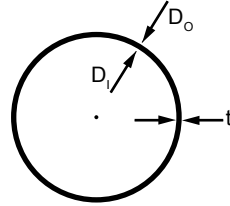


# ERW Pipe



APPROXIMATE VALUES
Pipe Weight (lbs/ft) = $10.69 \cdot t \cdot (D_o - t)$ $D_o$ (in) - outside diameter $t$ (in) - thickness of pipe
Pipe Weight (kg/m) = $0.0247 \cdot t \cdot (D_o - t)$ $D_o$ (mm) - outside diameter $t$ (mm) - thickness of pipe

Outside Diameter ( $D_o$ ) in mm	PIPE WEIGHT lbs/ft [kg/m]									
	WALL THICKNESS (t) in (mm)									
	0.179 4.55	0.188 4.78	0.203 5.16	0.219 5.56	0.250 6.35	0.312 7.92	0.375 9.53	0.500 12.70	0.562 14.29	0.625 15.88
<b>2 3/8</b> 60.33	4.22 6.29	4.38 6.54	4.72 7.03	5.02 7.52						
<b>2 7/8</b> 73.03	5.18 7.72	5.39 8.03	5.79 8.65	6.21 9.26	7.02 10.46					
<b>3 1/2</b> 88.90	6.38 9.51	6.64 9.90	7.16 10.67	7.58 11.44	8.69 12.95					
<b>4</b> 101.60	7.34 10.94	7.66 11.39	8.24 12.29	8.84 13.18	10.02 14.94	12.33 18.36	14.53 21.66			
<b>4 1/2</b> 114.30	8.30 12.37	8.64 12.89	9.33 13.91	10.01 14.92	11.36 16.93	13.99 20.85				
<b>6 5/8</b> 168.28	12.38 18.46	12.92 19.23	13.94 20.79	14.98 22.33	17.02 25.40	21.04 31.44	25.03 37.35	32.71 48.80	36.42 54.34	
<b>7</b> 177.80	13.10 19.53	13.65 20.36	14.75 22.00	15.59 23.64	18.04 26.89	22.34 33.30	26.50 39.59	34.74 51.79		
<b>8 5/8</b> 219.08	16.22 24.18	16.94 25.21	18.29 27.26	19.66 29.30	22.36 33.36	27.81 41.39	33.04 49.30	43.43 64.74	48.48 72.27	53.45 79.68
<b>9 5/8</b> 244.48	18.08 26.90	18.97 28.23	20.45 30.43	22.02 32.77	25.06 46.23	31.06 46.23	37.08 55.19	48.77 72.59		
<b>10 3/4</b> 273.05	20.23 30.10	21.23 31.59	22.89 34.06	24.65 36.69	28.06 41.76	34.81 51.81	40.52 (0.365) 60.30	54.79 81.54		
<b>12</b> 304.80	22.62 33.66	23.74 35.33	25.60 38.10	27.58 41.04	31.40 46.73	38.98 58.01	46.60 69.35	61.47 91.49		
<b>12 3/4</b> 323.85	24.05 35.80	25.25 37.57	27.23 40.52	29.34 43.66	33.41 49.71	41.48 61.74	49.61 73.83	65.48 97.45		
<b>14</b> 355.60	26.45 39.36	27.76 41.31	29.94 44.56	32.26 48.01	36.75 54.69	45.65 67.94	54.62 81.28	72.16 107.38		
<b>16</b> 406.40	30.27 45.05	31.78 47.29	34.28 51.02	36.95 54.98	42.09 62.64	52.32 77.87	62.64 93.21	82.85 123.29	92.83 138.38	102.72 153.13
<b>18</b> 457.20					47.44 70.59	58.99 87.79	70.65 105.15	93.54 139.20	104.76 155.90	
<b>20</b> 508.00					52.78 78.55	65.66 97.72	78.67 117.08	104.23 155.11	116.88 174.23	129.45 192.64
<b>24</b> 609.6						79.01 117.57	94.71 140.94	125.61 186.92	140.93 210.09	156.17 232.41

Please inquire about additional diameters and thicknesses.

# ERW Pipe

## Steel Pipe Specification

When specifying steel pipe it is important to note that there are often multiple ASTM specifications involved. Steel coil, for the production of ERW and spiralweld pipe, is manufactured to A1011 and A1018. This coil is often made to meet the physical and chemical requirements of steel grades like A36, A572, & A709.

Pipe manufacturing is different from steel grade and falls under specifications like A139 and A252. These specifications control the manufacturing tolerances of the pipe.

If the designer requires a steel grade that is more specific than the requirements that are described in A252 or other pipe manufacturing specifications it would be acceptable to specify steel pipe like below.

A252 Gr. 3 with physical and chemical requirements that meet A572 Gr. 55

## Pipe Manufacturing Specifications

ASTM	YIELD STRENGTH		ASTM	YIELD STRENGTH	
	ksi	MPa		ksi	MPa
<b>A 139 Grade A</b>	30	205	<b>A 252 Grade 1</b>	30	205
<b>A 139 Grade B</b>	35	240	<b>A 252 Grade 2</b>	35	240
<b>A 139 Grade C</b>	42	290	<b>A 252 Grade 3</b>	45	310
<b>A 139 Grade D</b>	46	315	<b>A 252 Grade 3 (Mod)</b>	50	345
<b>A 139 Grade E</b>	52	360	<b>A 252 Grade 3 (Mod)*</b>	55-80	379-555
			<b>AWWA C200</b>		

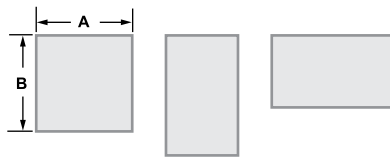
Highlighted fields represent the most commonly used and readily available steel grades. \*Availability is dependent on pipe diameter and thickness.

## Steel Specification

ASTM
A 588
A 690
A 572
A 709
A 1011
A 1018
Abrasion Resistant

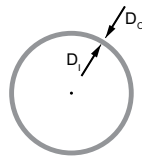
## Easy Weight Calculator (All Dimensions in inches. Density of steel = 0.2836 lbs/in<sup>3</sup>)

### Rectangles and Squares



$$\text{Weight (lbs)} = A \times B \times \text{Thickness} \times 0.2836$$

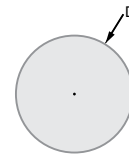
### Rings



$$\text{Weight (lbs)} = \text{Thickness} \times \frac{\pi}{4} (D_o^2 - D_i^2) \times 0.2836$$

$$\text{Area} = \frac{\pi}{4} (D_o^2 - D_i^2)$$

### Circular Plates



$$\text{Weight (lbs)} = \text{Thickness} \times \frac{\pi}{4} (D^2) \times 0.2836$$

$$\text{Area} = \frac{\pi}{4} D^2$$

## Delivery Conditions & Tolerances\*\*

### ASTM

Pipe Piles:

Outside Diameter	± 1%
Weight/Thickness	- 5%/+10%
Length	± 1 in.

\*\*Tighter specifications may be possible upon request.

## Maximum Rolled Lengths<sup>†</sup>

ERW	80 ft.	24.4 m
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<sup>†</sup> Longer lengths may be possible upon request.