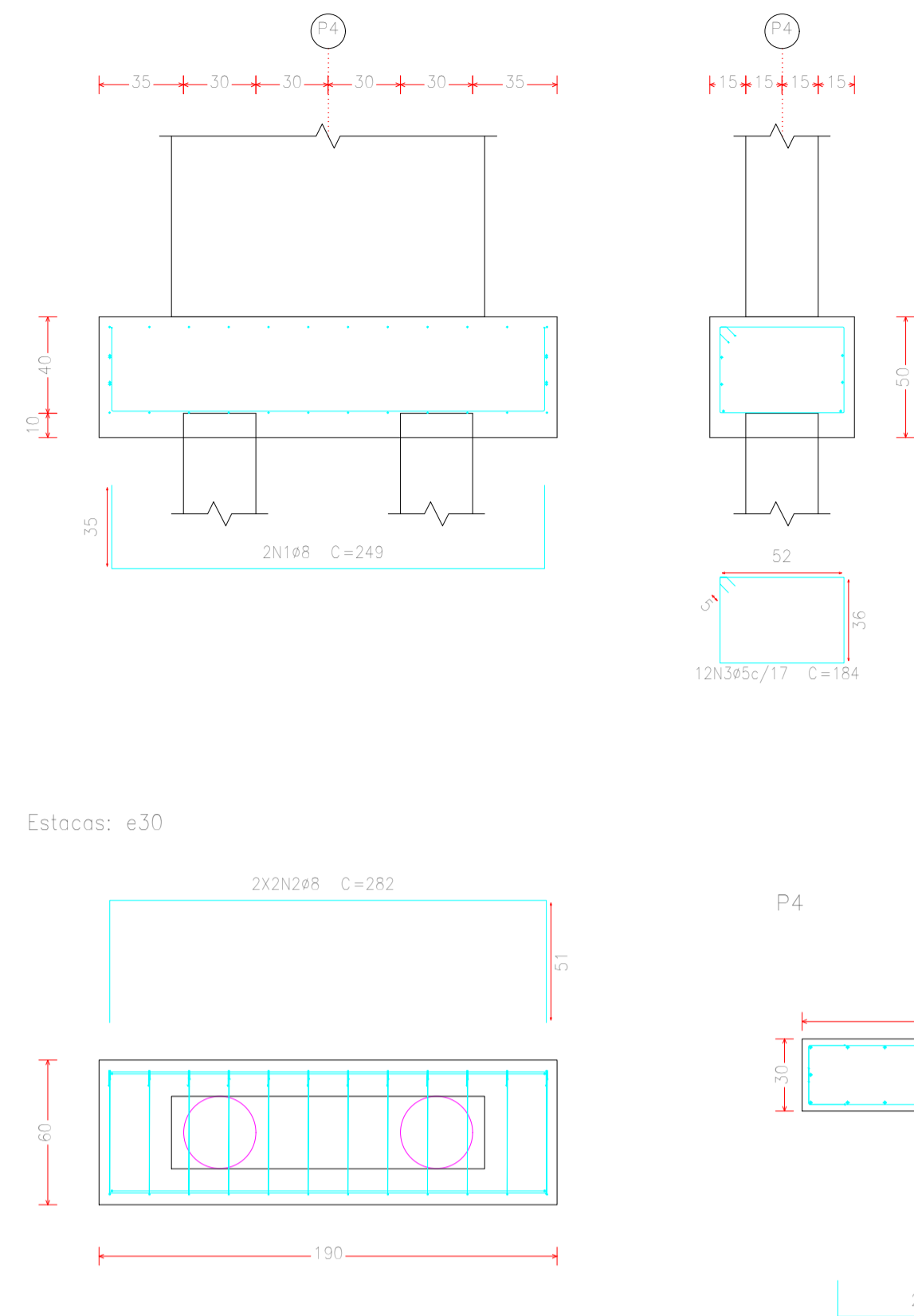
