in/lbs	75 in/lbs
EXTERIOR EXPOSURE Continuous exterior exposure to weather and sunlight. Birmingham, Alabama	2.5 years Chalking, negligible loss of film. No effect on metal protection.	2.5 years Chalking. Negligible loss of film. No effect on metal protection.

**HYDROGEN PEROXIDE IMMERSION — 25% Solution**

77° F ASTM D-1308	No effect Passed	Large Blisters Failed
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**NOTE:**

**All materials were tested with an average film thickness of 40 mils on production run ductile iron pipe**