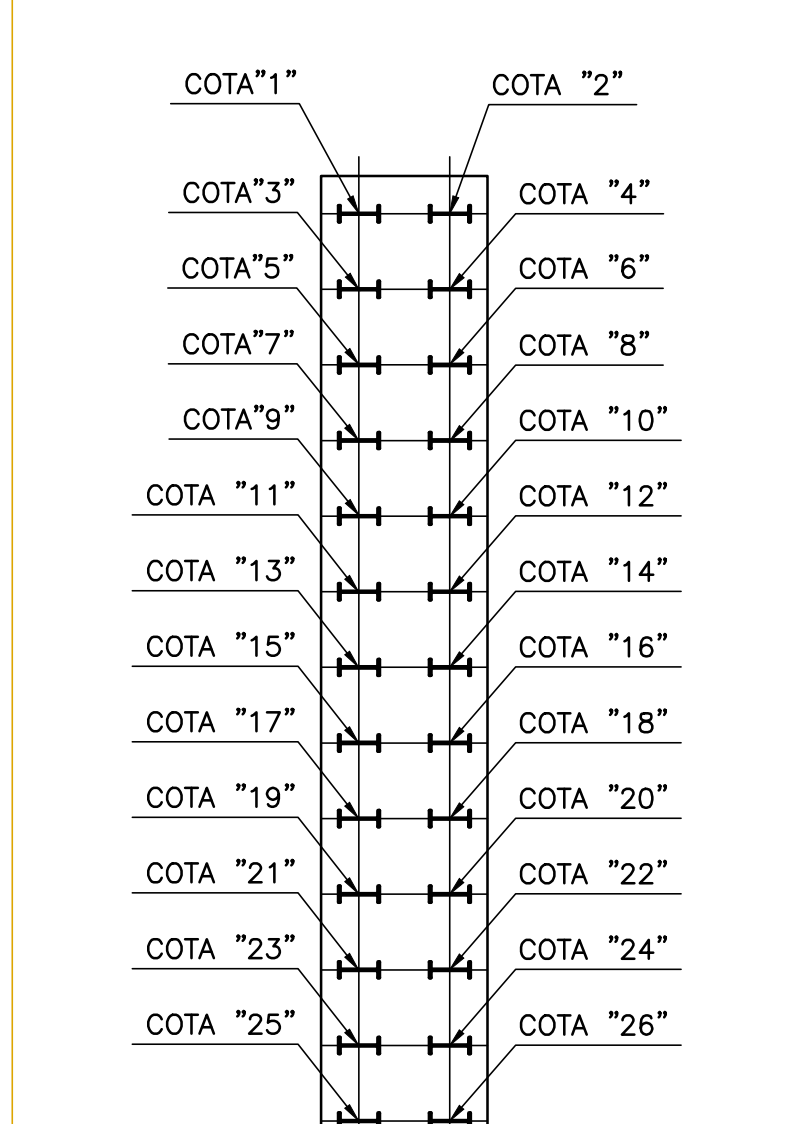
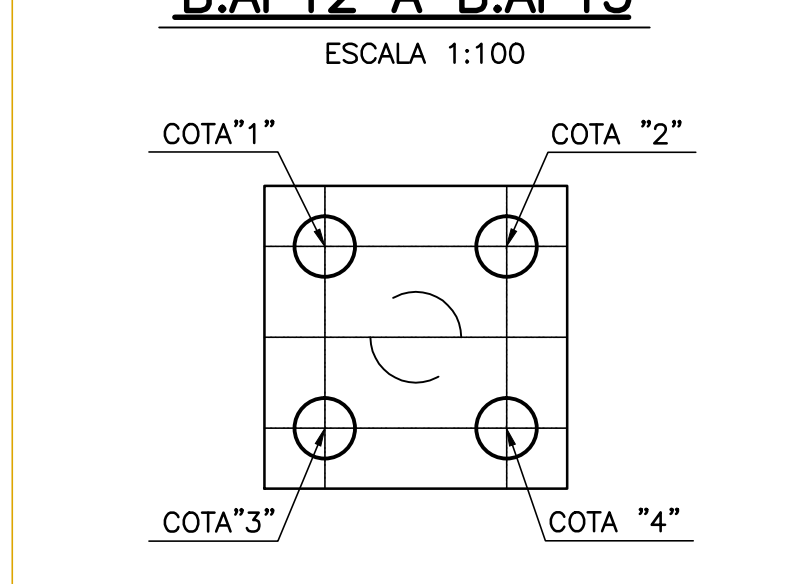


