

P1=P2=P3=P4=P5=P6=P7=P8=P49=P51=P52=P53  
=P54=P55=P56=P59

P21=P22=P33=P48

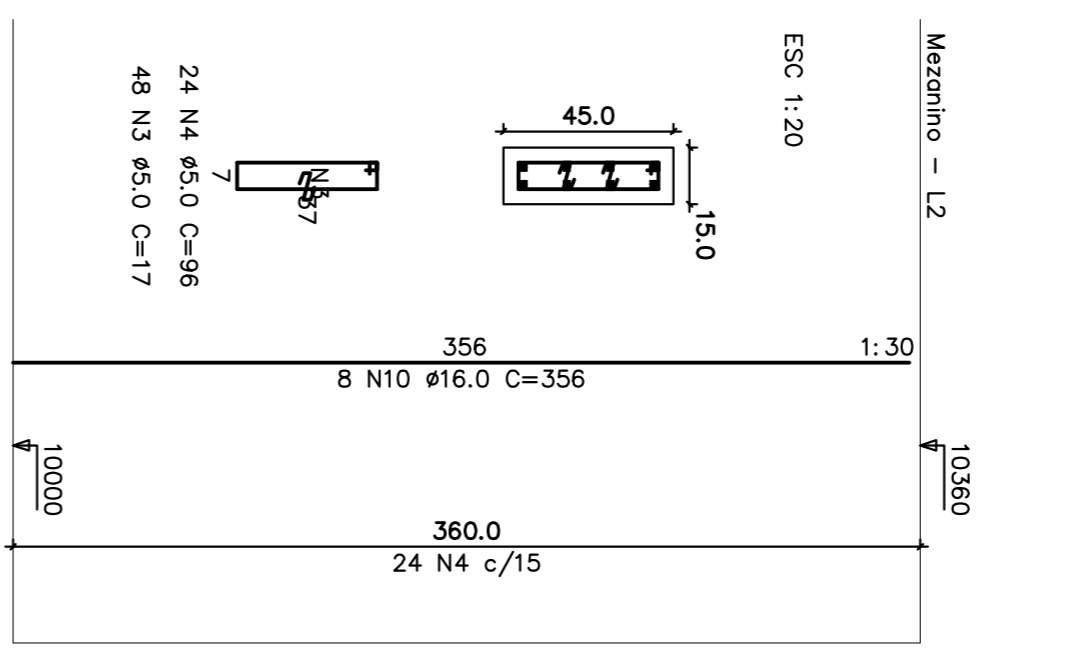
