

TUBO CÉDULA 30

Cédula	Diámetro Nóminal		Diámetro Ext.	Espesor			Peso	Longitud 6.00 mt			
	pulg	mm	pulg	cálibre	pulg	mm	kg/m	pzas/paq	kg/paq	kgs/pza	kgs/pza
30	1/2"	12.7	0.840	14	0.075	1.90	0.91	127	736	5.46	5.55
	3/4"	19.0	1.050	14	0.075	1.90	1.16	91	675	6.96	7.08
	1"	25.0	1.315	14	0.075	1.90	1.56	91	857	9.36	9.52
	1 1/4"	32.0	1.660	13	0.090	2.30	2.35	61	865	14.10	14.34
	1 1/2"	38.0	1.900	13	0.090	2.30	2.71	61	997	16.26	16.53
	2"	51.0	2.375	12	0.105	2.70	3.96	61	1457	23.76	24.16
	2 1/2"	64.0	2.875	12	0.105	2.70	4.84	37	1080	29.04	29.52
	3"	76.0	3.500	11	0.120	3.00	6.75	24	978	40.50	41.18
4"	102.0	4.500	11	0.120	3.00	8.74	19	1002	52.44	53.31	

TUBO CÉDULA 40

Cédula	Diámetro Nóminal		Diámetro Ext.	Espesor			Peso	Longitud 6.40 mt		
	pulg	mm	pulg	cálibre	pulg	mm	kg/m	pzas/paq	kg/paq	kg/pzas
40	1/2"	12.7	0.840	12	0.105	2.70	1.27	127	1041	8.13
	3/4"	19.0	1.050	12	0.105	2.70	1.68	91	973	10.75
	1"	25.0	1.315	10	0.135	3.40	2.65	91	1544	16.96
	1 1/4"	32.0	1.660	10	0.135	3.40	3.49	61	1363	22.34
	1 1/2"	38.0	1.900	9	0.148	3.80	4.37	61	1709	27.97
	2"	51.0	2.375	9	0.148	3.80	5.55	61	2167	32.52
	2 1/2"	64.0	2.875	3/16"	0.188	4.80	8.43	37	1997	53.95
	3"	76.0	3.500	5	0.220	5.70	12.25	24	1882	78.40
	4"	102.0	4.500	5	0.220	5.70	15.98	19	1944	102.27
6"	168.0	6.625		0.280	7.10	29.65	7	1329	189.76	

LAMINA GALVANIZADA

Perfil	Cálibre	Peso kg/m ²	Compresión superior momento positivo			Compresión superior momento negativo			Acciones permisibles		
			I+ cm4/mt	S+ cm3/mt	MMAX+ kg-m	I- cm4/mt	S- cm3/mt	MMAX- kg-m	Valor máximo kg/mt	Reacciones máximas	Apoyo exterior kg/mt
RN-100/35	26	4.69	10.57	4.42	68.95	6.86		57.41	1065	161	201
	24	5.42	12.76	5.38	83.93	8.21		69.73	1452	208	317
	22	7.60	18.53	8.05	125.58	12.53		110.92	2449	379	772
R-72	30	2.44	2.90	1.73	26.98	2.02		24.34	742	147	181
	28	2.97	3.93	2.41	37.60	2.66		32.92	1279	208	330
	26	3.52	4.93	3.07	47.89	3.38		42.59	1846	279	515
	24	4.06	5.81	3.65	56.94	4.14		50.70	2372	359	731
R-101	22	5.70	8.33	5.34	83.30	6.78		76.44	3393	680	1157
	28	3.46	3.93	2.41	37.60	2.66		32.92	1279	208	330
	26	4.69	4.93	3.07	47.89	3.38		42.59	1846	279	515
	24	5.42	5.81	3.65	56.94	4.14		50.70	2372	359	731
O-725	22	7.60	8.33	5.34	83.30	6.78		73.44	3393	680	1557
	30	2.44	1.84	1.90	29.64						
	28	2.97	2.28	2.35	36.68						
	26	3.52	2.74	2.82	44.00						
O-100	24	4.06	3.20	3.30	51.50						
	28	3.96	2.28	2.35	36.66						
	26	4.69	2.74	2.82	44.00						
	24	5.42	3.20	3.30	51.50						
SECC-25	22	5.42	45.11	11.93		50.54					
	22	7.60	69.54	19.22		72.31					
	20	9.06	86.34	24.54		86.81					
	18	11.96	114.63	35.25		114.63					
R-90	26	5.21	81.48	8.92							
	24	6.02	100.07	11.26							
	22	8.44	155.93	18.39							

Nota:
Fabricamos Lámina RN-100/35, R-72, R-101 a medidas especiales.

