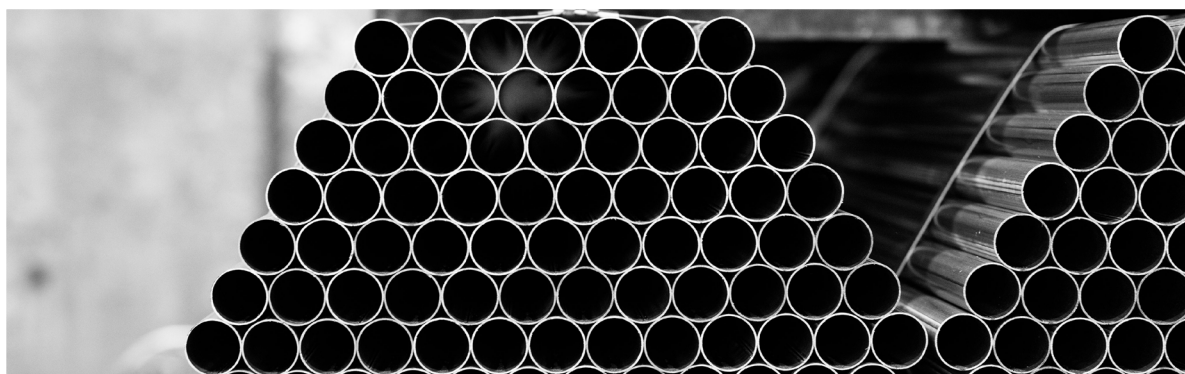


TUBOS

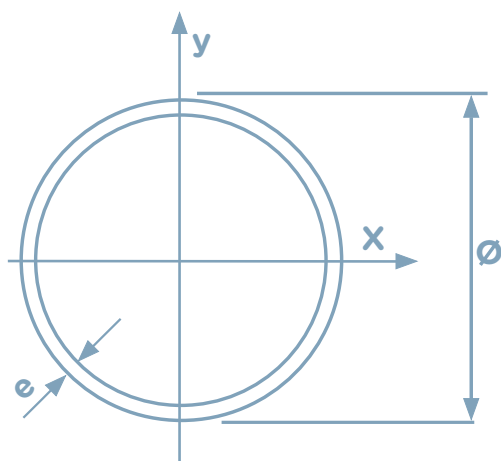
Tubo conformado a frio redondo

Todas as medidas até 3mm, podem ser fabricadas em galvanizado.

Φ (mm)	e (mm)											
	1	1.25	1.5	2	2.5	3	3.5	4	5	6	7	8
12	0.271	0.331	0.388									
13	0.296	0.362	0.425									
14	0.321	0.393	0.462									
16	0.370	0.455	0.536									
18	0.419	0.516	0.610	0.789								
19	0.444	0.547	0.647	0.838								
20	0.469	0.578	0.684	0.888								
22	0.518	0.640	0.758	0.986								
25	0.592	0.732	0.869	1.134								
28	0.666	0.825	0.980	1.282								
30	0.715	0.886	1.054	1.381								
32	0.765	0.948	1.128	1.480	1.819							
35	0.838	1.040	1.239	1.628	2.004							
38	0.912	1.133	1.350	1.776	2.189	2.589						
40	0.962	1.195	1.424	1.874	2.312	2.737						
42	1.011	1.256	1.498	1.973	2.435	2.885						
45	1.085	1.349	1.609	2.121	2.620	3.107						
48	1.159	1.441	1.720	2.269	2.805	3.329						
50	1.208	1.503	1.794	2.368	2.929	3.477	4.014	4.538				
60		1.811	2.164	2.861	3.545	4.217	4.877	5.524				