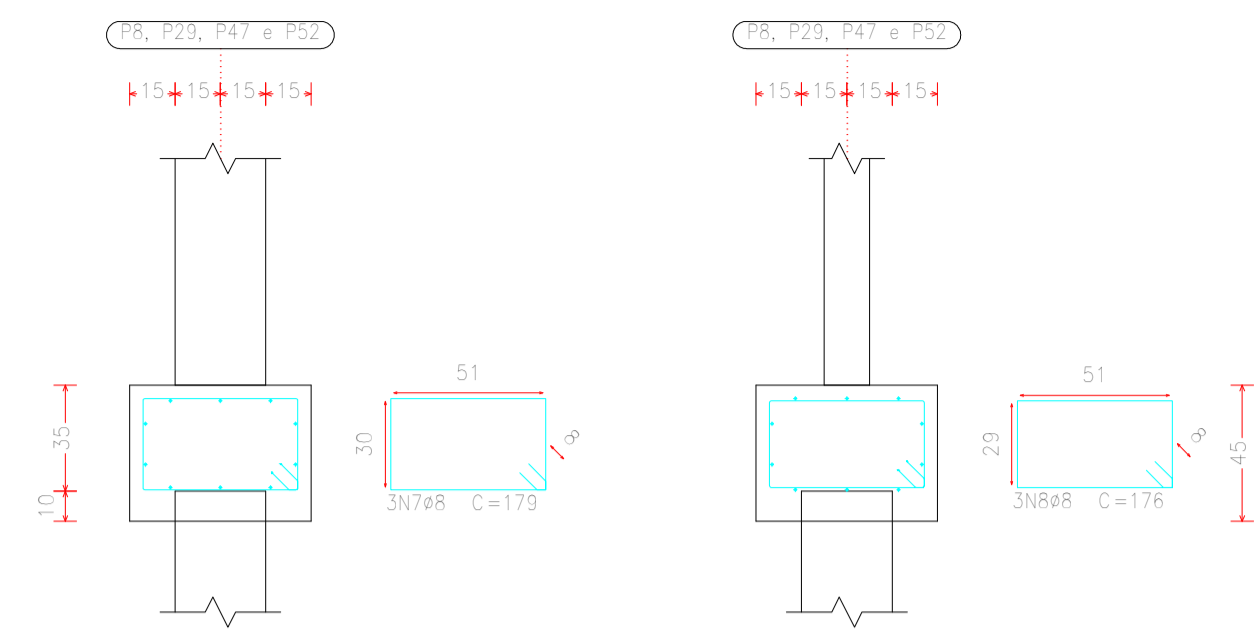


