



TABLA Nº 1

CALCULO DE MATERIAL DE CEMENTACION PARA PERFORACIONES

AISLACION				ESPESOR ANILLO CEMENTO		ZAPATA		CEMENTACION SEGUN PROFUNDIDAD																				
diám. perf.	diám. perf.	diám. caño	diám. caño	CEMENTO		diám.	perím.	Referencia POR METRO				20 mts.				24 mts.				27 mts.				30 mts.				
"	mts.	"	mts.	"	mts.	"	mts.	Volumen	Bolsas	accept.	Kg.	Agua (lts.)	Bolsas	accept.	Kg.	Agua (lts.)	Bolsas	accept.	Kg.	Agua (lts.)	Bolsas	accept.	Kg.	Agua (lts.)	Bolsas	accept.	Kg.	Agua (lts.)
5	0.127	3	0.076	1	0.0254	4	0.32	0.008	0.16	0.13	8.11	4.86	3.2	2.6	162.1	97.3	3.9	3.1	194.6	116.7	4.4	3.5	218.9	131.3	4.9	3.9	243.2	145.9
6	0.152	3	0.076	1.5	0.0381	5	0.40	0.014	0.27	0.22	13.68	8.21	5.5	4.4	273.6	164.2	6.6	5.3	328.3	197.0	7.4	5.9	369.4	221.6	8.2	6.6	410.4	246.3
5.5	0.140	3.5	0.089	1	0.0254	4.5	0.36	0.009	0.18	0.15	9.12	5.47	3.6	2.9	182.4	109.4	4.4	3.5	218.9	131.3	4.9	3.9	246.3	147.8	5.5	4.4	273.6	164.2
7.5	0.191	3.5	0.089	2	0.0508	6.5	0.52	0.022	0.45	0.36	22.30	13.38	8.9	7.1	445.9	267.5	10.7	8.6	535.1	321.0	12.0	9.6	602.0	361.2	13.4	10.7	668.9	401.3
6	0.152	4	0.102	1	0.0254	5	0.40	0.010	0.20	0.16	10.13	6.08	4.1	3.2	202.7	121.6	4.9	3.9	243.2	145.9	5.5	4.4	273.6	164.2	6.1	4.9	334.4	200.7
8	0.203	4	0.102	2	0.0508	7	0.56	0.024	0.49	0.39	24.32	14.59	9.7	7.8	486.4	291.9	11.7	9.3	583.7	350.2	13.1	10.5	656.7	394.0	14.6	11.7	729.7	437.8
6.5	0.165	4.5	0.114	1	0.0254	5.5	0.44	0.011	0.22	0.18	11.15	6.69	4.5	3.6	223.0	133.8	5.4	4.3	267.5	160.5	6.0	4.8	301.0	180.6	6.7	5.4	334.4	200.7
8.5	0.216	4.5	0.114	2	0.0508	7.5	0.60	0.026	0.53	0.42	26.35	15.81	10.5	8.4	527.0	316.2	12.6	10.1	632.4	379.4	14.2	11.4	711.4	426.9	15.8	12.6	790.5	474.3
10	0.254	6	0.152	2	0.0508	9	0.72	0.032	0.65	0.52	32.43	19.46	13.0	10.4	648.6	389.2	15.6	12.5	778.3	467.0	17.5	14.0	875.6	525.4	19.5	15.6	972.9	583.7
12	0.305	6	0.152	3	0.0762	11	0.88	0.055	1.09	0.88	54.72	32.83	21.9	17.5	1094.5	656.7	26.3	21.0	1313.4	788.0	29.6	23.6	1477.6	886.5	32.8	26.3	1641.7	985.0
12	0.305	8	0.203	2	0.0508	11	0.88	0.041	0.81	0.65	40.54	24.32	16.2	13.0	810.7	486.4	19.5	15.6	972.9	583.7	21.9	17.5	1094.5	656.7	24.3	19.5	1216.1	729.7