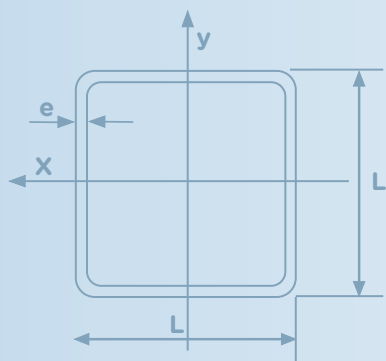
Φ	e (mm)											
(mm)	1	1.25	1.5	2	2.5	3	3.5	4	5	6	7	8
70			2.534	3.354	4.162	4.957	5.740	6.511	8.015			
76			2.756	3.650	4.532	5.401	6.258	7.103	8.754			
80			2.904	3.847	4.778	5.697	6.603	7.497	9.248			
90			3.274	4.340	5.395	6.437	7.456	8.484	10.481			
100				4.834	6.011	7.177	8.329	9.470	11.714	13.909		
125				6.067	7.553	9.026	10.487	11.936	14.796	17.608		23.083
152						11.023		14.599	18.126	21.603	25.031	28.410
178								17.164	21.332	25.450	29.519	33.539
200								19.334	24.044	28.705	33.317	37.880





Tubo conformado a frio quadrado

Todas as medidas até 3mm, podem ser fabricadas em galvanizado.

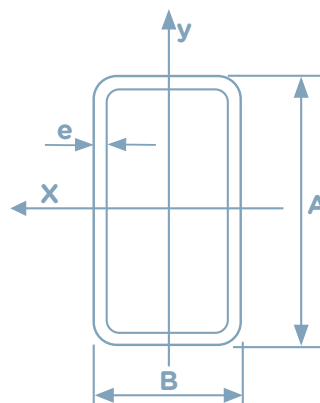


L (mm)	e (mm)												
	1	1.25	1.5	2	2.5	3	3.5	4	5	6	7	8	
10	0.283	0.343	0.400										
12	0.345	0.422	0.495	0.628									
14	0.408	0.500	0.589	0.754									
16	0.471	0.579	0.683	0.879	1.060								
18	0.534	0.657	0.777	1.005	1.217								
20	0.597	0.736	0.871	1.130	1.374	1.601							
25	0.754	0.932	1.107	1.444	1.766	2.072							
30	0.911	1.128	1.342	1.758	2.159	2.543							
35	1.068	1.325	1.578	2.072	2.551	3.014							
40	1.225	1.521	1.813	2.386	2.944	3.485	4.011	4.522					
45		1.717	2.049	2.700	3.336	3.956							
50			2.284	3.014	3.729	4.427	5.110	5.778	7.065				
60			2.755	3.642	4.514	5.369	6.209	7.034	8.635				
70			3.226	4.270	5.299	6.311	7.308	8.290	10.205				
80				4.898	6.084	7.253	8.407	9.546	11.775	13.942	16.045	18.086	
90				5.526	6.869	8.195	9.506	10.802	13.345	15.826	18.243	20.598	
100				6.154	7.654	9.137	10.605	12.058	14.915	17.710	20.441	23.110	
120								14.570	18.055	21.478	24.837	28.134	
125								15.198	18.840	22.420	25.936	29.390	
140								17.082	21.195	25.246	29.233	33.158	
150								18.338	22.765	27.130	31.431	35.670	
160								19.594	24.335	29.014	33.629	38.182	



Tubo conformado a frio retangular

Todas as medidas até 3mm, podem ser fabricadas em galvanizado.



