

RED BOX 1500

FIBERGLASS TUBING, CASING, AND LINERS
AROMATIC AMINE CURED EPOXY RESIN

DIMENSIONAL SPECIFICATIONS

June, 2010

Nominal Size (inches)	Nominal I.D. (inches)	Minimum Drift Dia (inches)	Nominal O.D. (inches)	Nominal Wall (inches)	Pin Upset O.D. (inches)	Max Box OD* (inches)	Nominal Weight		Connection Type API 5B, Table 14*, 7**, 6*** Fourteenth Edition August 96
							(lbs/ft)	(lbs/ft)	
2-3/8	2.00	1.91	2.26	0.13	2.69	3.43	0.8	25	2-3/8" 8Rd EUE Long*IJ
2-7/8	2.47	2.37	2.77	0.15	3.19	3.93	1.2	35	2-7/8" 8Rd EUE Long*IJ
3-1/2	3.00	2.90	3.37	0.19	3.85	4.82	1.8	53	3-1/2" 8Rd EUE Long*IJ
4	3.33	3.24	3.75	0.21	4.35	5.00	2.4	71	4" 8Rd EUE Long* TC
4-1/2	3.98	3.89	4.48	0.25	4.85	5.75	3.0	90	4-1/2" 8Rd EUE Long*IJ
5-1/2	4.42	4.33	4.96	0.27	5.60	7.20	4.0	119	5-1/2" 8Rd Csg Long*IJ
6-5/8	5.43	5.33	6.10	0.34	6.73	8.51	5.9	178	6-5/8" 8Rd Csg Long**IJ
7	6.21	6.11	6.97	0.38	7.10	8.61	7.2	216	7" 8Rd Csg Long**IJ
7-5/8	6.21	6.11	6.97	0.38	7.73	10.03	8.0	240	7-5/8" 8Rd Csg Long**IJ
9-5/8	7.84	7.75	8.80	0.48	9.73	12.66	12.8	384	9-5/8" 8Rd Csg*** IJ
10-3/4	8.85	8.76	9.94	0.54	10.85	14.05	16.3	489	10-3/4" 8Rd Csg***IJ
11-3/4	10.72	10.62	11.90	0.59	11.93	14.00	19.6	589	11-3/4" 8/6Rd Csg***TC
13-3/8	11.97	11.87	13.29	0.66	13.65	15.42	25.4	761	13-3/8" 8/6Rd Csg***TC
16	14.48	14.39	16.08	0.80	16.33	18.75	37.4	1,122	16" 6Rd Csg TC
18	16.60	16.50	18.43	0.92	18.84	22.60	51.8	1,553	18" 6Rd Csg TC
20	17.98	17.89	19.97	1.00	20.20	24.10	58.9	1,766	20" 6Rd Csg TC

*Depending on the application, smaller maximum box diameters are available.

Thread lengths may exceed API L4

PERFORMANCE AND RATINGS (-60 deg F to +210 deg F **)

30 ft Standard Joint Length

Nominal Size	Internal Pressure Rating (psi)	Mill Test Pressure (psi)	Collapse Rating (psi)	Axial Tension Rating (lbs)	Stretch vs Tension-Over-Pipe-Wt Stretch (ft) = Coeff. x P x L
2-3/8	1,500	1,850	1,200	13,000	0.363
2-7/8	1,500	1,850	1,000	19,000	0.266
3-1/2	1,500	1,850	1,100	28,000	0.178
4	1,500	1,850	1,100	35,000	0.138
4-1/2	1,500	1,850	1,100	46,500	0.098
5-1/2	1,500	1,850	1,000	55,500	0.084
6-5/8	1,500	1,850	1,100	72,500	0.054
7	1,500	1,850	1,000	76,500	0.042
7-5/8	1,500	1,850	1,000	86,500	0.042
9-5/8	1,500	1,850	1,000	140,500	0.027
10-3/4	1,500	1,850	1,000	161,500	0.021
11-3/4	1,500	1,850	750	147,000	0.024
13-3/8	1,500	1,850	750	189,500	0.019
16	1,500	1,850	750	290,500	0.013
18	1,500	1,850	750	336,500	0.010
20	1,500	1,850	750	362,000	0.008

Where: P = Tensile Load (1,000 lbs)

L = String Length (1,000 ft)

MECHANICAL & PHYSICAL PROPERTIES

TUBING/CASING BODY PROPERTIES	UNIT	VALUE 2-3/8 - 10-3/4	VALUE 11-3/4 - 20	TEST METHOD
Tensile Strength, Hoop	psi	31,300	31,300	ASTM D1599
Tensile Strength, Axial	psi	30,000	20,000	ASTM D2105
Modulus of Elasticity, Axial	10E+06 psi	3.0	2.0	ASTM D2105
Specific Gravity	---	1.9	1.9	ASTM D792
Density	lbs/in ³	0.07	0.07	ASTM D792
Thermal Conductivity	Btu/hr/ft ² /in/degF	2.4	2.4	ASTM C177
Thermal Expansion Coefficient (Linear)	10E-05in/in/degF	1.1	1.2	ASTM D696
Flow Factor	---	150	150	Hazen Williams