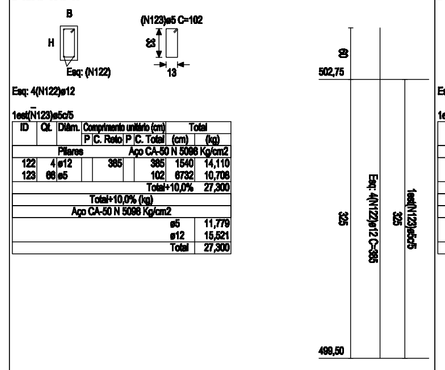
Pilar P008
CONC 20x40
L=325 B=30 ln=60

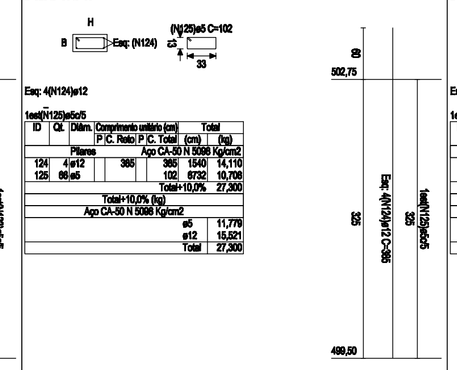


1ses(N122)ø5c5

ID	Qt.	Diâm.	Comprimento unitário [cm]		Total [cm]	Total [kg]
			P.C. Reto	P.C. Total		
Pilares						Aço CA-50 N 5088 Kg/cm2
122	4	ø12		385	1540	14,110
123	68	ø5		102	6732	10,700
						Total=10,0% 27,300

Total=10,0% [kg]	
Aço CA-50 N 5088 Kg/cm2	
ø5	11,779
ø12	15,521
Total	27,300

Pilar P009
CONC 20x40
L=325 B=30 ln=60

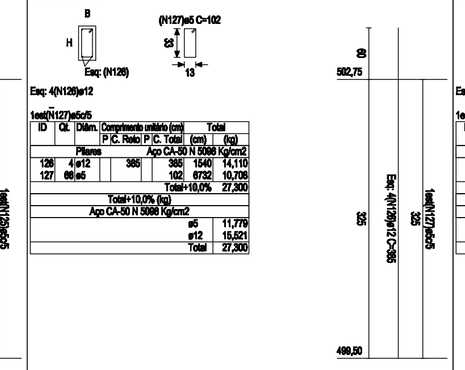


1ses(N124)ø5c5

ID	Qt.	Diâm.	Comprimento unitário [cm]		Total [cm]	Total [kg]
			P.C. Reto	P.C. Total		
Pilares						Aço CA-50 N 5088 Kg/cm2
124	4	ø12		385	1540	14,110
125	68	ø5		102	6732	10,700
						Total=10,0% 27,300

Total=10,0% [kg]	
Aço CA-50 N 5088 Kg/cm2	
ø5	11,779
ø12	15,521
Total	27,300

Pilar P010
CONC 20x40
L=325 B=30 ln=60

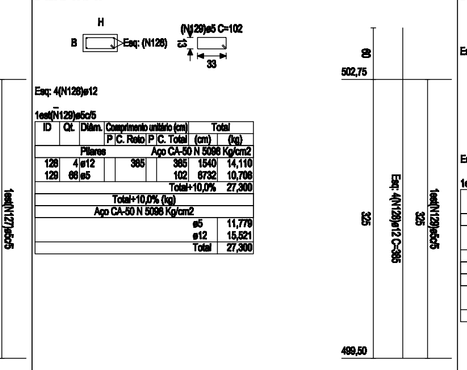


1ses(N127)ø5c5

ID	Qt.	Diâm.	Comprimento unitário [cm]		Total [cm]	Total [kg]
			P.C. Reto	P.C. Total		
Pilares						Aço CA-50 N 5088 Kg/cm2
126	4	ø12		385	1540	14,110
127	68	ø5		102	6732	10,700
						Total=10,0% 27,300