A*B (mm)	e (mm)											
	1	1.25	1.5	2	2.5	3	3.5	4	5	6	7	8
16*10	0.370	0.455	0.536									
20*10	0.438	0.547	0.632									
20*15	0.516	0.640	0.750									
25*10	0.516	0.640	0.750									
25*15	0.595	0.733	0.868	1.120								
25*20	0.673	0.825	0.985	1.280								
30*10	0.595	0.733	0.868									
30*15	0.673	0.825	0.985	1.280								
30*20	0.752	0.930	1.100	1.440								
30*25	0.838	1.040	1.220	1.590								
35*10	0.673	0.825	0.985									
35*15	0.752	0.930	1.100	1.440								
35*20	0.838	1.040	1.220	1.590								
35*25	0.912	1.130	1.340	1.750								
40*10	0.752	0.930	1.100									
40*15	0.838	1.040	1.220	1.590								
40*20	0.912	1.130	1.340	1.750								
40*25	0.986	1.225	1.460	1.910								
40*27	0.986	1.225	1.460	1.910								
40*30	1.060	1.318	1.570	2.070	2.540	2.830						
40*35	1.159	1.441	1.690	2.220	2.740	3.249						
45*10	0.838	1.040	1.220									
45*15	0.912	1.130	1.340	1.750								
45*20	0.986	1.225	1.460	1.910								
45*25	1.060	1.318	1.570	2.070								



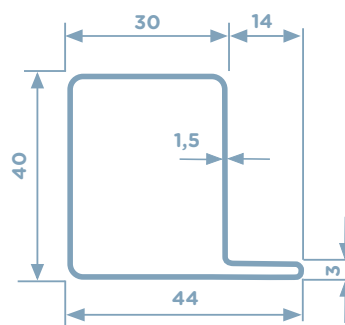
A*B (mm)	e (mm)												
	1	1.25	1.5	2	2.5	3	3.5	4	5	6	7	8	
50*10	0.912	1.130	1.340										
50*15	0.986	1.225	1.460	1.910									
50*20	1.060	1.318	1.570	2.070									
50*25	1.159	1.441	1.690	2.220									
50*30	1.208	1.503	1.810	2.380	2.930	3.300							
50*35		1.626	1.927	2.537									
50*40		1.719	2.050	2.690	3.330	3.770							
60*10	1.060	1.318	1.670										
60*15	1.159	1.441	1.690	2.220									
60*20	1.208	1.503	1.810	2.380									
60*30		1.719	2.050	2.690	3.330	3.770							
60*40			2.275	3.010	3.720	4.250	5.110	5.450	6.560				
60*50				3.320	4.110	4.720	5.659	6.080	7.340				
70*20			2.050	2.690									
70*30			2.275	3.010	3.720	4.250							
70*40			2.534	3.320	4.110	4.720							
70*50				3.640	4.500	5.190	6.209	6.710					
80*20			2.275	3.010									
80*30				3.320	4.110	4.720	5.659	6.080					
80*40			2.756	3.640	4.500	5.190	6.209	7.033	8.635				
80*50				3.950	4.900	5.840	6.758	7.661	9.420				
80*60				4.260	5.290	6.311	7.308	8.289	10.205				
90*30				3.640	4.500	5.190							
90*40				3.950	4.900	5.660	6.758	7.340					
90*50				4.260	5.290	6.130	7.308	7.970	9.700				
100*30				3.950	4.900	5.840							
100*40				4.260	5.290	6.130	7.308	7.970	9.700				
100*50				4.587	5.680	6.600	7.857	8.590	10.480				
100*60				4.834	6.070	7.070	8.407	9.220	11.270				
100*80				5.475	6.813	8.010	9.506	10.480	12.840	15.825			20.598



A*B (mm)	e (mm)												
	1	1.25	1.5	2	2.5	3	3.5	4	5	6	7	8	
120*40				4.834	6.050	7.070	8.407	9.220					
120*50								9.850	12.560	14.883			
120*60				5.526	6.868	8.195	9.506	10.801	13.345	15.825			
120*80				6.154	7.653	9.137	10.605	12.057	14.915	17.809			23.110
120*100									16.485	19.593	22.639	25.622	
140*60						9.137		12.057	14.915	17.709	20.441	23.104	
140*80								13.760	17.000	20.160	23.240	26.240	
150*50						9.137		12.057	14.915	17.709	20.440	23.110	
160*80								14.569	18.055	21.477	24.837	28.134	
180*100								17.081	21.195	25.245	29.233	33.158	
200*80								17.081	21.195	25.245	29.233	33.158	
200*100								18.337	22.765	27.129	31.431	35.670	
200*120								19.593	24.335	29.013	33.629	38.182	