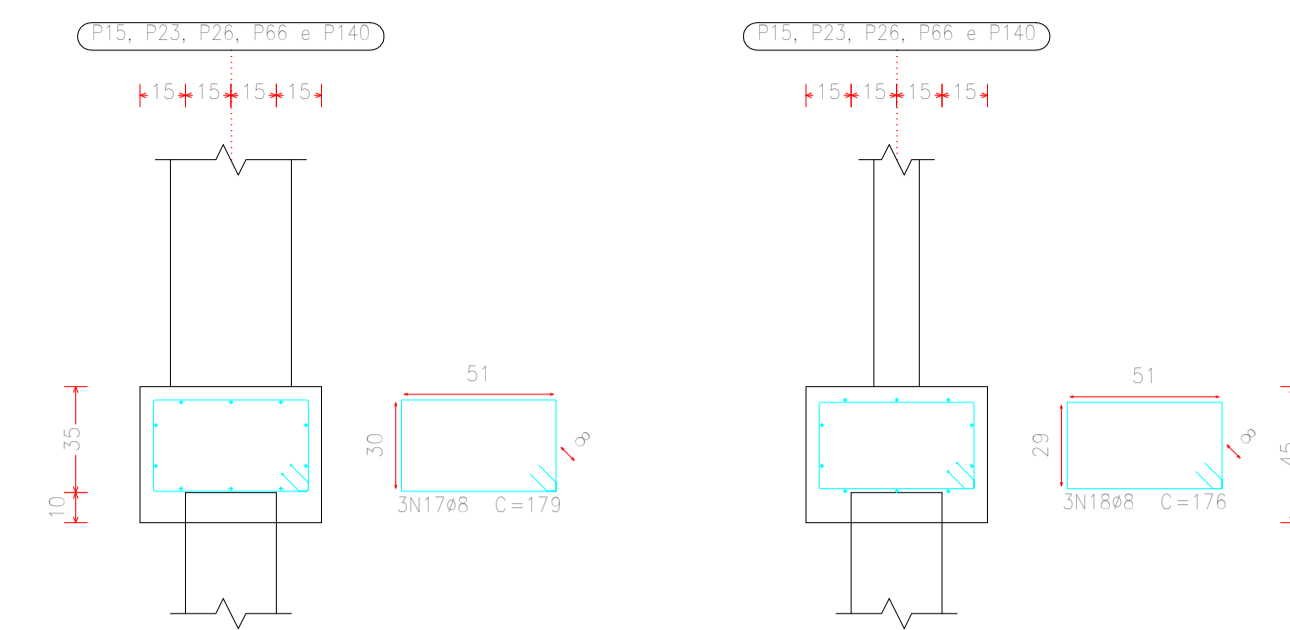
P4



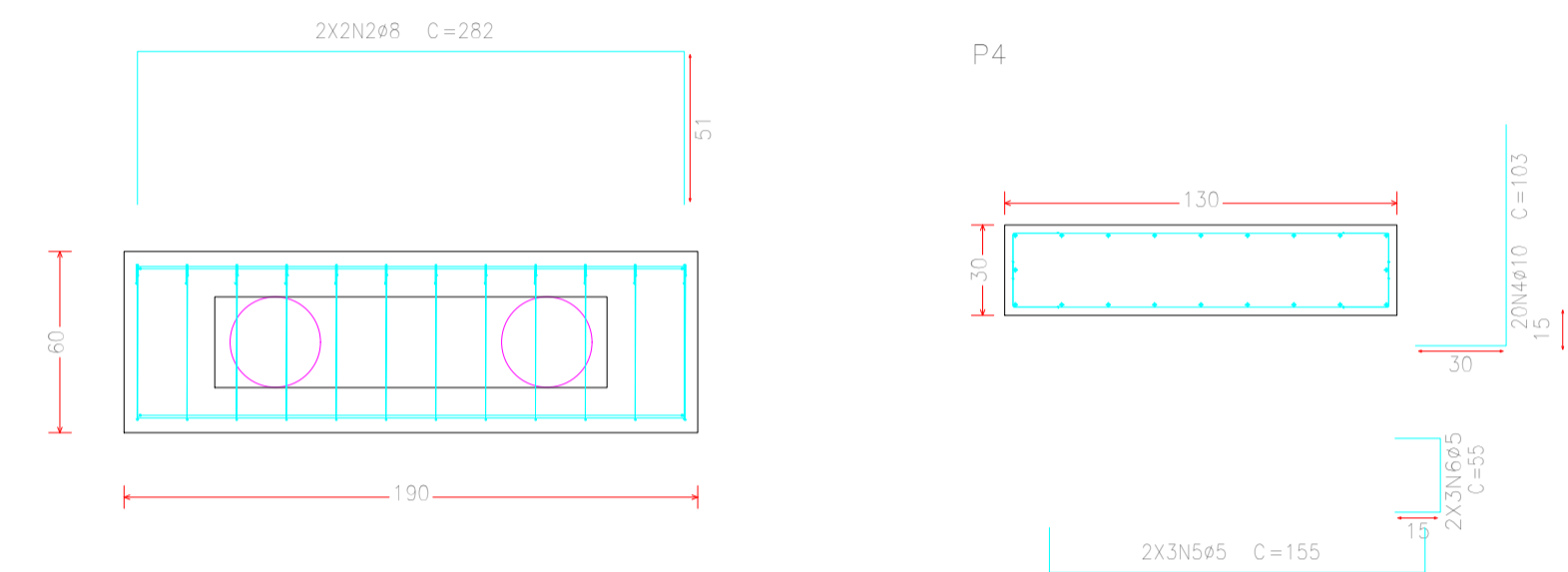
P8, P29, P47 e P52