Total=10,0% [kg]	
Aço CA-50 N 5088 Kg/cm2	
ø5	11,779
ø12	15,521
Total	27,300

Pilar P011
CONC 20x40
L=325 B=30 ln=60

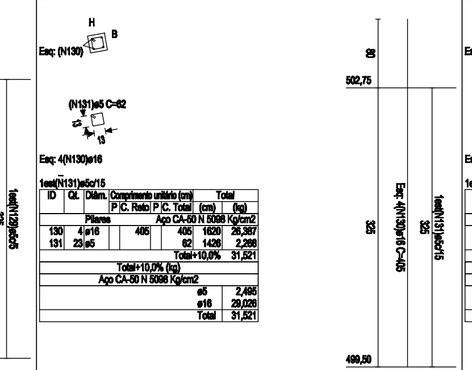


1ses(N128)ø5c5

ID	Qt.	Diâm.	Comprimento unitário [cm]		Total [cm]	Total [kg]
			P.C. Reto	P.C. Total		
Pilares						Aço CA-50 N 5088 Kg/cm2
128	4	ø12		385	1540	14,110
129	68	ø5		102	6732	10,700
						Total=10,0% 27,300

Total=10,0% [kg]	
Aço CA-50 N 5088 Kg/cm2	
ø5	11,779
ø12	15,521
Total	27,300

Pilar P012
CONC 20x20
L=325 B=40 ln=60

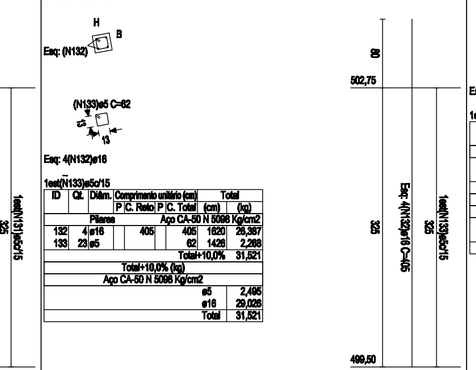


1ses(N131)ø5c15

ID	Qt.	Diâm.	Comprimento unitário [cm]		Total [cm]	Total [kg]
			P.C. Reto	P.C. Total		
Pilares						Aço CA-50 N 5088 Kg/cm2
130	4	ø16		400	1600	25,387
131	20	ø5		80	1436	2,266
						Total=10,0% 31,521

Total=10,0% [kg]	
Aço CA-50 N 5088 Kg/cm2	
ø5	2,496
ø16	28,025
Total	31,521

Pilar P013
CONC 20x20
L=325 B=40 ln=60

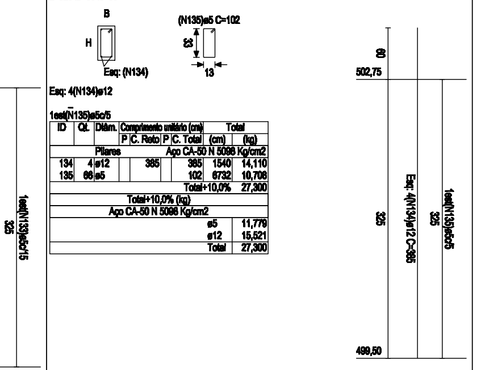


1ses(N133)ø5c15

ID	Qt.	Diâm.	Comprimento unitário [cm]		Total [cm]	Total [kg]
			P.C. Reto	P.C. Total		
Pilares						Aço CA-50 N 5088 Kg/cm2
132	4	ø16		400	1600	25,387
133	20	ø5		80	1436	2,266
						Total=10,0% 31,521

Total=10,0% [kg]	
Aço CA-50 N 5088 Kg/cm2	
ø5	2,496
ø16	28,025
Total	31,521

Pilar P014
CONC 20x40
L=325 B=30 ln=60

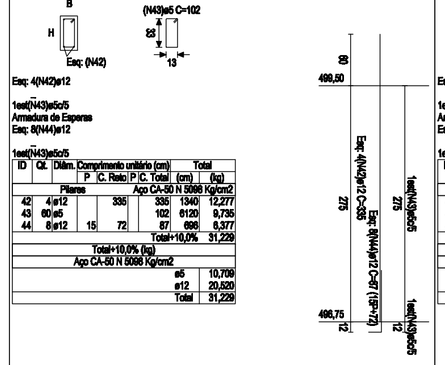


1ses(N135)ø5c5

ID	Qt.	Diâm.	Comprimento unitário [cm]		Total [cm]	Total [kg]
			P.C. Reto	P.C. Total		
Pilares						Aço CA-50 N 5088 Kg/cm2
134	4	ø12		385	1540	14,110
135	68	ø5		102	6732	10,700
						Total=10,0% 27,300