TUBO ESTRUCTURAL LONGITUD ESTÁNDAR 12.20 MT

Diámetro Nominal	Espesor de Pared		Cédula	Peso (kg/m)
6"	3/16"	0.188		19.35
	1/4"	0.250		25.55
		0.280	40	28.22
	3/8"	0.375		37.20
	1/2"	0.500		48.73
8"	3/16"	0.188		25.37
	1/4"	0.250	20	33.57
		0.277	30	36.51
	5/16"	0.312		41.14
		0.322	40	42.65
	3/8"	0.375		49.10
		0.438		56.94
10"	1/2"	0.500	80	64.64
	3/16"	0.188		31.76
	1/4"	0.250	20	42.09
		0.307	30	51.03
		0.365	40	60.50
12"		0.500	60	81.55
	3/16"	0.188		37.77
	1/4"	0.250	20	50.11
		0.330	30	65.35
		0.406	40	79.65
14"	1/2"	0.500		97.46
	3/16"	0.188		41.52
	1/4"	0.250	10	55.11
	5/16"	0.312	20	67.74
	3/8"	0.375	30	81.08
16"		0.438	40	94.30
	1/2"	0.500		107.39
	3/16"	0.188		47.54
	1/4"	0.250	10	63.13
	5/16"	0.312	20	77.63
18"	3/8"	0.375	30	92.98
	1/2"	0.500	40	123.30
	1/4"	0.250	10	71.12
	3/8"	0.375		104.84
	1/2"	0.500		139.15
20"	1/4"	0.250	10	79.16
	3/8"	0.375	20	116.78
	1/2"	0.500	30	155.12
24"	1/4"	0.250	10	94.53
	3/8"	0.375	20	141.12
	1/2"	0.500		187.06

Notas:

* La tubería para uso estructural se fabrica bajo las normas ASTM A-120, ASTM A-53 y API 5L GR. B y X-42

TUBERÍA PARA CONDUCCIÓN DE FLUIDOS

Diámetro Nominal	Diámetro Externo		Espesor		CED. No.	kg/m	kgs/pza	Presión de Prueba ASTM-120		Presión de Prueba ASTM-53		
	pulg	mm	pulg	mm				lbs/pulg2	kg/cm2	lbs/pulg2	kg/cm2	
1/2"	13	0.840	21.3	0.109	2.77	40	1.27	8.13	700	50	700	50
3/4"	13	0.840	21.3	0.147	3.73	80	1.62	10.37	850	60	850	60
	19	1.050	26.7	0.113	2.87	40	1.69	10.82	700	50	700	50
1"	19	1.050	26.7	0.154	3.38	80	2.20	14.08	850	60	850	60
	25	1.315	33.4	0.133	3.38	40	2.50	16.00	700	50	700	50
1 1/4"	25	1.315	33.4	0.179	4.55	80	3.24	20.74	850	60	850	60
	32	1.660	42.2	0.140	3.56	40	3.39	21.70	1000	70	1200	85
1 1/2"	32	1.660	42.2	0.191	4.85	80	4.47	28.61	1500	105	1800	127
	38	1.900	48.3	0.145	3.68	40	4.05	25.92	1000	70	1200	85
2"	38	1.900	48.3	0.200	5.08	80	5.41	34.62	1500	105	1800	127
	50	2.375	60.3	0.154	3.91	40	5.44	34.82	1000	70	2300	162
2 1/2"	50	2.375	60.3	0.218	5.54	80	7.48	47.87	1500	105	2500	176
	64	2.875	73.0	0.203	5.16	40	8.63	55.23	1000	70	2500	176
3"	64	2.875	73.0	0.160	4.06	X	6.90	44.16	1000	70	1950	137
	76	3.500	88.9	0.216	5.49	40	11.29	72.26	1000	70	2220	156
4"	76	3.500	88.9	0.170	4.32	X	9.00	57.60	1000	70	1930	136
	102	4.500	114.3	0.237	6.02	40	16.05	102.72	1200	85	1900	134
	102	4.500	114.3	0.188	4.78	X	12.91	82.62	1000	70	1500	105