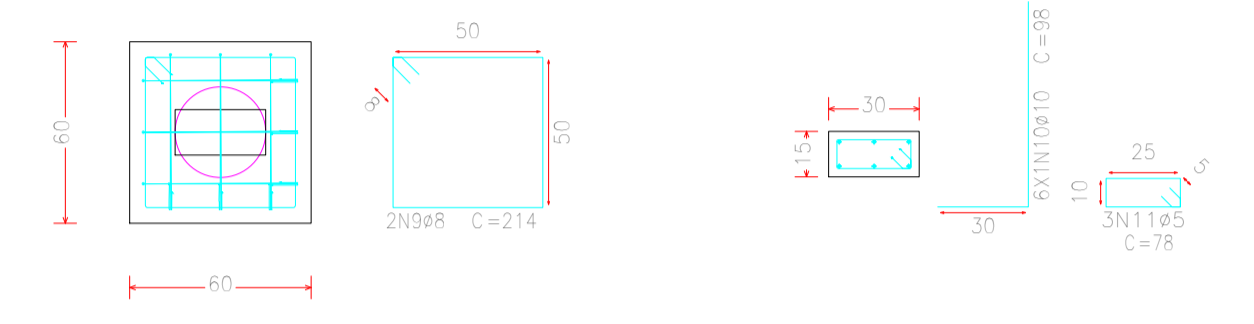
P15, P23, P26, P66 e P140



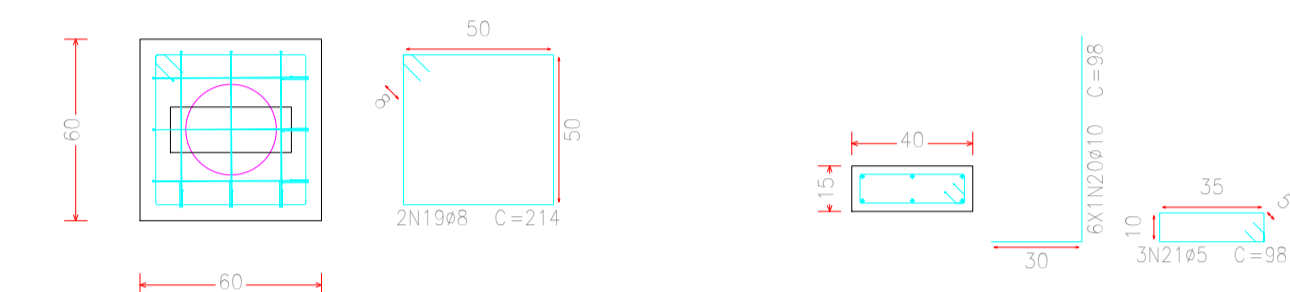
Estacas: e30