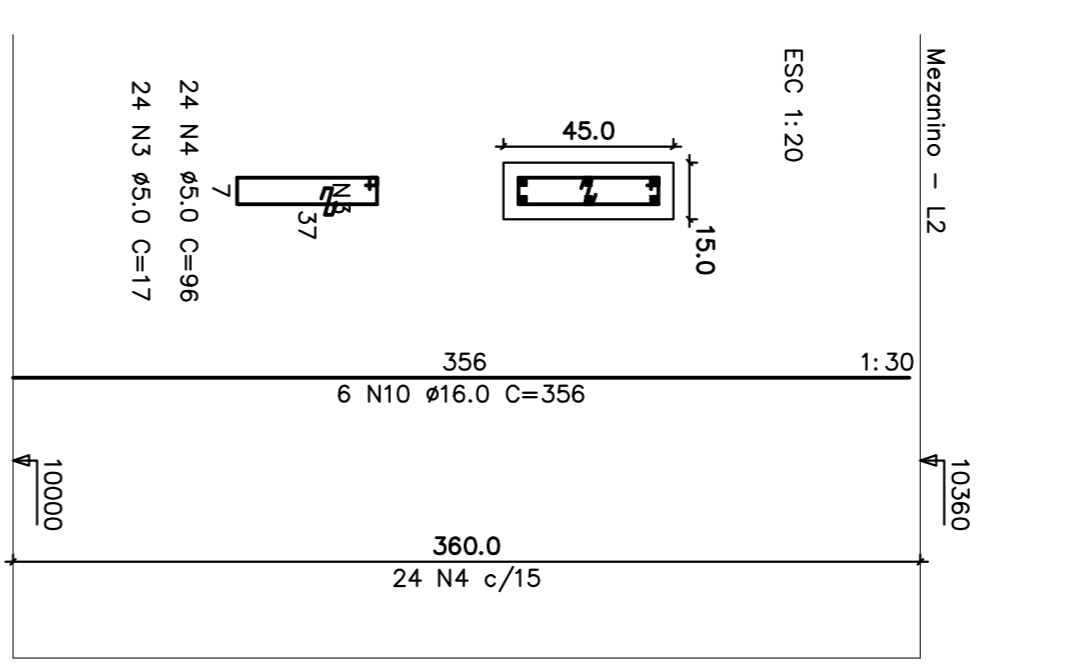
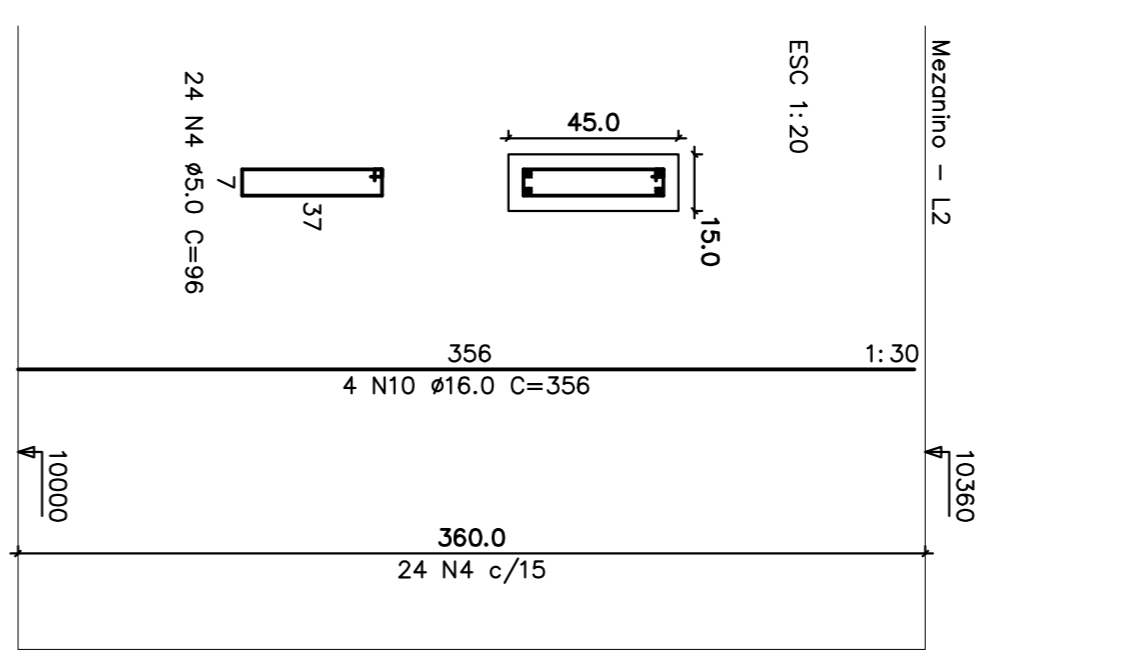
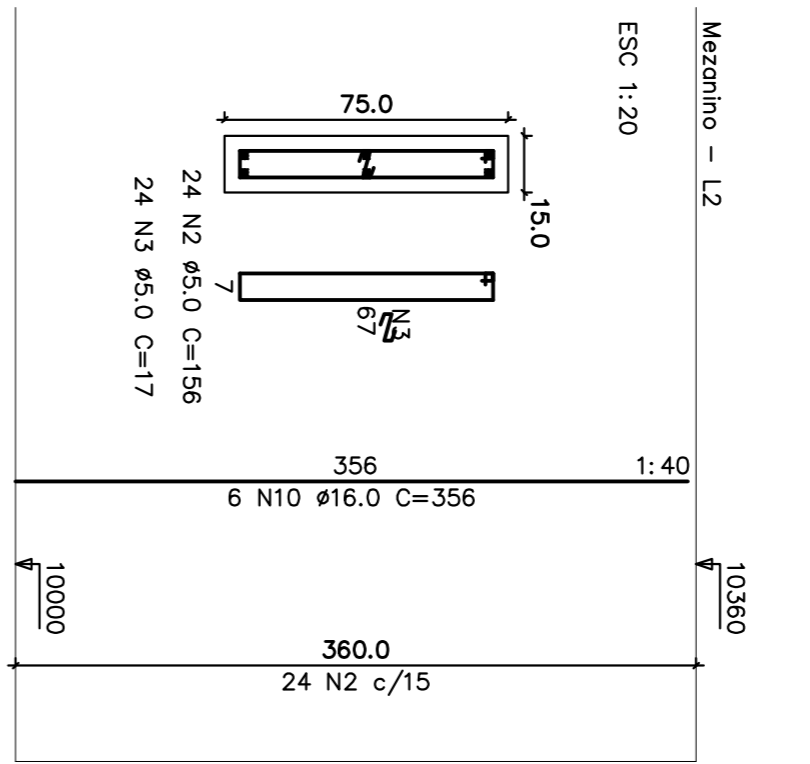