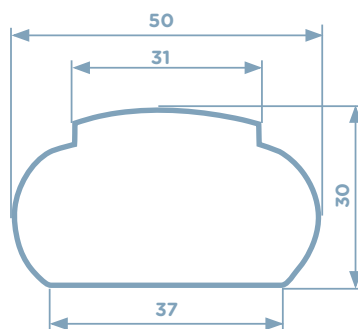
Tubo conformado a frio cerco x 1,5

Peso/Poids/Peso: 1,868 kg/m



Tubo conformado a frio corrimão x 1,5

Peso/Poids/Peso: 1,498 kg/m

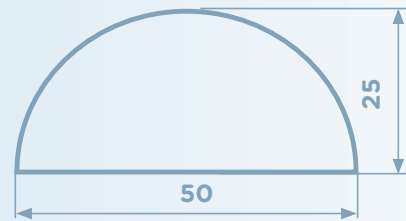
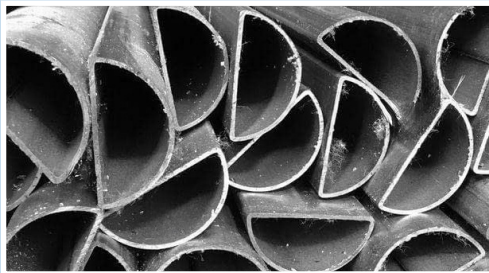


TUBOS



Tubo conformado a frio corrimão meia-cana 1,5

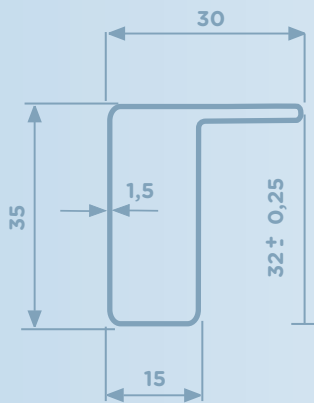
Peso/Poids/Peso: 1,498 kg/m



Tubo conformado para serralheria

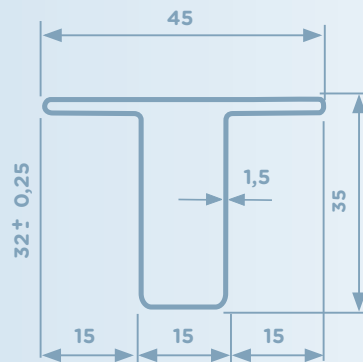
Todas as medidas até 3mm, podem ser
fabricadas em galvanizado.

X-21



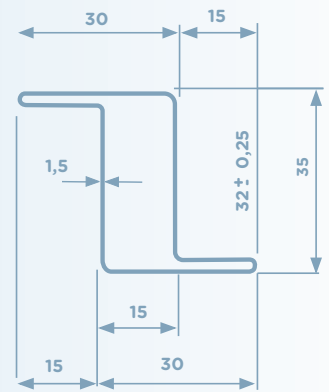
Peso/Poids/Peso: 1,407 kg/m

X-22



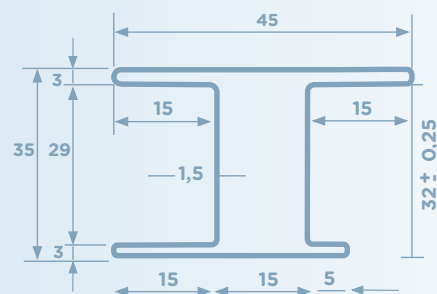
Peso/Poids/Peso: 1,754 kg/m

X-23



Peso/Poids/Peso: 1,778 kg/m

X-27



Peso/Poids/Peso: 2,207 kg/m