Total=10,0% [kg]	
Aço CA-50 N 5088 Kg/cm2	
ø5	11,779
ø12	15,521
Total	27,300

Pilar P008
CONC 20x40
L=275 B=30 ln=60

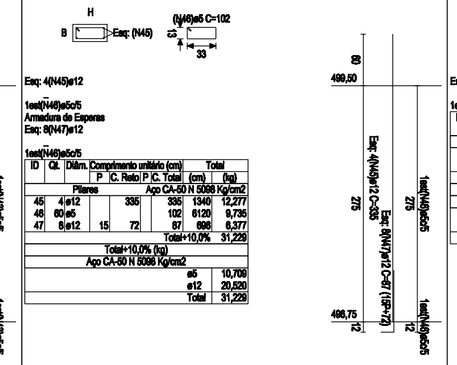


1ses(N42)ø5c5
Armadura de Espera
Esc: 8(N43)ø12

ID	Qt.	Diâm.	Comprimento unitário [cm]		Total [cm]	Total [kg]
			P.C. Reto	P.C. Total		
Pilares						Aço CA-50 N 5088 Kg/cm2
42	4	ø12		385	1540	13,377
43	60	ø5		102	6120	9,730
44	8	ø12	15	72	87	696	6,377
						Total=10,0% 31,239

Total=10,0% [kg]	
Aço CA-50 N 5088 Kg/cm2	
ø5	10,709
ø12	20,530
Total	31,239

Pilar P009
CONC 20x40
L=275 B=30 ln=60

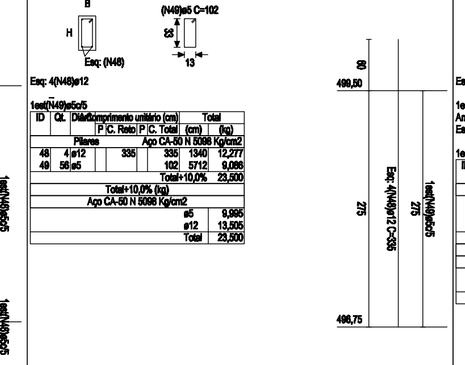


1ses(N44)ø5c5
Armadura de Espera
Esc: 8(N45)ø12

ID	Qt.	Diâm.	Comprimento unitário [cm]		Total [cm]	Total [kg]
			P.C. Reto	P.C. Total		
Pilares						Aço CA-50 N 5088 Kg/cm2
44	4	ø12		385	1540	13,377
45	60	ø5		102	6120	9,730
46	8	ø12	15	72	87	696	6,377
						Total=10,0% 31,239

Total=10,0% [kg]	
Aço CA-50 N 5088 Kg/cm2	
ø5	10,709
ø12	20,530
Total	31,239

Pilar P010
CONC 20x40
L=275 B=30 ln=60

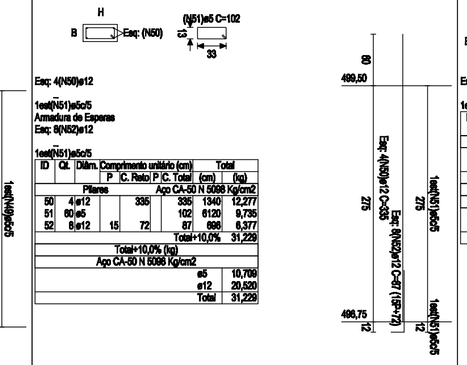


1ses(N46)ø5c5

ID	Qt.	Diâm.	Comprimento unitário [cm]		Total [cm]	Total [kg]
			P.C. Reto	P.C. Total		
Pilares						Aço CA-50 N 5088 Kg/cm2
46	4	ø12		385	1540	13,377
47	60	ø5		102	6120	9,730
						Total=10,0% 23,300