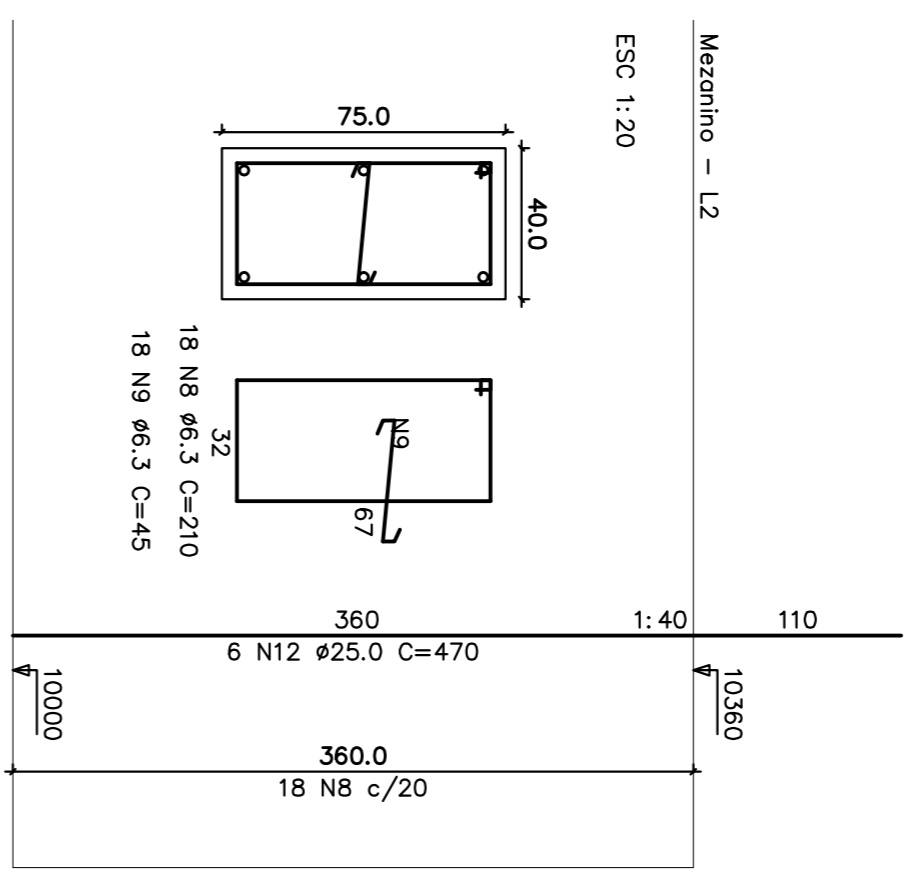
P23=P24=P25=P26=P27=P28=P29=P30=P31=P32  
=P35=P39=P41