MEDIDAS Y PESOS TEÓRICOS PTR RECTANGULAR

Dimensiones pulgadas (mm)	Color	Espesor			Peso		Longitud 6.10 mt	
		cal	pulg	mm	kg/mt	kg/pza	pzas/paq	kg/paq
1" x 1" (25.4 x 25.4)	Azul	14	0.075	1.90	1.46	8.91	96	855
	Naranja	12	0.105	2.70	1.99	12.14	96	1165
	Blanco	11	0.120	3.00	2.24	13.66	96	1311
	Verde	10	0.135	3.40	2.49	15.19	96	1458
1 1/4" x 1 1/4" (31.75 x 31.75)	Azul	14	0.075	1.90	1.87	11.41	80	912
	Naranja	12	0.105	2.70	2.57	15.68	80	1254
	Verde	10	0.135	3.40	3.20	19.52	80	1561
1 1/2" x 1 1/2" (38.1 x 38.1)	Azul	14	0.075	1.90	2.27	13.85	64	886
	Naranja	12	0.105	2.70	3.12	19.03	64	1218
	Blanco	11	0.120	3.00	3.50	21.35	64	1366
	Verde	10	0.135	3.40	3.91	23.85	64	1526
2" x 2" (50.8 x 50.8)	Azul	14	0.075	1.90	3.02	18.42	54	995
	Naranja	12	0.105	2.70	4.18	25.50	54	1376
	Blanco	11	0.120	3.00	4.75	28.98	54	1564
	Verde	10	0.135	3.40	5.31	32.39	54	1748
2 1/2" x 2 1/2" (64 x 64)	Azul	14	0.075	1.90	3.80	23.18	36	834
	Naranja	12	0.105	2.70	5.27	32.15	36	1157
	Blanco	11	0.120	3.00	5.80	35.38	36	1273
	Verde	10	0.135	3.40	6.17	37.64	36	1354
		9	0.148	3.80	6.75	41.18	36	1481
		8	0.165	4.20	7.44	45.38	36	1633
	Rojo	3/16"	0.188	4.80	8.31	50.69	36	1824
3" x 3" (76 x 76)		14	0.075	1.90	4.35	26.54	30	793
	Blanco	11	0.120	3.00	7.06	43.07	30	1291
		10	0.135	3.40	7.54	45.99	30	1379
	Verde	9	0.148	3.80	8.25	50.33	30	1509
		8	0.165	4.20	9.10	55.51	30	1664
	Rojo	3/16"	0.188	4.80	10.21	62.28	30	1967
3 1/2" x 3 1/2" (89 x 89)		14	0.075	1.90	5.11	31.17	20	623
	Blanco	11	0.120	3.00	8.32	50.75	20	1014
		10	0.135	3.40	8.89	54.23	20	1084
	Verde	9	0.148	3.80	9.73	59.35	20	1186
		8	0.165	4.20	10.76	65.64	20	1312
	Rojo	3/16"	0.188	4.80	12.11	73.87	20	1476
		5	0.220	5.70	13.97	85.22	20	1703
4" x 4" (102 X 102)	Azul	1/4"	0.250	6.40	15.62	95.28	20	1904
		14	0.075	1.90	5.87	35.81	20	716
	Blanco	11	0.120	3.00	9.60	58.56	20	1170
		10	0.135	3.40	10.24	62.46	20	1248
	Verde	9	0.148	3.80	11.24	68.56	20	1370
		8	0.165	4.20	12.44	75.88	20	1517
	Rojo	3/16"	0.188	4.80	14.00	85.40	20	1707
4 1/2" x 4 1/2" (114 x 114)		5	0.220	5.70	16.19	98.76	20	1974
	Azul	1/4"	0.250	6.40	18.15	110.72	20	2213
		14	0.075	1.90	6.63	40.44	16	647
	Blanco	11	0.120	3.00	10.24	62.46	16	999
		10	0.135	3.40	11.52	70.27	16	1124
	Verde	9	0.148	3.80	13.02	79.42	16	1270
		8	0.165	4.20	14.03	85.58	16	1368
5" x 5" (127 x 127)	Rojo	3/16"	0.188	4.80	15.90	96.99	16	1551
		5	0.220	5.70	18.40	112.24	16	1795
	Azul	1/4"	0.250	6.40	20.67	126.09	16	2016
		14	0.075	1.90	7.39	45.08	9	405
	Blanco	11	0.120	3.00	12.13	73.99	9	666
		10	0.135	3.40	13.18	80.40	9	723
5" x 5" (127 x 127)	Verde	9	0.148	3.80	14.22	86.74	9	780
		8	0.165	4.20	16.13	98.39	9	885
	Rojo	3/16"	0.188	4.80	17.79	108.52	9	976
		5	0.220	5.70	20.66	126.03	9	1133
	Azul	1/4"	0.250	6.40	23.21	141.58	9	1273