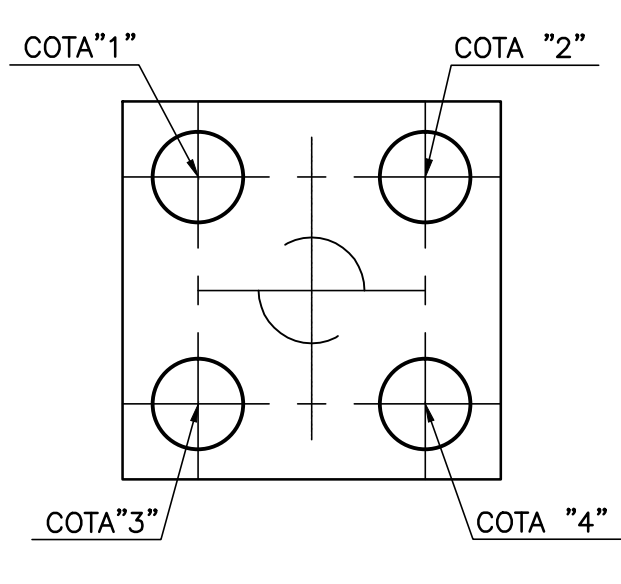
**ESTACAS DOS ENCONTROS**  
**B.AP16**  
ESCALA 1:100



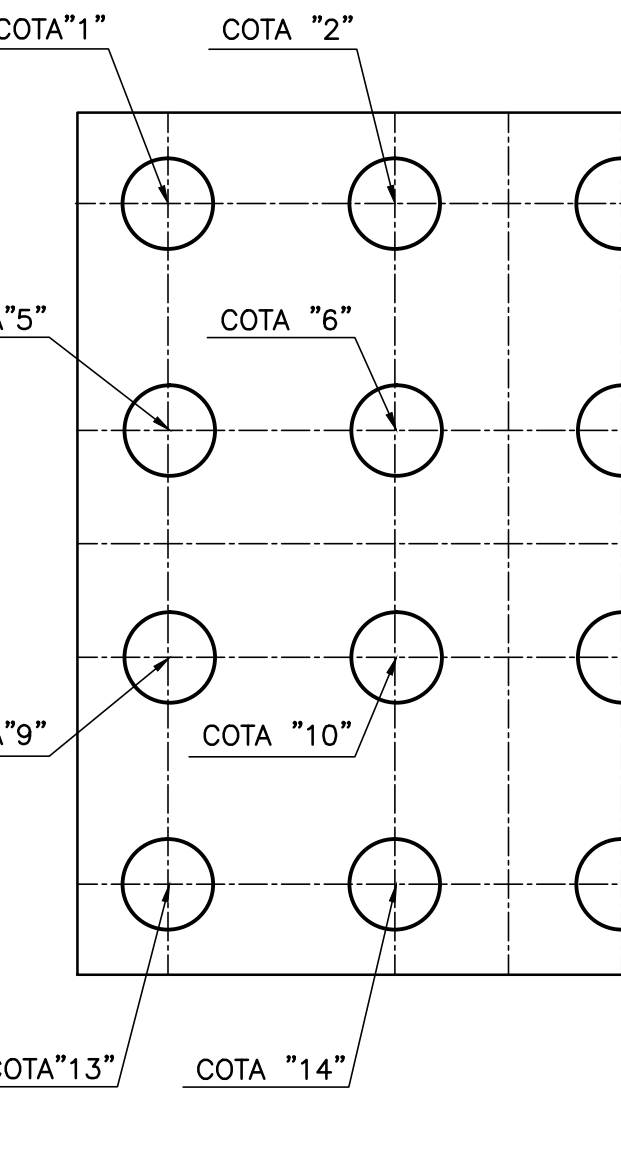
**ESTACAS DOS BLOCOS**  
**B.AP12 A B.AP15**  
ESCALA 1:100



