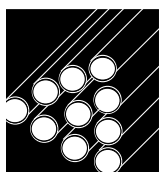


"TL" Threadable Light Wall Steel Pipe

ASTM A 135
ASTM A 795
Threadable
Light Wall
Black Painted
Domestic
Steel Pipe

Central Sprinkler Company
451 North Cannon Avenue, Lansdale, Pennsylvania 19446



Product Description

Introduction

Central Sprinkler Company is proud to offer its own line of domestic high-quality ASTM A 135 and ASTM A 795 threadable light wall steel sprinkler pipe as an alternative to schedule 40 and other threadable alternatives. It is characterized by high strength and ductility. Black painted, and available in 1", 1¼", 1½" and 2" sizes, this economical alternative to schedule 40 is ideal for use in wet, dry, preaction or deluge sprinkler systems. Central Sprinkler "TL" is manufactured from the highest quality prime domestic steel. Quality is insured through continual testing throughout the rolling cycle.

Standards

Central Sprinkler threadable light wall steel pipe is manufactured to ASTM A 135 and ASTM A 795 Grade A, NH Specifications. Each piece of Electric Resistance Welded (ERW) pipe is Eddy Current tested and is coated and stenciled exclusively for the fire protection industry. Central Sprinkler threadable light wall "TL" meets or exceeds all requirements of NFPA 13, 13D, and 13R, and can be used either threaded or unthreaded in wet, dry, preaction or deluge systems having maximum working pressures of 300 psi or less. Central Sprinkler threadable light wall "TL" successfully met or exceeded all Underwriters Laboratories, Inc., Underwriters Laboratories of Canada, and Factory Mutual testing for sprinkler systems with a maximum working pressure of 300 psi.

Certificate of Conformance

Central Sprinkler threadable light wall "TL" is domestically manufactured exclusively for the fire protection industry. With the material as specified, Central Sprinkler Company certifies the product is tested and accepted in accordance with ASTM A 135 and ASTM A 795 standards.

Installation Requirements

Central Sprinkler threadable light wall "TL" is intended for installation in accordance with the requirements of all of the NFPA Standards applicable to conventional threaded, welded or roll grooved specifications for schedule 40 steel pipe. "TL" may be threaded in the field using standard pipe threading equipment for creating NPT threads. **After machining, the threads must be checked with an ANSI/ASME B1.20.1 thread gauge. Improper threading and quality control may lead to leakage or rupture.** "TL" pipe may be joined in the field using conventional cast iron, ductile iron, malleable iron NPT threaded fittings, conventional welded fittings and mechanical couplings or fittings. (See Approvals and Listings) **Caution: "TL" threadable light wall pipe shall not be cut-grooved.**

Additional Services

With the Central "Roll Your Own Program" custom lengths are easily accomplished from lengths 15'-0" to 25'-0" ($\pm 1/8"$). Please allow additional lead time to custom roll your order. A minimum order will be required to complete your custom application, additional charges may be required. Standard stock lengths of 21' are available by calling any Central Sprinkler Distribution center or by calling us directly at 800-523-6512 or 215-362-0700, Steel Pipe Division.

Economic Benefits of "TL" Threadable Light Wall Sprinkler Pipe

The reduction of wall thickness provides increased flow characteristics when compared to schedule 40 at any given friction loss. Additionally, the lighter weight of "TL" provides economic savings when compared to other alternatives including freight and easier field installation.

Hazen-Williams C Values (Taken from NFPA 13)

Pipe or Tube	C Value*
Black Steel (dry systems including preaction)	100
Black Steel (wet systems including deluge)	120
Galvanized (all systems)	120
Unlined Cast or Ductile Iron	100

*The Authority Having Jurisdiction may recommend other C Values.