Total=10,0% [kg]	
Aço CA-50 N 5088 Kg/cm2	
ø5	9,900
ø12	13,300
Total	23,300

Pilar P011
CONC 20x40
L=275 B=30 ln=60

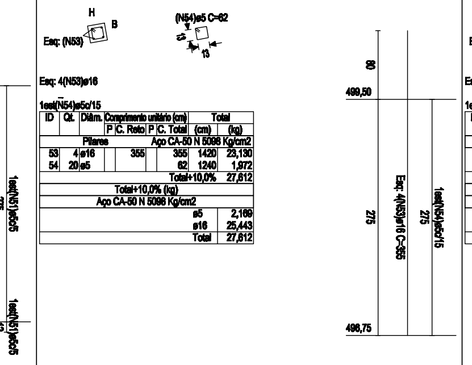


1ses(N48)ø5c5
Armadura de Espera
Esc: 8(N49)ø12

ID	Qt.	Diâm.	Comprimento unitário [cm]		Total [cm]	Total [kg]
			P.C. Reto	P.C. Total		
Pilares						Aço CA-50 N 5088 Kg/cm2
48	4	ø12		385	1540	13,377
49	60	ø5		102	6120	9,730
50	8	ø12	15	72	87	696	6,377
						Total=10,0% 31,239

Total=10,0% [kg]	
Aço CA-50 N 5088 Kg/cm2	
ø5	10,709
ø12	20,530
Total	31,239

Pilar P012
CONC 20x20
L=275 B=40 ln=60

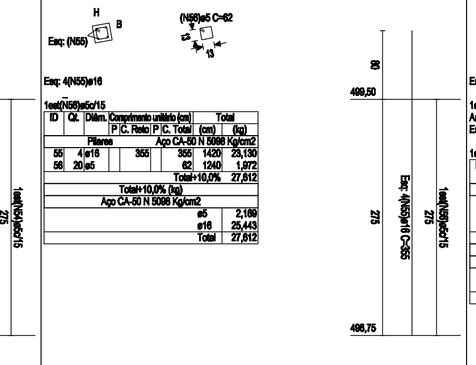


1ses(N50)ø5c15
Armadura de Espera
Esc: 8(N51)ø12

ID	Qt.	Diâm.	Comprimento unitário [cm]		Total [cm]	Total [kg]
			P.C. Reto	P.C. Total		
Pilares						Aço CA-50 N 5088 Kg/cm2
50	4	ø16		400	1600	25,387
51	20	ø5		80	1436	2,266
						Total=10,0% 27,653

Total=10,0% [kg]	
Aço CA-50 N 5088 Kg/cm2	
ø5	2,196
ø16	25,457
Total	27,653

Pilar P013
CONC 20x20
L=275 B=40 ln=60

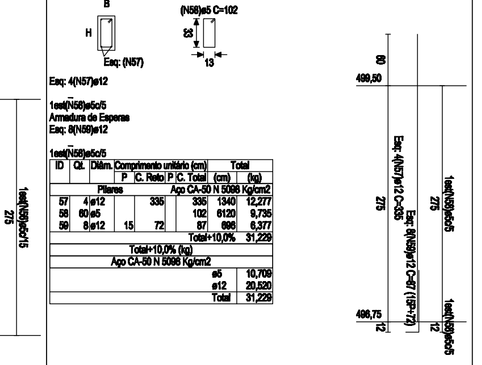


1ses(N52)ø5c15
Armadura de Espera
Esc: 8(N53)ø12

ID	Qt.	Diâm.	Comprimento unitário [cm]		Total [cm]	Total [kg]
			P.C. Reto	P.C. Total		
Pilares						Aço CA-50 N 5088 Kg/cm2
52	4	ø16		400	1600	25,387
53	20	ø5		80	1436	2,266
						Total=10,0% 27,653

Total=10,0% [kg]	
Aço CA-50 N 5088 Kg/cm2	
ø5	2,196
ø16	25,457
Total	27,653

Pilar P014
CONC 20x40
L=275 B=30 ln=60

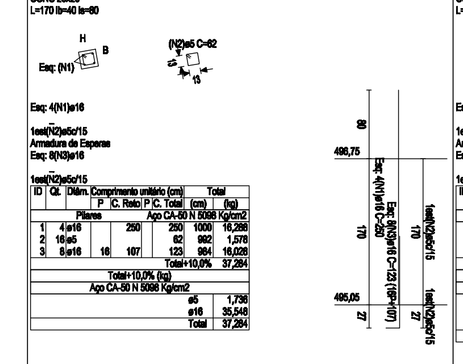


1ses(N54)ø5c5
Armadura de Espera
Esc: 8(N55)ø12

ID	Qt.	Diâm.	Comprimento unitário [cm]		Total [cm]	Total [kg]
			P.C. Reto	P.C. Total		
Pilares						Aço CA-50 N 5088 Kg/cm2
54	4	ø12		385	1540	13,377
55	60	ø5		102	6120	9,730
56	8	ø12	15	72	87	696	6,377
						Total=10,0% 31,239