14	0.356	8	0.203	3	0.0762	13	1.04	0.067	1.34	1.07	66.89	40.13	26.8	21.4	1337.7	802.6	32.1	25.7	1605.2	963.1	36.1	28.9	1805.9	1083.5	40.1	32.1	2006.6	1203.9
14	0.356	10	0.254	2	0.0508	13	1.04	0.049	0.97	0.78	48.64	29.19	19.5	15.6	972.9	583.7	23.3	18.7	1167.5	700.5	26.3	21.0	1313.4	788.0	29.2	23.3	1459.3	875.6
16	0.406	10	0.254	3	0.0762	15	1.20	0.079	1.58	1.26	79.05	47.43	31.6	25.3	1580.9	948.6	37.9	30.4	1897.1	1138.3	42.7	34.1	2134.3	1280.6	47.4	37.9	2371.4	1422.8
16	0.406	12	0.305	2	0.0508	15	1.20	0.057	1.14	0.91	56.75	34.05	22.7	18.2	1135.0	681.0	27.2	21.8	1362.0	817.2	30.6	24.5	1532.3	919.4	34.1	27.2	1702.5	1021.5
18	0.457	12	0.305	3	0.0762	17	1.36	0.091	1.82	1.46	91.21	54.72	36.5	31.0	1824.1	1094.5	43.8	37.2	2189.0	1313.4	49.3	41.9	2462.6	1477.6	54.7	46.5	2736.2	1641.7
18	0.457	14	0.356	2	0.0508	17	1.36	0.065	1.30	1.04	64.86	38.92	25.9	22.1	1297.2	778.3	31.1	26.5	1556.6	934.0	35.0	29.8	1751.2	1050.7	38.9	31.1	1945.8	1167.5
20	0.508	14	0.356	3	0.0762	19	1.52	0.103	2.07	1.65	103.37	62.02	41.3	35.1	2064.4	1240.4	49.6	42.2	2480.8	1488.5	55.8	47.4	2790.9	1674.6	62.0	49.6	3101.0	1860.6
20	0.508	16	0.406	2	0.0508	19	1.52	0.073	1.46	1.17	72.97	43.78	29.2	24.8	1459.3	875.6	35.0	29.8	1751.2	1050.7	39.4	33.5	1970.1	1182.0	43.8	35.0	2189.0	1313.4
22	0.559	16	0.406	3	0.0762	21	1.68	0.116	2.31	1.85	115.53	69.32	46.2	39.3	2310.6	1386.4	55.5	47.1	2772.7	1663.6	62.4	53.0	3119.3	1871.6	69.3	55.5	3465.9	2079.5
22	0.559	18	0.457	2	0.0508	21	1.68	0.081	1.62	1.30	81.07	48.64	32.4	27.6	1621.5	972.9	38.9	33.1	1945.8	1167.5	43.8	37.2	2189.0	1313.4	48.6	38.9	2432.2	1459.3
24	0.610	18	0.457	3	0.0762	23	1.84	0.128	2.55	2.04	127.69	76.61	51.1	43.4	2553.8	1532.3	61.3	52.1	3064.6	1838.7	69.0	58.6	3447.6	2068.6	76.6	61.3	3830.7	2298.4

AISLACION				ESPESOR ANILLO CEMENTO		ZAPATA		CEMENTACION SEGUN PROFUNDIDAD																				
diám. perf.	diám. perf.	diám. caño	diám. caño	CEMENTO		diám.	perím.	Referencia POR METRO				35 mts.				40 mts.				45 mts.				50 mts.				
"	mts.	"	mts.	"	mts.	"	mts.	Volumen	Bolsas	accept.	Kg.	Agua (lts.)	Bolsas	accept.	Kg.	Agua (lts.)	Bolsas	accept.	Kg.	Agua (lts.)	Bolsas	accept.	Kg.	Agua (lts.)	Bolsas	accept.	Kg.	Agua (lts.)
