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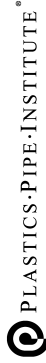
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## **New PE Pipe Material Designation Codes**



**Polyethylene Pipe and Fittings are now  
being used in gas distribution in large  
diameters of 8" and greater.**



New PE Pipe Material Designation Codes

Pipe Material Designation Code		First Digit (Density)	Second Digit (Min. PENT, hrs)	Third & Fourth Digits (Max. HDS, psi)	Pressure Ratings, psig @73°F, SDR 11 Pipe Water / Gas
Historical	Current <sup>a</sup>				
PE 2406	PE 2406	>0.925 - 0.940	10	625	125 / 80
	PE 2606	"	100	625	125 / 80
	PE 2708	"	500	800 <sup>b</sup>	160 <sup>c</sup> / 100 <sup>d</sup>
PE 3408	PE 3408	>0.940 - 0.947 <sup>e</sup>	10	800	160 / 102
	PE 3608	"	100	800	160 / 102
	PE 3708	"	500	800	160 / 102
	PE 3710	"	500	1000 <sup>b</sup>	200 <sup>c</sup> / 128 <sup>d</sup>
	PE 4608	>0.947 - 0.955 <sup>e</sup>	100	800	160 / 102
	PE 4708	"	500	800	160 / 102
	PE 4710	"	500	1000 <sup>b</sup>	200 <sup>c</sup> / 128 <sup>d</sup>

**PE 4710** Example:  $\frac{4}{7} - 10 -$   
 first digit, density = >0.947 - 0.955;  
 second digit, SCG, PENT = >500 hr;  
 third and fourth digits, maximum HDS/100,  
 (1600 psi x 0.63 DF) / 100 = 10

<sup>a</sup> Current PE pipe material designation codes based on new design factor, DF, for high-performance PE materials. (The 0.63 DF is approved for the high-performance PE materials in water piping applications)  
<sup>b</sup> Using 0.63 DF for high-performance PE materials, the HDS is 1250 x 0.63 = 800 psi for a 1250 psi HDB and 1600 x 0.63 = 1000 psi for a 1600 psi HDB.  
 Using 0.50 DF for standard-performance materials, the HDS is 1250 x 0.50 = 625 psi for a 1250 psi HDB and 1600 x 0.50 = 800 psi for a 1600 psi HDB.  
 High-performance PE materials are defined by PPI TR-3 as a material having a 50 year substantiation according to Part F.5, a minimum PENT value of 500 hours, and an LCL/LTHS ratio of at least 90% as per ASTM D 2837.  
<sup>c</sup> Using the 0.63 DF for high-performance PE materials in PE water pipes.  
<sup>d</sup> Assuming 0.40 DF is adopted into US CFR Title 49, Part 192 for these high-performance PE materials in PE gas pipes. (Canada has adopted the 0.40 DF for all PE materials.)  
<sup>e</sup> Revisions in ASTM D 3350-02a resulted in the former cell class 3 density being split into two cell classifications, 3 and 4 as shown in the table.