Total=10,0% [kg]	
Aço CA-50 N 5088 Kg/cm2	
ø5	10,709
ø12	20,530
Total	31,239

Pilar P012
CONC 20x20
L=170 B=40 ln=60

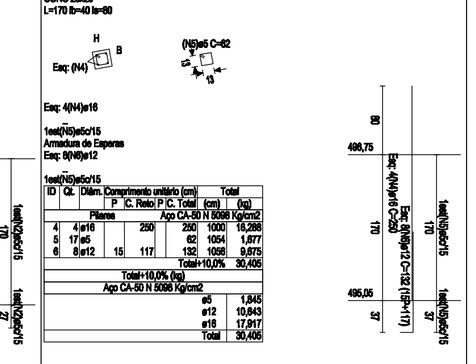


1ses(N1)ø5c15
Armadura de Espera
Esc: 8(N2)ø12

ID	Qt.	Diâm.	Comprimento unitário [cm]		Total [cm]	Total [kg]
			P.C. Reto	P.C. Total		
Pilares						Aço CA-50 N 5088 Kg/cm2
1	4	ø16		250	250	1000	15,866
2	16	ø5			62	992	1,276
3	8	ø16	15	197	123	984	16,606
						Total=10,0% 37,284

Total=10,0% [kg]	
Aço CA-50 N 5088 Kg/cm2	
ø5	1,756
ø16	35,528
Total	37,284

Pilar P013
CONC 20x20
L=170 B=40 ln=60



1ses(N4)ø5c15
Armadura de Espera
Esc: 8(N5)ø12

ID	Qt.	Diâm.	Comprimento unitário [cm]		Total [cm]	Total [kg]
			P.C. Reto	P.C. Total		
Pilares						Aço CA-50 N 5088 Kg/cm2
4	4	ø16		250	250	1000	15,866
5	17	ø5			62	1054	1,677
6	8	ø12	15	117	132	1056	8,970
						Total=10,0% 30,400

Total=10,0% [kg]	
Aço CA-50 N 5088 Kg/cm2	
ø5	1,845
ø12	10,843
ø16	17,817
Total	30,505

NOTAS

1 – DIMENSÕES EM CENTÍMETROS, ELEVAÇÕES EM METROS, EXCETO ONDE INDICADO
2 – LEGENDA DOS PILARES
PILAR – NASCE
PILAR – SEGUE
PILAR – MORRE
3 – CONCRETO FCK 30MPA
Alturas e cotas em cm Cobrimento 36 mm

REVISÃO	DETALHADOS	DATA	VISTO
00	INICIAL	09/01/12	

GELFUS
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OBRA :
CONSTRUÇÃO DE EDIFÍCIOS ADMINISTRATIVO NA CÂMARA MUNICIPAL DE LIMEIRA

CLIENTE :
CÂMARA MUNICIPAL DE LIMEIRA

DETALHADOS :
DETALHES DAS ARMADURAS PILARES

PROJ. TÉCNICO: ARGAINO	DATA: 09 / 01 / 2012	PROJETO: ESTRUTURAL
ESCALAS: 1 : 50	REVISÃO: 00	FOLHA: 17 / 36
DESENHISTA: LÍVIA GOUVEIA	ARQUIVO: 132-D-556-16-003_1	

ESTE PROJETO É PROPRIEDADE INTELECTUAL DE SEUS AUTORES, PODENDO SER UTILIZADO SOMENTE DE ACORDO COM OS LIMITES CONTRATUAIS. PORTANTO É VETADA SUA UTILIZAÇÃO EM PARTE OU NO TODO SEM EXPRESSA AUTORIZAÇÃO DOS MESMOS.

DESENHO ELABORADO EM ZWCAD