MEDIDAS Y PESOS TEÓRICOS PTR RECTANGULAR

Dimensiones pulgadas (mm)	Color	Espesor			Peso		Longitud 6.10 mt	
		cal	pulg	mm	kg/mt	kg/pza	pzas/paq	kg/paq
2" x 1" (50.8 x 25.4)	Azul	14	0.075	1.90	2.40	14.64	72	1054
2 1/2" x 1 1/2" (64 x 38.1)	Azul	14	0.075	1.90	3.01	18.36	80	1468
	Naranja	12	0.105	2.70	4.16	25.38	80	2029
3" x 1 1/2" (76.2 x 38.1)	Azul	14	0.075	1.90	3.38	20.62	40	825
3" x 2" (76 x 50.8)	Azul	14	0.075	1.90	3.80	23.18	36	834
	Naranja	12	0.105	2.70	5.27	32.15	36	1157
	Blanco	11	0.120	3.00	5.80	35.38	36	1273
	Verde	10	0.135	3.40	6.17	37.64	36	1354
		9	0.148	3.80	6.75	41.18	36	1481
		8	0.165	4.20	7.44	45.38	36	1633
	Rojo	3/16"	0.188	4.80	8.31	50.69	36	1824
4" x 1 1/2" (101.6 x 38.1)	Azul	14	0.075	1.90	4.17	25.44	96	2441
4" x 2" (102 x 50.8)		14	0.075	1.90	4.35	26.54	30	793
	Blanco	11	0.120	3.00	7.06	43.07	30	1291
		10	0.135	3.40	7.54	45.99	30	1379
	Verde	9	0.148	3.80	8.25	50.33	30	1509
		8	0.165	4.20	9.10	55.51	30	1664
		Rojo	3/16"	0.188	4.80	10.21	62.28	30
4" x 3" (102 x 76)		14	0.075	1.90	5.11	31.17	20	623
	Blanco	11	0.120	3.00	8.32	50.75	20	1014
		10	0.135	3.40	8.89	54.23	20	1084
	Verde	9	0.148	3.80	9.73	59.35	20	1186
		8	0.165	4.20	10.76	65.64	20	1312
	Rojo	3/16"	0.188	4.80	12.11	73.87	20	1476
		5	0.220	5.70	13.97	85.22	20	1703
	Azul	1/4"	0.250	6.40	15.62	95.28	20	1904
5" x 3" (127 x 76)		14	0.075	1.90	5.87	35.81	20	716
	Blanco	11	0.120	3.00	9.60	58.56	20	1170
		10	0.135	3.40	10.24	62.46	20	1248
	Verde	9	0.148	3.80	11.24	68.56	20	1370
		8	0.165	4.20	12.24	75.88	20	1517
6" x 2" (152 x 50.8)	Rojo	3/16"	0.188	4.80	14.00	85.40	20	1707
		5	0.220	5.70	16.19	98.76	20	1974
	Azul	1/4"	0.250	6.40	18.15	110.72	20	2213
		14	0.075	1.90	6.63	40.44	16	647
6" x 3" (152 x 76)	Blanco	11	0.120	3.00	10.24	62.46	16	999
		10	0.135	3.40	11.52	70.27	16	1124
	Verde	9	0.148	3.80	13.02	79.42	16	1270
		8	0.165	4.20	14.03	85.58	16	1368
	Rojo	3/16"	0.188	4.80	15.90	96.99	16	1551
		5	0.220	5.70	18.40	112.24	16	1795
	Azul	1/4"	0.250	6.40	20.67	126.09	16	2016
		14	0.075	1.90	7.39	45.08	9	405
6" x 4" (152 x 102)	Blanco	11	0.120	3.00	12.13	73.99	9	666
		10	0.135	3.40	13.18	80.40	9	723
	Verde	9	0.148	3.80	14.22	86.74	9	780
		8	0.165	4.20	16.13	98.39	9	885
	Rojo	3/16"	0.188	4.80	17.79	108.52	9	976
		5	0.220	5.70	20.66	126.03	9	1133
	Azul	1/4"	0.250	6.40	23.21	141.58	9	1273