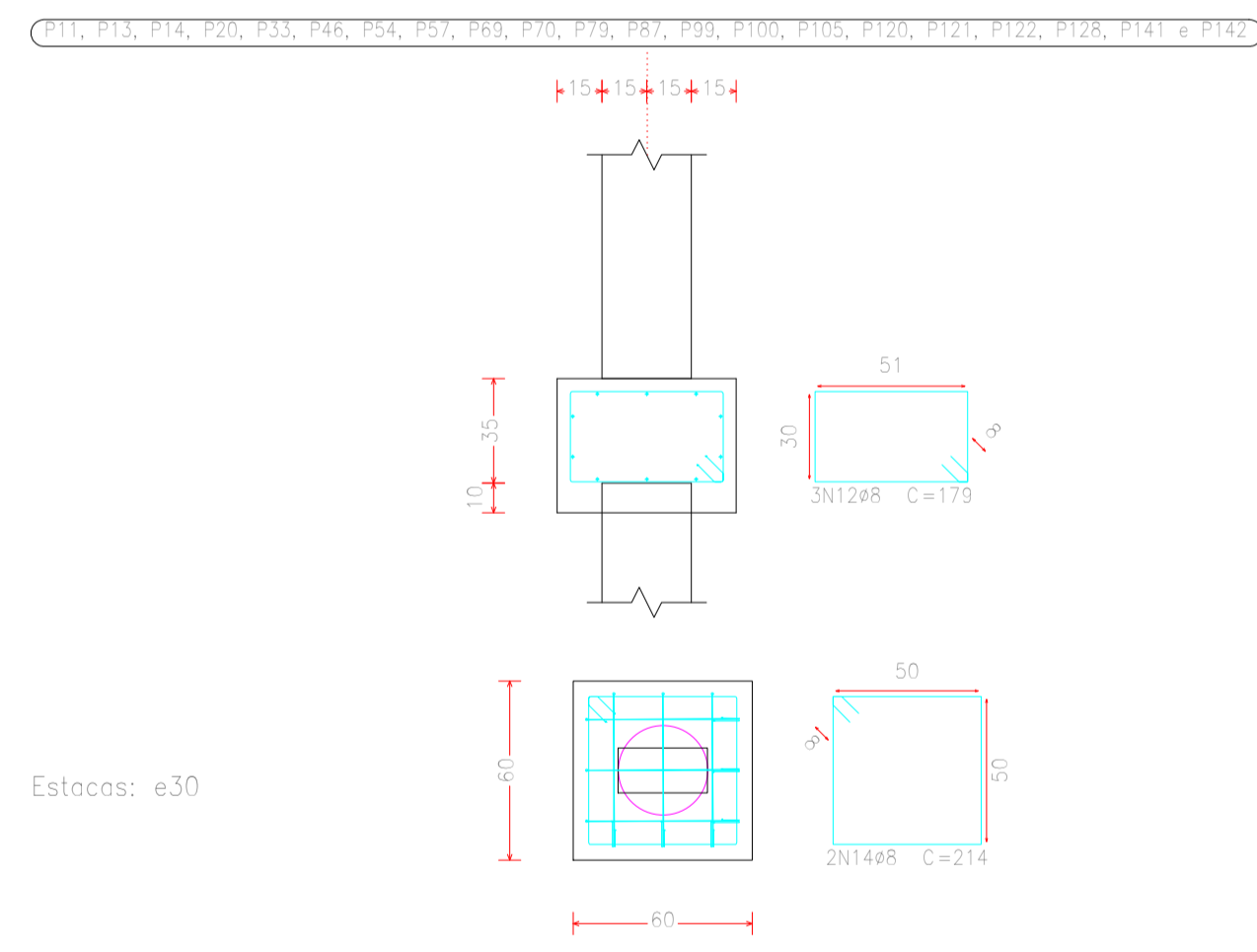
Estacos: e30



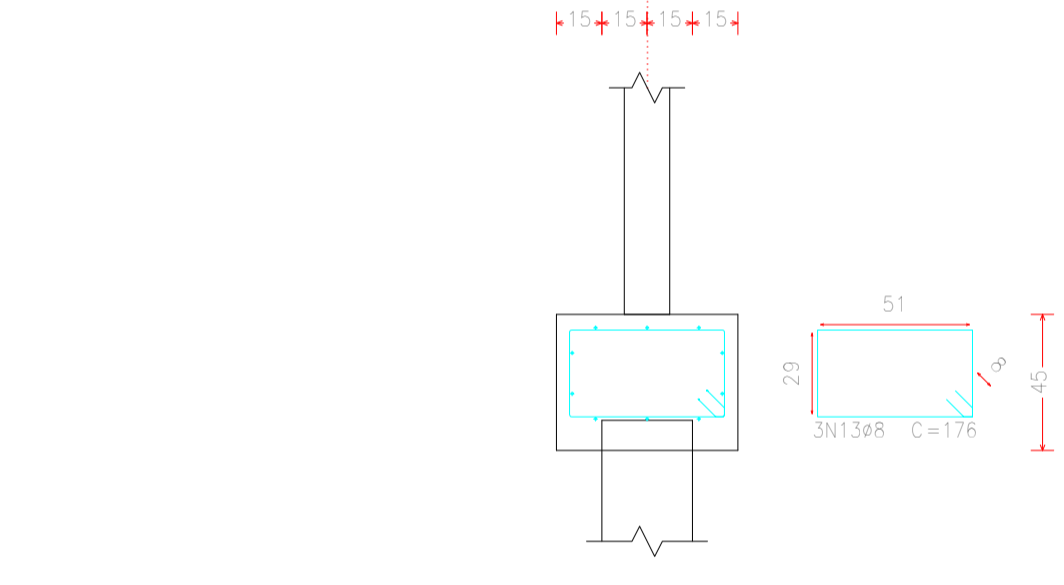
Estacos: e30



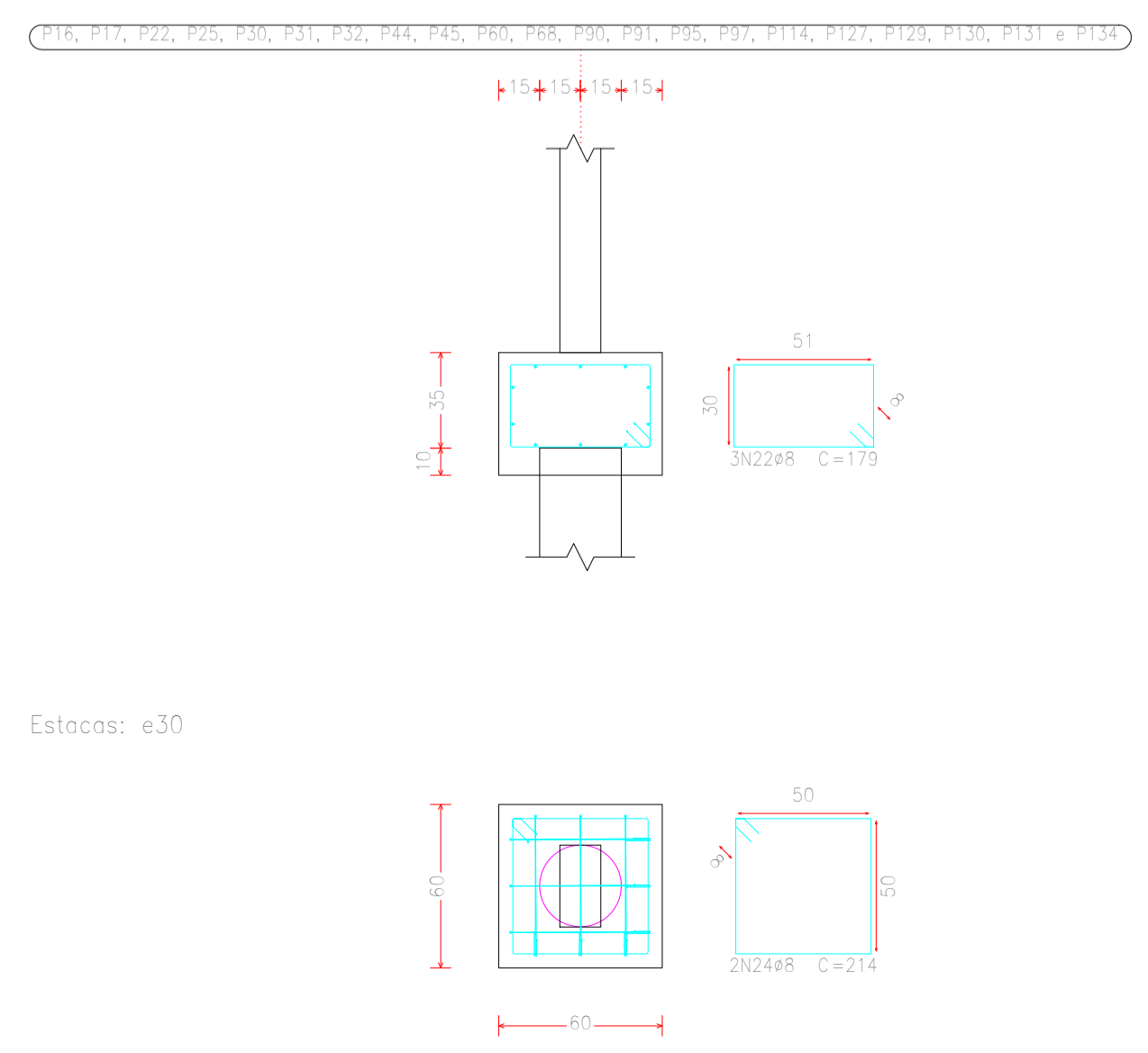
P11, P13, P14, P20, P33, P46, P54, P57, P69, P70, P79, P87, P99, P100, P105, P120, P121, P122, P128, P141 e P142