**Friction Loss Table
Central Sprinkler TL Sprinkler Pipe**

Nom. Pipe Size	Pipe O.D.	Wall Thickness
1"	1.290"	0.100"
1¼"	1.638"	0.100"
1½"	1.883"	0.105"
2"	2.360"	0.110"

<i>C = 100</i>				
Nom. Dia.	1"	1¼"	1½"	2"
Pipe I.D.	1.090"	1.438"	1.673"	2.140"
G.P.M.	Friction Loss (psi/ft.)			
4	0.008	0.002	0.001	0.000
8	0.028	0.007	0.003	0.001
12	0.059	0.015	0.007	0.002
16	0.100	0.026	0.012	0.004
20	0.151	0.039	0.019	0.006
24	0.212	0.055	0.026	0.008
28	0.282	0.073	0.035	0.011
32	0.361	0.094	0.045	0.014
36	0.449	0.116	0.056	0.017
40	0.545	0.141	0.068	0.020
44	0.651	0.169	0.081	0.024
48	0.764	0.198	0.095	0.029
52	0.886	0.230	0.110	0.033
56	1.016	0.264	0.126	0.038
60	1.155	0.300	0.143	0.043
64	1.301	0.338	0.161	0.049
68	1.456	0.378	0.181	0.054
72	1.618	0.420	0.201	0.061
76	1.788	0.464	0.222	0.067
80	1.966	0.510	0.244	0.074
84	2.152	0.558	0.267	0.081
88	2.345	0.608	0.291	0.088
92	2.546	0.660	0.316	0.095
96	2.755	0.715	0.342	0.103
100	2.971	0.771	0.369	0.111
110	3.544	0.919	0.440	0.133
120		1.080	0.517	0.156
130		1.252	0.599	0.181
140		1.436	0.687	0.207
150		1.632	0.781	0.235
160		1.839	0.880	0.265
170		2.057	0.984	0.297
180		2.286	1.094	0.330
190		2.527	1.209	0.365
200			1.329	0.401
220			1.586	0.478
240			1.863	0.562
260			2.160	0.651
280				0.747
300				0.849
320				0.956
340				1.070
360				1.189
380				1.314
400				1.445

<i>C = 120</i>				
Nom. Dia.	1"	1¼"	1½"	2"
Pipe I.D.	1.090"	1.438"	1.673"	2.140"
G.P.M.	Friction Loss (psi/ft.)			
4	0.005	0.001	0.001	0.000
8	0.020	0.005	0.002	0.001
12	0.042	0.011	0.005	0.002
16	0.071	0.019	0.009	0.003
20	0.108	0.028	0.013	0.004
24	0.151	0.039	0.019	0.006
28	0.201	0.052	0.025	0.008
32	0.258	0.067	0.032	0.010
36	0.320	0.083	0.040	0.012
40	0.389	0.101	0.048	0.015
44	0.464	0.120	0.058	0.017
48	0.545	0.141	0.068	0.020
52	0.632	0.164	0.078	0.024
56	0.725	0.188	0.090	0.027
60	0.824	0.214	0.102	0.031
64	0.929	0.241	0.115	0.035
68	1.039	0.269	0.129	0.039
72	1.155	0.300	0.143	0.043
76	1.276	0.331	0.158	0.048
80	1.403	0.364	0.174	0.053
84	1.536	0.398	0.191	0.057
88	1.674	0.434	0.208	0.063
92	1.817	0.471	0.226	0.068
96	1.966	0.510	0.244	0.074
100	2.120	0.550	0.263	0.079
110	2.529	0.656	0.314	0.095
120		0.771	0.369	0.111
130		0.894	0.428	0.129
140		1.025	0.490	0.148
150		1.164	0.557	0.168
160		1.312	0.628	0.189
170		1.468	0.702	0.212
180		1.632	0.781	0.235
190		1.803	0.863	0.260
200			0.949	0.286
220			1.132	0.341
240			1.329	0.401
260			1.541	0.465
280				0.533
300				0.606
320				0.682
340				0.763
360				0.849
380				0.938
400				1.031

Velocity Table
Central Sprinkler TL Sprinkler Pipe

Nom. Pipe Size	Pipe O.D.	Wall Thickness
1"	1.290"	0.100"
1¼"	1.638"	0.100"
1½"	1.883"	0.105"
2"	2.360"	0.110"

