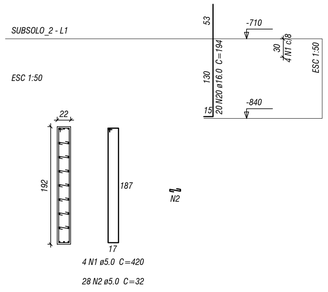
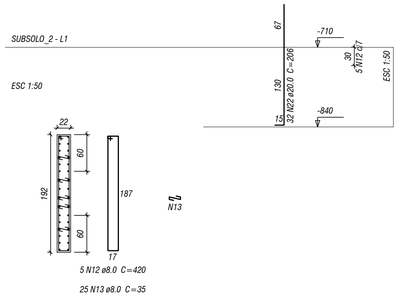
P13



4 N1 ø5.0 C=420

28 N2 ø5.0 C=32

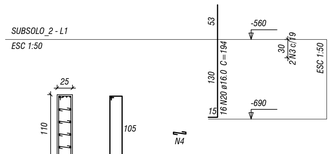
P17



5 N12 ø8.0 C=420

25 N13 ø8.0 C=35

P20



2 N3 ø5.0 C=262

8 N4 ø5.0 C=35

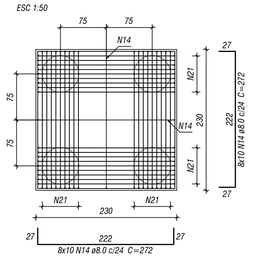
P21

5 N10 ø6.3 C=252

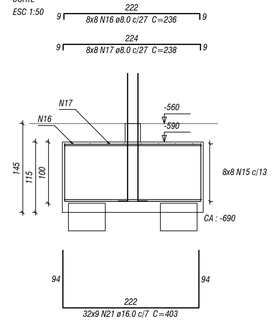
30 N11 ø6.3 C=31

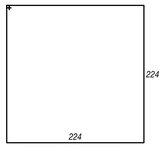
B4=B6=B8=B13=B17=B20=B21=B24
4ø60

PLANTA
ESC 1:50

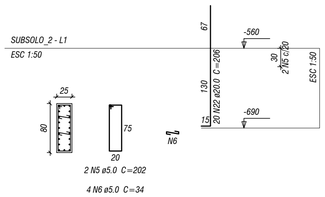


CORTE
ESC 1:50





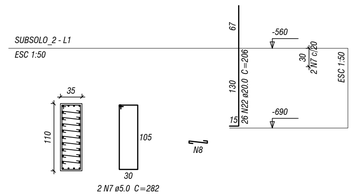
P24



2 N5 ø5.0 C=202

4 N6 ø5.0 C=34

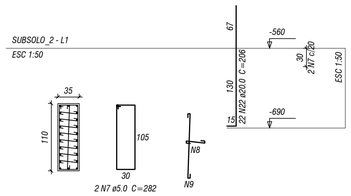
P4



2 N7 ø5.0 C=282

18 N8 ø5.0 C=44

P6

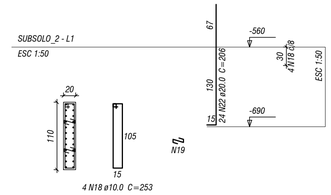


2 N7 ø5.0 C=282

2 N9 ø5.0 C=119

16 N8 ø5.0 C=44

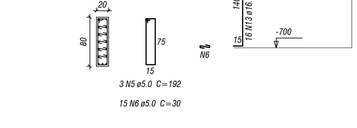
P8



4 N18 ø10.0 C=253

8 N19 ø10.0 C=36

P11



4 N1 ø5.0 C=262

32 N2 ø5.0 C=35

P12

3 N3 ø5.0 C=192

6 N4 ø5.0 C=29

B11=B12=B15=B22
4ø60

PLANTA
ESC 1:50

CORTE
ESC 1:50

P26=P27

3 N1 ø5.0 C=302

12 N2 ø5.0 C=35

B26=B27
4ø60

PLANTA
ESC 1:50

CORTE
ESC 1:50

P15

4 N1 ø5.0 C=262

24 N2 ø5.0 C=35

P22

4 N5 ø5.0 C=282

32 N6 ø5.0 C=34

P23

2 N1 ø5.0 C=212

6 N2 ø5.0 C=40

P25

2 N3 ø5.0 C=162

6 N4 ø5.0 C=44

P16

3 N5 ø5.0 C=192

15 N6 ø5.0 C=30

B16=B23=B25
4ø50

PLANTA
ESC 1:50

CORTE
ESC 1:50

Relação do aço

ELEMENTO	AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
B11	CA60	1	5.0	8	262	2096
	CA60	2	5.0	56	35	1960
	CA60	3	5.0	3	192	576
	CA60	4	5.0	6	29	174
	CA60	5	5.0	4	282	1128
	CA60	6	5.0	32	34	1088
	CA50	7	8.0	88	272	23936
	CA50	8	8.0	32	908	29056
	CA50	9	8.0	32	236	7552
	CA50	10	8.0	32	238	7616
	CA50	11	16.0	48	204	9792
	CA50	12	16.0	144	403	58032
	CA50	13	20.0	42	216	9072
B16	CA60	1	5.0	2	212	424
	CA60	2	5.0	6	40	240
	CA60	3	5.0	2	162	324
	CA60	4	5.0	6	44	264
	CA60	5	5.0	3	192	576
	CA60	6	5.0	15	30	450
	CA50	7	8.0	42	237	9954
	CA50	8	8.0	24	768	18432
	CA50	9	8.0	21	201	4221
	CA50	10	8.0	21	203	4263
	CA50	11	12.5	96	369	35424
	CA50	12	16.0	10	194	1940
	CA50	13	16.0	16	204	3264
	CA50	14	20.0	14	206	2884
B24	CA60	1	5.0	4	420	1680