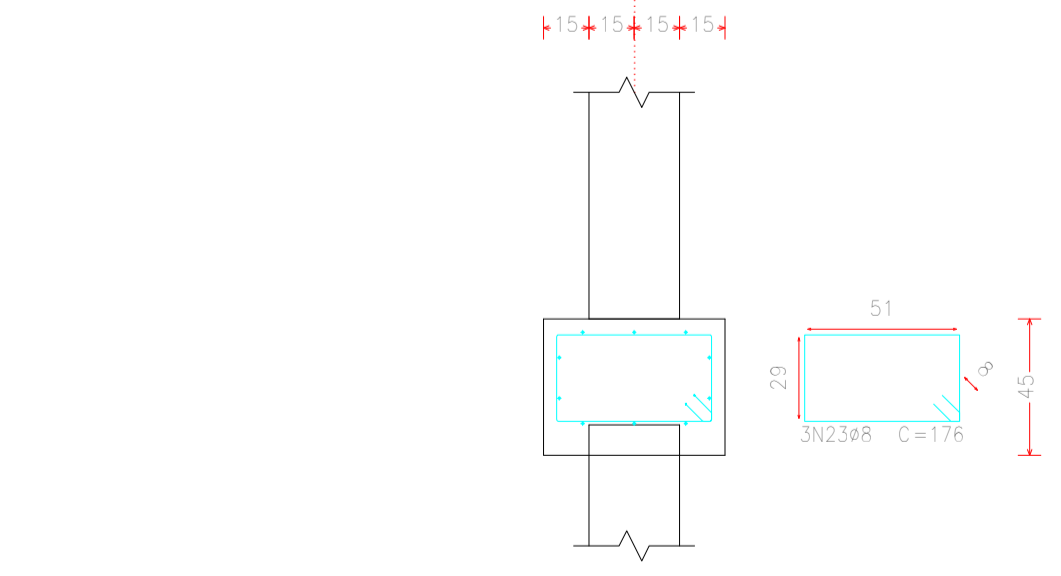
P11, P13, P14, P20, P33, P46, P54, P57, P69, P70, P79, P87, P99, P100, P105, P120, P121, P122, P128, P141 e P142



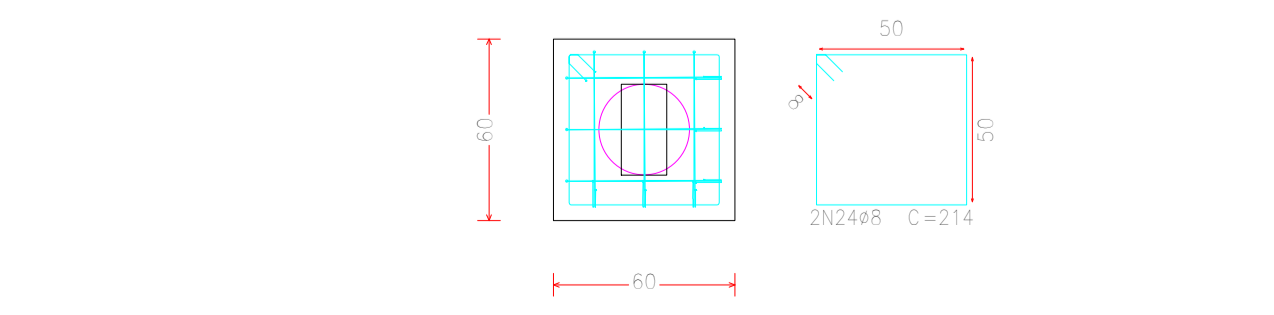
P16, P17, P22, P25, P30, P31, P32, P44, P45, P60, P68, P90, P91, P95, P97, P114, P127, P129, P130, P131 e P134