5	0.127	3	0.076	1	0.0254	4	0.32	0.008	0.16	0.13	8.11	4.86	5.7	4.5	283.8	170.3	6.5	5.2	324.3	194.6	7.3	5.8	364.8	218.9	8.1	6.5	405.4	243.2
6	0.152	3	0.076	1.5	0.0381	5	0.40	0.014	0.27	0.22	13.68	8.21	9.6	7.7	478.8	287.3	10.9	8.8	547.2	328.3	12.3	9.9	615.6	369.4	13.7	10.9	684.1	410.4
5.5	0.140	3.5	0.089	1	0.0254	4.5	0.36	0.009	0.18	0.15	9.12	5.47	6.4	5.1	319.2	191.5	7.3	5.8	364.8	218.9	8.2	6.6	410.4	246.3	9.1	7.3	456.0	273.6
7.5	0.191	3.5	0.089	2	0.0508	6.5	0.52	0.022	0.45	0.36	22.30	13.38	15.6	12.5	780.3	468.2	17.8	14.3	891.8	535.1	20.1	16.1	1003.3	602.0	22.3	17.8	1114.8	668.9
6	0.152	4	0.102	1	0.0254	5	0.40	0.010	0.20	0.16	10.13	6.08	7.1	5.7	354.7	212.8	8.1	6.5	405.4	243.2	9.1	7.3	456.0	273.6	10.1	8.1	506.7	304.0
8	0.203	4	0.102	2	0.0508	7	0.56	0.024	0.49	0.39	24.32	14.59	17.0	13.6	851.3	510.8	19.5	15.6	972.9	583.7	21.9	17.5	1094.5	656.7	24.3	19.5	1216.1	729.7
6.5	0.165	4.5	0.114	1	0.0254	5.5	0.44	0.011	0.22	0.18	11.15	6.69	7.8	6.2	390.2	234.1	8.9	7.1	445.9	267.5	10.0	8.0	501.6	301.0	11.1	8.9	557.4	334.4
8.5	0.216	4.5	0.114	2	0.0508	7.5	0.60	0.026	0.53	0.42	26.35	15.81	18.4	14.8	922.2	553.3	21.1	16.9	1054.0	632.4	23.7	19.0	1185.7	711.4	26.3	21.1	1317.4	790.5
10	0.254	6	0.152	2	0.0508	9	0.72	0.032	0.65	0.52	32.43	19.46	22.7	18.2	1135.0	681.0	25.9	20.8	1297.2	778.3	29.2	23.3	1459.3	875.6	32.4	25.9	1621.5	972.9
12	0.305	6	0.152	3	0.0762	11	0.88	0.055	1.09	0.88	54.72	32.83	38.3	30.6	1915.4	1149.2	43.8	35.0	2189.0	1313.4	49.3	39.4	2462.6	1477.6	54.7	43.8	2736.2	1641.7
12	0.305	8	0.203	2	0.0508	11	0.88	0.041	0.81	0.65	40.54	24.32	28.4	22.7	1418.8	851.3	32.4	25.9	1621.5	972.9	36.5	29.2	1824.1	1094.5	40.5	32.4	2026.8	1216.1
14	0.356	8	0.203	3	0.0762	13	1.04	0.067	1.34	1.07	66.89	40.13	46.8	37.5	2341.0	1404.6	53.5	42.8	2675.4	1605.2	60.2	48.2	3009.8	1805.9	66.9	53.5	3344.3	2006.6
14	0.356	10	0.254	2	0.0508	13	1.04	0.049	0.97	0.78	48.64	29.19	34.1	27.2	1702.5	1021.5	38.9	31.1	1945.8	1167.5	43.8	35.0	2189.0	1313.4	48.6	38.9	2432.2	1459.3
16	0.406	10	0.254	3	0.0762	15	1.20	0.079	1.58	1.26	79.05	47.43	55.3	44.3	2766.6	1660.0	63.2	50.6	3161.9	1897.1	71.1	56.9	3557.1	2134.3	79.0	63.2	3952.3	2371.4
16	0.406	12	0.305	2	0.0508	15	1.20	0.057	1.14	0.91	56.75	34.05	39.7	31.8	1986.3	1191.8	45.4	36.3	2270.0	1362.0	51.1	40.9	2553.8	1532.3	56.8	45.4	2837.6	1702.5
18	0.457	12	0.305	3	0.0762	17	1.36	0.091	1.82	1.46	91.21	54.72	63.8	54.3	3192.3	1915.4	73.0	58.4	3648.3	2189.0	82.1	65.7	4104.3	2462.6	91.2	73.0	4560.4	2736.2
18	0.457	14	0.356	2	0.0508	17	1.36	0.065	1.30	1.04	64.86	38.92	45.4	38.6	2270.0	1362.0	51.9	41.5	2594.3	1556.6	58.4	46.7	2918.6	1751.2	64.9	51.9	3242.9	1945.8
20	0.508	14	0.356	3	0.0762	19	1.52	0.103	2.07	1.65	103.37	62.02	72.4	61.5	3617.9	2170.7	82.7	66.2	4134.7	2480.8	93.0	74.4	4651.6	2790.9	103.4	82.7	5168.4	3101.0
20	0.508	16	0.406	2	0.0508	19	1.52	0.073	1.46	1.17	72.97	43.78	51.1	43.4	2553.8	1532.3	58.4	46.7	2918.6									