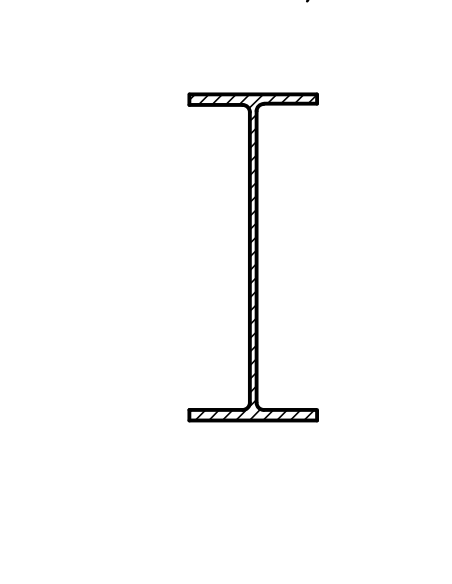
**ESTACAS DOS BLOCOS**  
**B.AP11**  
ESCALA 1:100



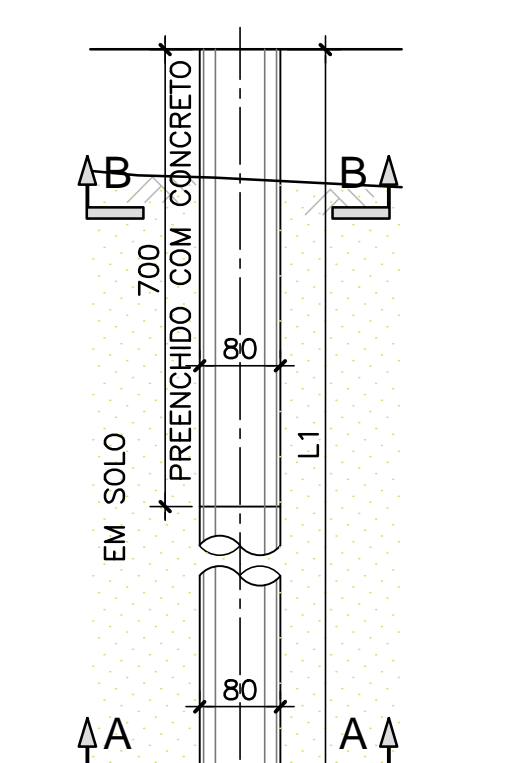
**ESTACAS DOS BLOCOS B.AP10**  
ESCALA 1:100



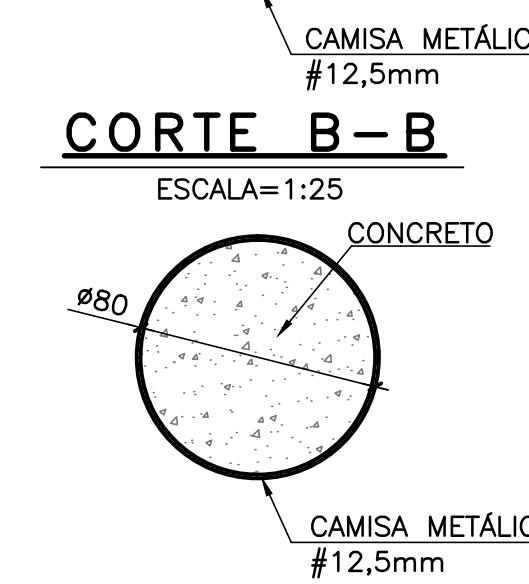
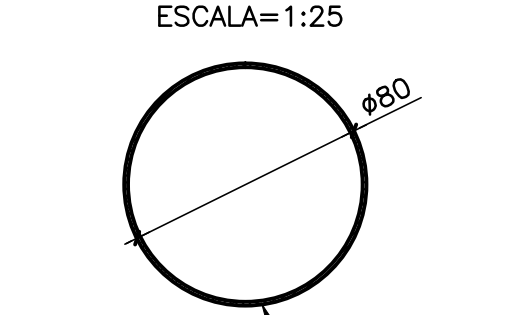
**DETALHE**  
**PERFIL METÁLICO**  
**W530x109**  
ESCALA 1:12,5