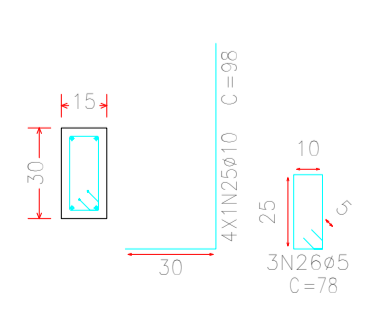
P16, P17, P22, P25, P30, P31, P32, P44, P45, P60, P68, P90, P91, P95, P97, P114, P127, P129, P130, P131 e P134



Estacos: e30



P16, P17, P22, P25, P30, P31, P32, P44, P45, P60, P68, P90, P91, P95, P97, P114, P127, P129, P130, P131 e P134



Elemento	Pos.	Diam.	Q.	Dob. (cm)	Reia (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
P4	1	Ø8	2	35	179	35	249	498	2,9	
	2	Ø8	4	282	1128		282	1776	4,5	
	3	Ø5	12	184	184		184	2208	12,7	3,5
	4	Ø10	20	30	73		103	2060		1,5
	5	Ø5	6	15	125	15	155	330		0,5
	6	Ø5	6	15	125	15	155	330		0,5
Total+10%									21,1	6,1
P8=P29=P47=P52	7	Ø8	3	179	537		179	1038	2,1	
	8	Ø8	3	176	528		176	1008	2,1	
	9	Ø8	2	214	214		214	2568	1,7	
	10	Ø10	6	30	68		98	588	3,6	0,4
	11	Ø5	3	78	78		78	234		0,4
Total+10% (x4)									10,5	3,0
P11=P13=P14=P20 P33=P46=P54=P57 P69=P70=P79=P87 P99=P100=P105 P120=P121=P122 P128=P141=P142	12	Ø8	3	179	537		179	1038	2,1	
	13	Ø8	3	176	528		176	1008	2,1	
	14	Ø8	2	214	214		214	2568	1,7	
	15	Ø10	4	30	68		98	392	2,4	0,4
	16	Ø5	3	78	78		78	234		0,4
	Total+10% (x2)									9,1
P15=P23=P26=P66 P140	17	Ø8	3	179	537		179	1038	2,1	
	18	Ø8	3	176	528		176	1008	2,1	
	19	Ø8	2	214	214		214	2568	1,7	
	20	Ø10	6	30	68		98	588	3,6	0,5
	21	Ø5	3	78	78		78	234		0,5
Total+10% (x5)									10,5	3,0
P16=P17=P22=P25 P30=P31=P32=P44 P45=P60=P68=P90 P91=P95=P97=P114 P127=P129=P130 P131=P134	22	Ø8	3	179	537		179	1038	2,1	
	23	Ø8	3	176	528		176	1008	2,1	
	24	Ø8	2	214	214		214	2568	1,7	
	25	Ø10	4	30	68		98	392	2,4	0,4
	26	Ø5	3	78	78		78	234		0,4
	Total+10% (x2)									9,1
e5:									0,0	27,5
Ø8:									338,7	0,0
Ø10:									159,1	0,0
Total:									497,8	27,5

EDIFICAÇÃO EDUCACIONAL DE ALVENARIA  
É DE INTEIRA RESPONSABILIDADE DO AUTOR DO PROJETO E RESPONSÁVEL TÉCNICO, ATENDER A LEGISLAÇÃO MUNICIPAL E NORMAS BRASILEIRAS VIGENTES.

APROVAÇÕES

PROJETO VINCULADO AO  
ALVARÁ Nº \_\_\_\_\_  
PROT. Nº \_\_\_\_\_

JULIO ANDREI NASCIMENTO  
RESPONSÁVEL TÉCNICO | ENGENHEIRO CIVIL - CREA SC 166369-1

OBRA: EDIFICAÇÃO EDUCACIONAL

**JULIO ANDREI**  
ENGENHEIRO CIVIL

FRANQUIA  
**PROJETO FUNDAÇÃO**  
DETALHE BLOCO FUNDAÇÃO

03/19