Nom. Dia.	1"	1¼"	1½"	2"
Pipe I.D.	1.090"	1.438"	1.673"	2.140"
G.P.M.	Velocity (ft. sec.)			
4	1.375	0.790	0.584	0.357
8	2.751	1.580	1.168	0.714
12	4.126	2.371	1.751	1.070
16	5.501	3.161	2.335	1.427
20	6.877	3.951	2.919	1.784
24	8.252	4.741	3.503	2.141
28	9.627	5.531	4.087	2.498
32	11.002	6.322	4.670	2.854
36	12.378	7.112	5.254	3.211
40	13.753	7.902	5.838	3.568
44	15.128	8.692	6.422	3.925
48	16.504	9.482	7.006	4.282
52	17.879	10.273	7.589	4.638
56	19.254	11.063	8.173	4.995
60	20.630	11.853	8.757	5.352
64	22.005	12.643	9.341	5.709
68	23.380	13.433	9.925	6.066
72	24.755	14.224	10.508	6.422
76	26.131	15.014	11.092	6.779
80	27.506	15.804	11.676	7.136
84	28.881	16.594	12.260	7.493
88	30.257	17.384	12.843	7.850
92	31.632	18.174	13.427	8.206

Nom. Dia.	1"	1¼"	1½"	2"
Pipe I.D.	1.090"	1.438"	1.673"	2.140"
G.P.M.	Velocity (ft. sec.)			
96	33.007	18.965	14.011	8.563
100	34.383	19.755	14.595	8.920
110	37.821	21.730	16.054	9.812
120		23.706	17.514	10.704
130		25.681	18.973	11.596
140		27.657	20.433	12.488
150		29.632	21.892	13.380
160		31.608	23.352	14.272
170		33.583	24.811	15.164
180		35.559	26.271	16.056
190		37.534	27.730	16.948
200			29.190	17.840
220			32.109	19.624
240			35.028	21.408
260			37.947	23.192
280				24.976
300				26.760
320				28.544
340				30.328
360				32.112
380				33.896
400				35.680

Dimensions & Weights

Nominal Pipe Size	Outside Diameter (in.)	Nominal Wall Thickness	(CRR) Corrosion Resistance Ratio	Theoretical Weight Per Foot (lb/ft)	Inside Nominal Diameter (in.)	Standard Lengths	Pieces Per Bundle	Feet Per Bundle	Theoretical Weight Per Bundle (lb.)	Approvals
1"	1.290	.100"	.52	1.27	1.090	21'	61	1281'	1627	UL, FM, ULC, MEA
1¼"	1.638	.100"	.29	1.64	1.438	21'	61	1281'	2100	UL, FM, ULC, MEA
1½"	1.883	.105"	.29	1.99	1.673	21'	44	924'	1839	UL, FM, ULC, MEA
2"	2.360	.110"	.32	2.64	2.140	21'	37	777'	2051	UL, FM, ULC, MEA

Warranty

All Central Sprinkler Company manufactured products are warranted against defects in material and workmanship solely to original purchasers. This warranty will continue for a period of one year from the shipping date. Materials found to be defective by Central will be repaired or replaced at Central's option. Central Sprinkler Company will not be responsible for labor charges or consequential expenses or damages incurred as a result of defective products. This warranty is expressly made in lieu of any and all other warranties, expressed or implied, including the warranties of merchantability and fitness.

Ordering Information

Please indicate the type, size and finish when ordering steel pipe. Make sure to indicate if the shipping address is different than the billing address. *For additional technical or ordering information please contact our Steel Pipe Division at 800-523-6512.*

Terms & Conditions

1. Shipping Liability — Shipping or delivery dates are approximate only. Central Sprinkler assumes no penalty or liability for delays under any circumstances.
2. Return Shipments — There shall be no credit given for material returned without written authorization. Requests for such returns shall include the date and invoice number of the original purchase. Returns will be credited for the amount of the purchase price less 20% for handling, inspection, and re-testing provided the goods are in resaleable condition. Returns must be shipped freight prepaid.
3. Method of Shipment — Unless shipment method is designated by the Buyer, Central will make this selection at Buyer's risk.

4. Special Terms — Special material orders and made-to-order products may not be cancelled unless agreed to by Central in writing, and upon agreement for compensation for work already performed.

5. Price Changes — Prices are subject to change without prior notice.

6. Packing — An extra charge may be incurred for additional handling, dunnage, paper work and custom charges. Additional lead time may also be required to complete shipment of the order.

7. Minimum Order — Bundle quantities only on a direct ship basis.



Central Sprinkler Company

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