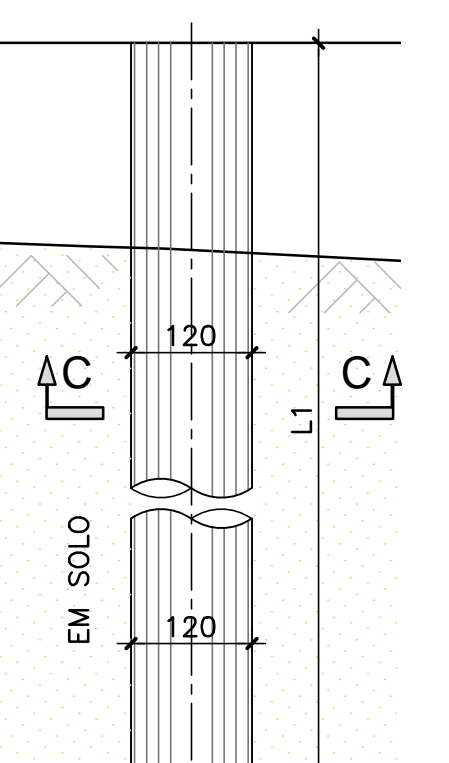
**DETALHE**  
**PERFIL METÁLICO**  
**ø800mm-#12,5mm**  
ESCALA 1:75