	CA60	2	5.0	28	32	896
	CA60	3	5.0	2	262	524
	CA60	4	5.0	8	35	280
	CA60	5	5.0	2	202	404
	CA60	6	5.0	4	34	136
	CA60	7	5.0	4	282	1128
	CA60	8	5.0	34	44	1496
	CA60	9	5.0	2	119	238
	CA50	10	6.3	5	252	1260
	CA50	11	6.3	30	31	930
	CA50	12	8.0	5	420	2100
	CA50	13	8.0	25	35	875
	CA50	14	8.0	160	272	43520
	CA50	15	8.0	64	908	58112
	CA50	16	8.0	64	236	15104
	CA50	17	8.0	64	238	15232
	CA50	18	10.0	4	253	1012
	CA50	19	10.0	8	36	288
	CA50	20	16.0	54	194	10476
	CA50	21	16.0	288	403	116064
	CA50	22	20.0	124	206	25544
2xB27	CA60	1	5.0	6	302	1812
	CA60	2	5.0	24	35	840
	CA50	3	8.0	32	272	8704
	CA50	4	8.0	12	908	10896
	CA50	5	8.0	16	236	3776
	CA50	6	8.0	16	238	3808
	CA50	7	12.5	32	169	5408
	CA50	8	16.0	48	373	17904

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO (kg)
CA50	6.3	21.9	5.4
	8.0	2671.6	1054.2
	10.0	13	8
	12.5	408.4	393.4
	16.0	2174.8	3432.4
	20.0	375	924.8
CA60	5.0	187.4	28.9
PESO TOTAL			
CA50	5818.1		
CA60	28.9		

Vol. de concreto total (C-30) = 100.33 m³

Área de forma total = 233.79 m²

COR	PENA Nº	ESP.
1. (red)	7	0,10
2. (yellow)	7	0,13
3. (green)	7	0,60
4. (cian)	7	0,60
5. (blue)	7	0,60
6. (magenta)	7	0,40
7. (white)	7	0,22

PENAS PARA PLOTAGEM

CORES

ENGENHARIA

Engenharia de Estruturas e Engenharia de Segurança do Trabalho

Excelência em Projetos Estruturais de Concreto Armado, Protendido, Pré-Moldado, Estruturas Metálicas e Alvenaria Estrutural

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Fone/Fax: (44) 3026-8993 - e-mail: yk@ykengenharia.com.br - Visite nosso site! http://www.ykengenharia.com.br

CONTROLE DAS REVISÕES:

REVISÃO	DATA	DESCRIÇÃO

PROJETO:

ESTRUTURAL EM CONCRETO ARMADO

CLIENTE:

RODRIGO KOJO

OBRA:

Para Construção de Uma Edificação Residencial Coletiva - Edifício Jardins de France

LOCAL:

Rua Francisco Glicério, nº 1.033 - Zona 07 - Maringá - Paraná

REFERÊNCIA(s):

Detalhes dos Blocos de Fundação (Folha 01 de 02)

<>

<>

REVISÃO: **R-00**

PRANCHA: **2** / **68**

RESPONSÁVEL TÉCNICO:

Eng° Esp.Yutaka Mario Kobayashi Júnior

CREA PR-89.748/D

DATA CRIAÇÃO: 09/04/2013

DATA DA REVISÃO: N/C

ART Nº: 20122498064

PROJETO Nº:

ESCALAS: INDICADAS