Notas:

* Todas las medidas se fabrican con acero calidad comercial.

* Medidas mayores de 2" y calibres más gruesos que calibre 12 se ofrecen en especificación ASTM A-500 grado B

PERFILES TUBULARES

Denominación	Prolimsa Pint./Galv	Regiopytsa Pint./Galv	Arco Metal Pint./Galv	Imssa Mex Galvanizado	Peso (largo std. 6.0 m)			Atados pzas/peq		
					18 (kg/m)	20 (kg/pza)	20 (kg/m)			
Tubular 1/2" x 1/2"	C050	212	AC050	ZC050	0.47	2.82	0.35	2.10	20	56.4
Tubular 3/4" x 3/4"	C075	210	AC075	ZC075	0.67	4.02	0.53	3.18	20	80.4
Tubular 1" x 1"	C100	121	AC100	ZC100	0.93	5.58	0.72	4.32	20	111.6
Tubular 1 1/4" x 1 1/4"	C125	208	AC125	ZC125	1.21	7.26	0.91	5.46	10	72.6
Tubular 1 1/2" x 1 1/2"	C150	207	AC150	ZC150	1.47	8.82	1.10	6.60	10	88.2
Tubular 1 3/4" x 1 3/4"	C175	230	AC175	ZC175	1.71	10.26	1.28	7.68	1	10.3
Tubular 2" x 2"	C200	307	AC200	ZC200	1.95	11.70	1.46	8.76	8	93.6
Tubular 1/2" x 3/8"	R050	*	*	*	0.38	2.28			20	45.6
Tubular 1" x 1/2"	R100	215	AR100	ZR100	0.70	4.20	0.53	3.18	20	84.0
Tubular 1 1/4" x 3/4"	R125	228	AR125	ZR125	0.96	5.76	0.72	4.32	10	57.6
Tubular 1 1/2" x 1/2"	*	128	*	*	0.94	5.64			100	564.0
Tubular 1 1/2" x 1"	*	229	AR229	*	1.20	7.20			100	720.0
Tubular 1 3/4" x 3/4"	R175	230	AR175	ZR175	1.20	7.20	0.92	5.52	10	72.0
Tubular 2" x 1"	R200	216	AR200	ZR200	1.47	8.82	1.11	6.66	8	70.6
Tubular 2 1/4" x 3/4"	R225	209	AR225	ZR225	1.47	8.82	1.10	6.60	10	88.2
Tubular 2 1/2" x 1 1/4"	R249	241	AR249	ZR249	1.86	11.16	1.39	8.34	8	89.3
Tubular 2 1/2" x 1 1/2"	R250	368	AR250	ZR250	1.95	11.70	1.46	8.76	1	11.7
Tubular 3" x 1 1/4"	*	223	*	*	2.00	12.00	1.45	8.70	50	600.0
Tubular 3" x 1 1/2"	R300	322	AR300	ZR300	2.12	12.72	1.60	9.60	6	76.3
Tubular 4" x 1 1/2"	R400	422	AR400	ZR400	2.70	16.20	2.00	12.00	4	64.8

* El tubular se maneja en calibre 18 ó calibre 20

(*) Productos con asterisco no los fabrica dicho proveedor

* El tablero se fabrica en largo continuo ó ancho continuo* (acanalado a lo largo ó ancho)