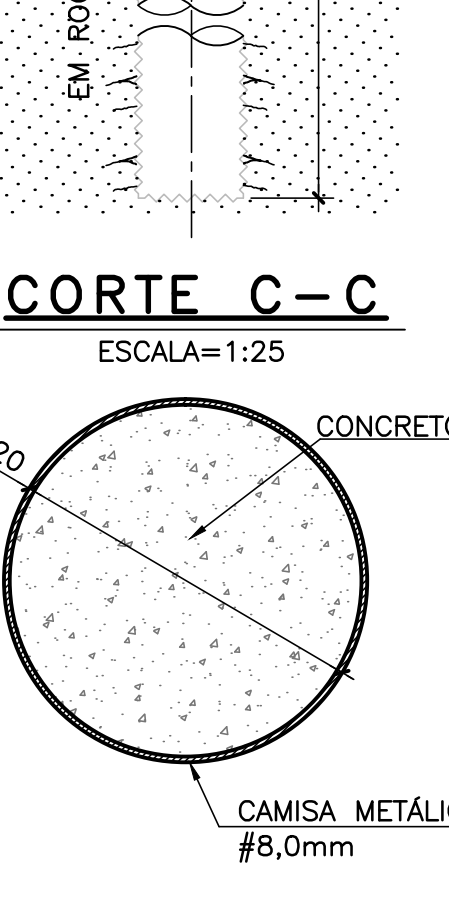
**CORTE A-A**  
ESCALA=1:25



**DETALHE**  
**ESTACA ESCAVADA**  
**ø1200mm/1050mm**  
ESCALA 1:75



**CORTE C-C**  
ESCALA=1:25



**TABELAS DE COORDENADAS RAMO 1000**

BLOCOS B.AP10.1			BLOCOS B.AP13.1			BLOCO B.AP16.1		
COTA	NORTE	ESTE	COTA	NORTE	ESTE	COTA	NORTE	ESTE
1	7088067.459	718896.079	1	7087921.423	718969.16	1	7087814.55	719022.964
2	7088064.77	718897.41	2	7087919.272	718970.225	2	7087813.474	719023.496
3	7088062.082	718898.741	3	7087920.358	718967.009	3	7087814.106	719022.067
4	7088059.393	718900.072	4	7087918.207	718968.074	4	7087813.03	719022.6
5	7088066.128	718893.39	5	7087813.662	719021.171	5	7087813.662	719021.171
6	7088063.439	718894.721	6	7087812.587	719021.704	6	7088057.459	718882.641
7	7088060.751	718896.052	7	7087813.218	719020.275	7	7088054.77	718883.972
8	7088058.062	718897.383	8	7087812.143	719020.808	8	7088052.081	718885.303
9	7088064.797	718899.702	9	7087812.775	719019.379	9	7088058.816	718878.621
10	7088062.108	718892.033	10	7087811.699	719019.911	10	7088056.127	718879.952
11	7088059.42	718893.364	11	7087812.331	719018.483	11	7088053.439	718881.283
12	7088056.731	718894.695	12	7087811.255	719019.015	12	7088050.75	718882.614
13	7088063.466	718888.013	13	7087811.887	719017.587	13	7088057.485	718875.932
14	7088060.777	718889.344	14	7087810.812	719018.119	14	7088054.796	718877.263
15	7088058.089	718890.675	15	7087811.443	719016.691	15	7088052.108	718878.595
16	7088055.4	718892.006	16	7087810.368	719017.223	16	7088049.419	718879.926
BLOCOS B.AP11.1			BLOCOS B.AP14.2			BLOCOS B.AP11.3		
COTA	NORTE	ESTE	COTA	NORTE	ESTE	COTA	NORTE	ESTE
1	7087993.027	718934.045	1	7087885.576	718986.907	1	7087987.046	718921.964
2	7087990.338	718935.376	2	7087883.425	718987.972	2	7087984.357	718923.295
3	7087991.696	718931.356	3	7087884.511	718984.756	3	7087985.715	718919.276
4	7087989.007	718932.687	4	7087882.36	718985.821	4	7087983.026	718920.607
BLOCOS B.AP11.2			BLOCOS B.AP15.1			BLOCOS B.AP11.4		
COTA	NORTE	ESTE	COTA	NORTE	ESTE	COTA	NORTE	ESTE
1	7087989.477	718926.875	1	7087849.728	719004.655	1	7087983.496	718914.795
2	7087986.789	718928.206	2	7087847.577	719005.719	2	7087980.808	718916.126
3	7087988.146	718924.187	3	7087848.663	719002.504	3	7087982.165	718912.106
4	7087985.458	718925.518	4	7087846.513	719003.569	4	7087979.477	718913.437
BLOCOS B.AP12.1			BLOCOS B.AP15.2			BLOCOS B.AP11.5		
COTA	NORTE	ESTE	COTA	NORTE	ESTE	COTA	NORTE	ESTE
1	7087957.27	718951.412	1	7087847.179	718997.485	1	7087983.496	718914.795
2	7087955.119	718952.477	2	7087844.028	718998.617	2	7087980.808	718916.126
3	7087956.205	718949.261	3	7087845.114	718995.334	3	7087982.165	718912.106
4	7087954.055	718950.326	4	7087842.963	718996.399	4	7087979.477	718913.437
BLOCOS B.AP12.2			EIXO DOS BLOCOS			BLOCOS B.AP11.6		
COTA	NORTE	ESTE	NOME	NORTE	ESTE	COTA	NORTE	ESTE
1	7087953.721	718944.243	B.AP10.1	7088061.430	718894.042	1	7087983.496	718914.795
2	7087951.57	718945.308	B.AP11.1	7087991.017	718933.366	2	7087980.808	718916.126
3	7087952.656	718942.092	B.AP12.1	7087987.467	718926.197	3	7087982.165	718912.106
4	7087950.505	718943.157	B.AP12.2	7087955.662	718950.869	4	7087979.477	718913.437
			B.AP13.1	7087952.113	718943.700	BLOCOS B.AP11.7		
			B.AP13.2	7087919.815	718968.617	COTA	NORTE	ESTE
			B.AP13.3	7087916.266	718961.447	1	7087843.747	718992.574
			B.AP14.1	7087883.968	718986.364	2	7087841.597	718993.639
			B.AP14.2	7087880.418	718979.195	3	7087842.683	718990.423
			B.AP15.1	7087848.121	719004.112	4	7087840.532	718991.488
			B.AP15.2	7087844.571	718996.942	EIXO DOS BLOCOS		
			B.AP16.1	7087811.350	719017.853	NOME	NORTE	ESTE
						B.AP10.2	7088055.449	718881.962

