



## SPECIFICATIONS FOR SEVEN-WIRE PRESTRESSING STEEL STRAND

ASTM A416 – SEVEN-WIRE UNCOATED LOW RELAXATION PRESTRESSING STEEL STRAND										
Grade	Nominal Strand Diameter in [mm]	Strand Diameter Tolerance in [mm]	Minimum Breaking Strength Lbf [kN]	Min. Yield Strength at 1% Extension Lbf [kN]	Minimum Elongation %	Nominal Area in <sup>2</sup> [mm <sup>2</sup> ]	Nominal Modulus of Elasticity psi [kN/mm <sup>2</sup> ]	Min. Diameter Difference C/W and O/W in [mm]	Nominal Pitch	Nominal Weight Lbs/1000 ft Kg/1000 m
250K	3/8 [9.5]	+0.016, -0.016 [+0.40, -0.40]	20,000 [89]	18,000 [80]	3.5	0.080 [52]	28.6 x 10 <sup>6</sup> [197.2]	0.002 [0.051]	12 x dia   16 x dia	272 [405]
	7/16 [11.1]		27,000 [120]	24,300 [108]		0.108 [69.7]		0.0025 [0.064]		367 [548]
	1/2 [12.7]		36,000 [160]	32,400 [144]		0.144 [92.9]		0.003 [0.076]		490 [730]
270K	3/8 [9.5]	+0.026, -0.006 [+0.65, -0.15]	23,000 [102]	20,700 [92]		0.085 [55]		0.002 [0.051]		290 [430]
	7/16 [11.1]		31,000 [138]	27,900 [124]		0.115 [74.2]		0.0025 [0.064]		390 [580]
	1/2 [12.7]		41,300 [184]	37,170 [165]		0.153 [98.7]		0.003 [0.076]		520 [780]
	0.52 (1/2HBS) [13.2]		45,000 [200]	40,500 [180]		0.167 [108]		0.003 [0.076]		570 [840]
	9/16 [14.3]		51,700 [230]	46,530 [207]		0.192 [124]		0.0035 [0.089]		650 [970]
	6/10 [15.2]		58,600 [261]	52,740 [235]		0.217 [140]		0.004 [0.102]		740 [1,100]
	0.62 [15.7]		62,800 [279]	56,520 [251]		0.231 [150]		0.004 [0.102]		780 [1,200]
	7/10 [17.8]		79,400 [353]	71,460 [318]		0.294 [190]		0.0045 [0.114]		1000 [1,500]
300K*	6/10 [15.2]		65,100 [290]	58,590 [261]		0.217 [140]		0.004 [0.102]		740 [1,100]

\* This product is not recognized by any specification.

RELAXATION PROPERTIES	
Initial Stress	Maximum Relaxation after 1000 Hours
70% Specified Minimum Breaking Strength	2.5%
80% Specified Minimum Breaking Strength	3.5%