PLASTICS · PIPE · INSTITUTE®

THE VOICE OF AN INDUSTRY

Sample Comparison between PE 4710 and PE 3608

Properties & Standards	PE 4710	PE 3608	PE 3408
Tensile yield strength (psi, min) @ 73°F	3,500	3,000	No longer available
Allowable compressive stress (psi) @ 73°F	1,150	1,000	
Hydrostatic Design Stress (psi) @ 73°F	1,000	800	
Pressure Class, DR 11 (psi) @ 73°F	200	160	
Allowable total pressure during recurring surge, DR 11 (psi) @ 73°F	300	240	
Allowable total pressure during occasional surge, DR11 (psi) @ 73°F	400	320	
Bend raduis, DR 11 (min.)	25 x Pipe OD		
Design deflection limit, pressure pipe, DR 11 (AWWA M55)	5%		
Pipe ID 12" DIPS, PC 200 (inches, nominal)	10.66	10.09	
Fracture Toughness, PENT (hrs, min.)	500	100	
Safe Pull Tensile Stress, 12 hrs (psi) @ 73°F	1,300	1,150	
Apparent Elastic Modulus, 100 years (psi) @ 73°F	28,000	27,000	
Fatigue life, PPI PACE (years)	≥ 100		
ANSI/AWWA C906-15 sizes	4" - 65"		
Allowable leakage, M55	zero		
Hazen-Williams C Factor	150		
ASTM fusion standard	ASTM F2620		
ASTM Electrofusion standard	ASTM F1055		
ASTM HDD standard	ASTM F1962		
ASTM Fittings Standards	ASTM D3261 / F2206		
NSF standard	NSF/ANSI 61		
AWWA Design Factor	0.63	0.5	
AWWA Safety Factor (against burst)	> 2		
AWWA Manual	AWWA M55		
ANSI/AWWA Standards	AWWA C901-08 and C906-15		

July 2015

© 2015 Plastics Pipe Institute



PE4710 Pipe: The Best Solution for Water Systems