

RED BOX 1000

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	2.16	0.08	2.69	3.43	0.6	17	2-3/8" 8Rd EUE Long*IJ
2-7/8	2.47	2.37	2.67	0.10	3.19	3.93	0.8	25	2-7/8" 8Rd EUE Long*IJ
3-1/2	3.00	2.90	3.25	0.13	3.85	4.82	1.3	39	3-1/2" 8Rd EUE Long*IJ
4	3.33	3.24	3.61	0.14	4.35	4.91	1.7	51	4" 8Rd EUE Long* TC
4-1/2	3.98	3.89	4.30	0.16	4.85	5.75	2.0	61	4-1/2" 8Rd EUE Long*IJ
5-1/2	4.42	4.33	4.78	0.18	5.60	7.20	2.9	86	5-1/2" 8Rd Csg Long*IJ
6-5/8	5.43	5.33	5.87	0.22	6.73	8.51	4.2	127	6-5/8" 8Rd Csg Long**IJ
7	6.21	6.11	6.71	0.25	7.10	8.61	5.0	151	7" 8Rd Csg Long**IJ
7-5/8	6.21	6.11	6.71	0.25	7.73	10.03	5.8	174	7-5/8" 8Rd Csg Long**IJ
9-5/8	7.84	7.75	8.47	0.31	9.73	12.66	9.4	281	9-5/8" 8Rd Csg*** IJ
10-3/4	8.85	8.76	9.56	0.36	10.85	13.98	11.8	354	10-3/4" 8Rd Csg***IJ
11-3/4	10.72	10.62	11.49	0.39	11.93	14.00	14.2	427	11-3/4" 8/6Rd Csg***TC
13-3/8	11.97	11.87	12.83	0.43	13.65	15.00	18.3	550	13-3/8" 8/6Rd Csg***TC
16	14.48	14.39	15.53	0.52	16.33	18.10	26.7	800	16" 6Rd Csg TC
18	16.60	16.50	17.80	0.60	18.84	21.40	37.8	1,135	18" 6Rd Csg TC
20	17.98	17.89	19.28	0.65	20.20	22.98	43.1	1,293	20" 6Rd Csg TC
24	23.78	23.69	25.50	0.86	26.69	32.10	82.2	2,466	24" 4Rd Csg L TC
30	29.53	29.43	31.67	1.07	33.00	41.30	130.5	3,915	30" 4Rd Csg L 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	1,000	1,250	310	8,000	0.649
2-7/8	1,000	1,250	350	12,500	0.387
3-1/2	1,000	1,250	370	19,000	0.249
4	1,000	1,250	340	22,500	0.214
4-1/2	1,000	1,250	310	31,000	0.163
5-1/2	1,000	1,250	330	39,500	0.125
6-5/8	1,000	1,250	330	59,000	0.084
7	1,000	1,250	330	76,500	0.064
7-5/8	1,000	1,250	330	77,500	0.064
9-5/8	1,000	1,250	310	121,000	0.042
10-3/4	1,000	1,250	310	154,000	0.033
11-3/4	1,000	1,250	240	135,500	0.037
13-3/8	1,000	1,250	240	169,000	0.030
16	1,000	1,250	240	217,500	0.020
18	1,000	1,250	240	264,500	0.015
20	1,000	1,250	240	310,000	0.013
24	1,000	1,250	240	631,500	0.007
30	1,000	1,250	240	805,000	0.005

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