

Poly-Triplex® Liner System Technical Data

Poly-Triplex Liner System Physical Properties

Test Property	PTLS-4400 Type I	PTLS-5600 Type II	PTLS-6800 Type III	PTLS-11600 Type IV
<i>Pre-Saturated Fabric Weight:</i>	44 Ounces PSY	56 Ounces PSY	68 Ounces PSY	116 Ounces PSY

ASTM Tests D790, D695, D638 & D5813

Performed by: HTS, Inc. Consultants - 2005

ASTM-D-790				
Maximum Flexural Fiber Stress	30,093 psi	39,460 psi	44,535 psi	49,912 psi
Flexural Modulus of Elasticity	1,125,419 psi	1,158,240 psi	1,090,654 psi	1,783,142 psi
ASTM-D-695				
Compressive Strength	4,473 psi	7,896 psi	11,900 psi	14,150 psi
Compressive Modulus	572,100 psi	805,900 psi	989,000 psi	1,570,000 psi
ASTM-D-638				
Strength at Break	14,950 psi	21,180 psi	28,400 psi	40,970 psi
Elongation at Break	6.91%	8.18%	8.59%	11.92%
ASTM-D5813				
Average Specimen	0.099 in.	0.117 in.	0.122 in.	0.158 in.

ASTM Tests D2240, D638, & C497-98/AASHTO T280-00

Performed by: Southwestern Laboratories, Dallas, TX

ASTM-D-2240				
Hardness			82 Shore D	
ASTM-D-638				
% Elongation @ Max. Load	1.20 %	1.54 %	1.57 %	1.71 %
Std. Dev.	0.1	0.19	0.19	0.14
Ultimate Elongation			6.00 %	

ASTM-C497-98 / AASHTO-T280-00 Corrugated Culvert Pipe PTLs-11600 Lined

Culvert Pipe Alone-Max Load				2753 lbs.
PTLS-11600 Lined-Max Load				6190 lbs.
Pipe Alone-Ultimate Strength				1377 lbf/ft
PTLS-11600 Lined-Ultimate Strength				3095 lbf/ft
Pipe Alone-D-Load Strength				689 lbf/ft/ft
PTLS-11600 Lined-D-Load Strength				1548 lbf/ft/ft

Test Performed By: Whitney & Associates, Peoria, IL

Bond	Butt to Butt Resin Bonded			
	Bonding Strength		7,130 Lbs.	
	6" Dia., 10,000 psi Test Cylinder		Concrete Failed	
Permeability	Impermeable	Impermeable	Impermeable	Impermeable
Excavation Required?	No	No	No	No
Life Expectancy	100 Years	100 Years	100 Years	100 Years
Warranty	10 Years	10 Years	10 Years	10 Years