**TABELAS DE COORDENADAS RAMO 2000**

BLOCOS B.AP10.2			BLOCOS B.AP13.3			BLOCO B.AP16.2		
COTA	NORTE	ESTE	COTA	NORTE	ESTE	COTA	NORTE	ESTE
1	7088061.478	718883.998	1	7087915.442	718957.079	1	7087808.569	719010.883
2	7088058.79	718885.329	2	7087913.291	718958.144	2	7087807.493	719011.415
3	7088056.101	718886.66	3	7087914.377	718954.928	3	7087808.125	719009.987
4	7088053.412	718887.991	4	7087912.226	718955.993	4	7087807.05	719010.519
5	7088060.147	718881.31	5	7087911.893	718949.91	5	7087807.681	719009.091
6	7088057.459	718882.641	6	7087909.742	718950.975	6	7087806.162	719008.727
7	7088054.77	718883.972	7	7087910.828	718947.759	7	7087805.718	719007.831
8	7088052.081	718885.303	8	7087908.677	718948.824	8	7087805.35	719006.402
9	7088058.816	718878.621	9	7087907.595	718974.827	9	7087805.275	719006.935
10	7088056.127	718879.952	10	7087877.444	718975.891	10	7087805.906	719005.506
11	7088053.439	718881.283	11	7087878.53	718972.676	11	7087804.831	719006.039
12	7088050.75	718882.614	12	7087876.379	718973.741	12	7087805.019	719003.714
13	7088057.485	718875.932	13	7087875.379	718974.824	13	7087803.943	719004.246
14	7088054.796	718877.263	14	7087874.98	718975.506	14	7087804.575	719002.818
15	7088052.108	718878.595	15	7087873.98	718976.571	15	7087803.5	719003.35
16	7088049.419	718879.926	16	7087872.83	718977.646	16	7087804.131	719001.922
BLOCOS B.AP11.3			BLOCOS B.AP14.4			17	7087803.056	719002.454
COTA	NORTE	ESTE	COTA	NORTE	ESTE	18	7087803.687	719001.025
1	7087987.046	718921.964	1	7087876.045	718967.657	19	7087804.575	719002.818
2	7087984.357	718923.295	2	7087875.379	718968.722	20	7087803.5	719003.35
3	7087985.715	718919.276	3	7087874.98	718969.506	21	7087804.131	719001.922
4	7087983.026	718920.607	4	7087873.98	718970.571	22	7087803.056	719002.454
BLOCOS B.AP11.4			BLOCOS B.AP15.3			23	7087803.687	719001.025
COTA	NORTE	ESTE	COTA	NORTE	ESTE	24	7087802.612	719001.558
1	7087983.496	718914.795	1	7087843.747	718992.574	25	7087803.244	719000.129
2	7087980.808	718916.126	2	7087841.597	718993.639	26	7087802.168	719000.662
3	7087982.165	718912.106	3	7087842.683	718990.423	EIXO DOS BLOCOS		
4	7087979.477	718913.437	4	7087840.532	718991.488	NOME	NORTE	ESTE
BLOCOS B.AP11.5			BLOCOS B.AP15.4			B.AP10.2	7088055.449	718881.962
COTA	NORTE	ESTE	COTA	NORTE	ESTE	B.AP11.3	7087985.036	718921.285
1	7087951.289	718938.332	1	7087876.045	718967.657	B.AP11.4	7087981.487	718914.116
2	7087949.139	718940.397	2	7087875.379	718968.722	B.AP12.3	7087949.682	718938.789
3	7087950.225	718937.181	3	7087874.98	718969.506	B.AP12.4	7087946.132	718931.619
4	7087948.074	718938.246	4	7087873.98	718970.571	B.AP13.3	7087913.834	718956.536
BLOCOS B.AP12.4			BLOCOS B.AP16.2			B.AP13.4	7087910.285	718949.367
COTA	NORTE	ESTE	COTA	NORTE	ESTE	B.AP14.3	7087877.987	718974.284
1	7087947.74	718932.162	1	7087876.045	718967.657	B.AP14.4	7087874.437	718977.114
2	7087945.589	718933.227	2	7087875.379	718968.722	B.AP15.3	7087842.140	718992.031
3	7087946.675	718930.011	3	7087874.98	718969.506	B.AP15.4	7087838.590	718984.862
4	7087944.524	718931.076	4	7087873.98	718970.571	B.AP16.2	7087805.369	719005.772

NOTAS :

- DIMENSÕES EM CENTÍMETROS EXCETO ONDE INDICADO;
- VER NOTAS GERAIS NO DESENHO I-OAESV-X-R0/16-70-iv;

RAMO 1000

APOIO	TIPO ESTACA	COMP.(L1)	ROCHA(L2)	Nm&x(kN)
AP10	ESCAVADA ø1200mm/1050mm	30,0m	7,0m	6.500,0
AP11	ESCAVADA ø1200mm/1050mm	35,0m	4,0m	2.870,0
AP12	TUBULAR ø800mm-#12,5mm	23,0m	-	2.475,0
AP13	TUBULAR ø800mm-#12,5mm	27,0m	-	2.470,0
AP14	TUBULAR ø800mm-#12,5mm	27,0m	-	2.380,0
AP15	TUBULAR ø800mm-#12,5mm	31,0m	-	2.370,0
AP16	PERFIL W530x109	21,0m	-	480,0