PERFILES TUBULARES

Denominación	Prolamsa Pint./Galv	Regiopytsa Pint./Galv	Arco Metal Pint./Galv	Imsa Mex Galvanizado	Peso (largo std. 6.0 m)				Atados	
					18 (kg/m)	18 (kg/pza)	20 (kg/m)	20 (kg/pza)	pzas/paq	18 (kg/paq)
Tubular R25	P100	236	AP100	ZP100	1.40	8.40	1.01	6.06	8	67.2
Tubular R40	P150	234	AP150	ZP150	1.61	9.66	1.23	7.38	8	77.3
Tubular R50	P200	261	AP200	ZP200	1.90	11.40	1.41	8.46	8	91.2
Tubular R60	P250	268	AP250	ZP250	2.10	12.60	1.58	9.48	6	75.6
Tubular R75	P300	310	AP300	ZP300	2.35	14.10	1.73	10.38	6	84.6
Tubular R100	P400	410	AP400	ZP400	2.81	16.86	2.11	12.66	4	67.4
Tubular MH25	*	237	AK100	*	1.50	9.00	1.16	6.96	100	900.0
Tubular MH40	K150	235	AK150	ZP015	1.90	11.40	1.34	8.04	9	102.6
Tubular MH50	K200	238	AK200	ZP020	2.40	14.40	1.71	10.26	10	144.0
Tubular MH75	K300	239	AK300	ZP030	2.61	15.66	1.91	11.46	10	156.6
Tubular T40 E	159	301	A159	*	1.80	10.80	1.40	8.40	6	64.8
Tubular 121	121	204	A121	ZV121	1.40	8.40	0.95	5.70	8	67.2
Tubular 126	126	243	AP126	ZV126	1.80	10.80	1.31	7.86	8	86.4
Tubular 127	127	242	AK127	ZV127	1.91	11.46	1.51	9.06	5	57.3
Tubular RL	101	201	A101	ZV101	1.30	7.80	0.91	5.46	10	78.0
Tubular RL CORR	123	205	A123	ZV123	1.40	8.40	1.04	6.24	10	84.0
Tubular RL MOSQ	131	101	*	ZV131			0.67	4.02	20	80.4
Tubular ML	103	219	A103	ZV103	1.50	9.00	1.07	6.42	10	90.0
Tubular ZETA	106	233	A106	ZV106	1.50	9.00	1.01	6.06	10	90.0
Tubular TEE	144	224	A144	ZV144	1.61	9.66	1.21	7.26	20	193.2
Tubular Junquillo 3/8	154	114	A154	ZV154	0.25	1.50	0.20	1.20	50	75.0
Tubular Junquillo 3/4	155	117	*	*			0.30	1.80	50	90.0
Tubular Pasamanos	160	225	A160	pasamanos	1.50	9.00	1.12	6.72	10	90.0
Tubular Riel 1400	1400	127	A1400	ZP1400			1.22	7.32	4	29.3
Tubular Riel 1500	1500	227	A1500	ZP1500	3.00	18.00		15.00	4	72.0
Tubular Zercha	*	*	A30		0.46	2.76	2.50		50	138.0
Tubular D60	171	131	A171	ZD171			0.90	5.40	10	54.0
Tubular DD60	170	132	A170	ZD170			1.60	9.60	10	96.0
Tubular Tablero 3x3 pies	149	149	Tab C CH	ZT149			6.70	40.20	25	1005.0
Tubular Tablero 3x6 pies	149	149	Tab C CH	ZT150			6.70	40.20	25	1005.0
Tubular Tablero 3x8 pies	149	149	Tab C CH	ZT151			6.70	40.20	25	1005.0
Tubular Tablero 3x10 pies	149	149	Tab C CH	ZT152	1.40	8.40	6.70	40.20	25	1005.0
Tubular M225	M225	112	A129	ZM225	2.10	12.60	1.10	6.60	8	67.2
Tubular Jamba lados desiguales	M525	145	A167	ZM225	2.30	13.80	1.60	9.60	7	88.2
Tubular Jamba lados iguales	M600	146	A130	*					7	96.6

* El tubular se maneja en calibre 18 ó calibre 20

(*) Productos con asterisco no los fabrica dicho proveedor

* El tablero se fabrica en largo continuar ó ancho continuar (acanalado a lo largo ó ancho)