P34=P36=P40=P43=P45

P37=P38=P42

RELAÇÃO DO AÇO

16#P1 7#P9 4#P21  
13#P23 5#P34 5#P37  
P44 2#P46 2#P57



ACO	N	DIAM	Q	UNIT	C.TOTAL
60	1	50	168	176	12768
	2	50	157	176	11792
	3	50	350	177	61200
	4	50	504	96	48384
	6	50	72	116	8352
	7	50	108	22	2376
50	8	6.3	288	210	60480
	9	6.3	288	356	57672
	10	16.0	162	431	22412
	11	16.0	80	470	45120
	12	25.0	32	470	45120

RESUMO DO AÇO

ACO	DIAM	C.TOTAL	PESQUA.10%
CASO	6.3	775.9	1088.4
	16.0	800.8	1391.7
	25.0	451.2	1914.1
CASEO	50	937.9	1622.2
PESO TOTAL			
CASO	3504.2		
CASEO	1622.2		

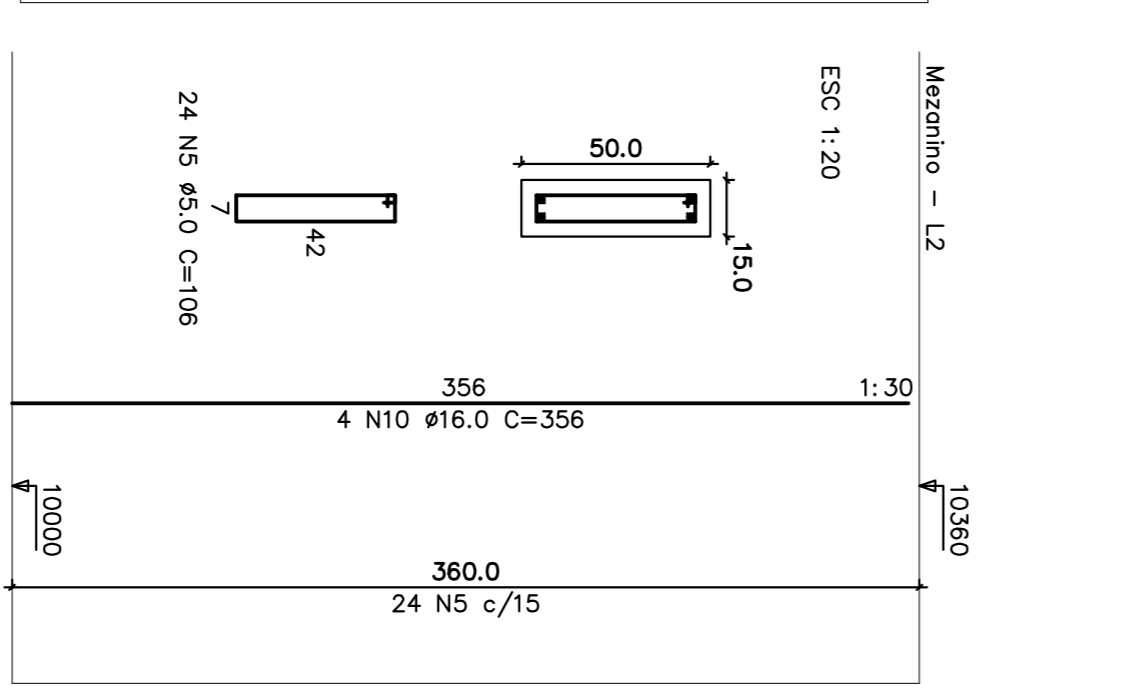
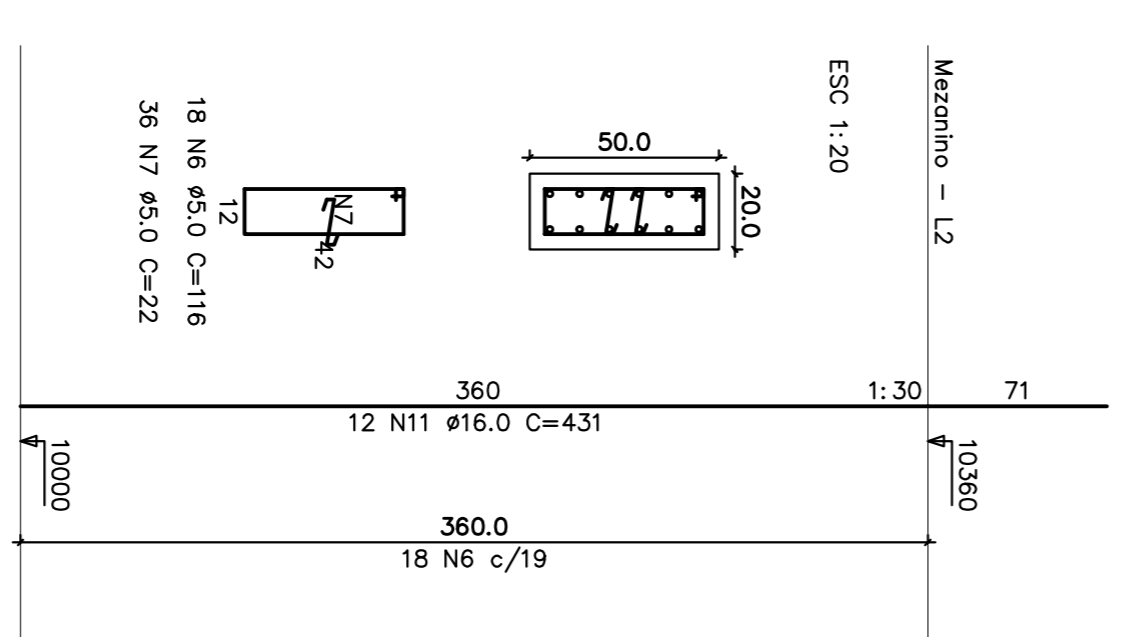
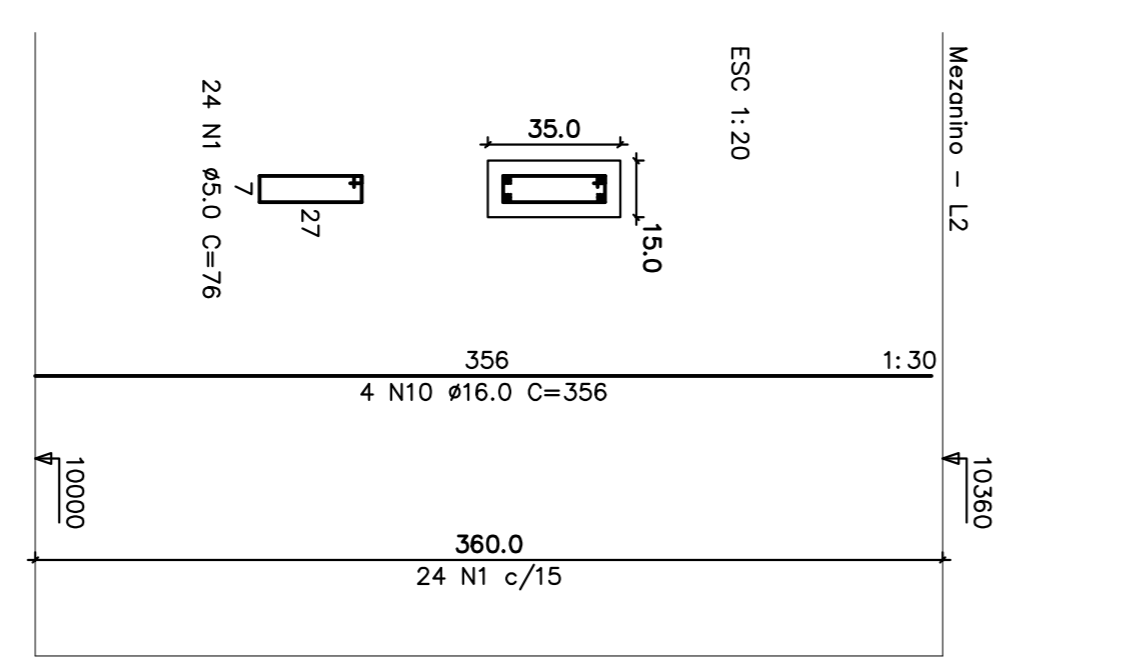
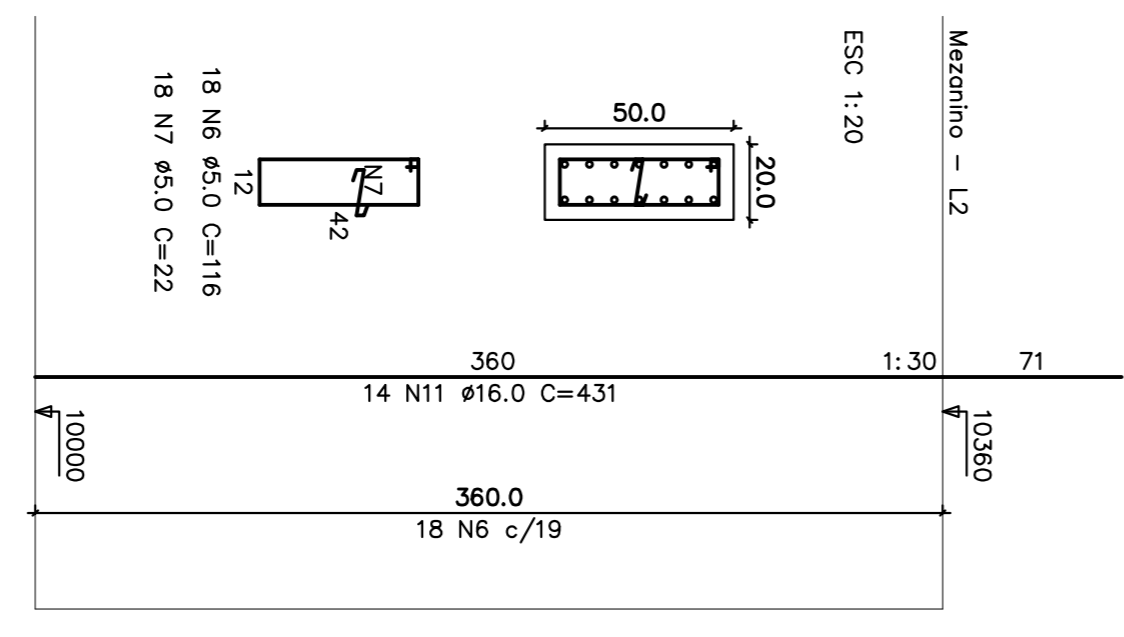
Vol. concreto total = 27,04 m³  
Vol. de ferro total = 299,16 m³  
Ick = 300,00 kg/cm

P57=P58

P9=P10=P17=P18=P19=P20=P50

P46=P47

P44



PROJETO	ABILITADO	PROJETO	PROJETO
28/11/13	PAULO	EMISSÃO PROJ.	EXECUÇÃO
		COMANDO	ALVARO
		VALIDAR PROJETO	

PROJETO	PROJETO
ESTRUTURA DE CONCRETO - PROJETO EXECUTIVO	
GINASIO CIE-P40-45 - ARMADURA DOS PILARES ATÉ 1ª LAR	
28/11/13	01/07/16
28/11/13	01/07/16
1:50	1:50

TITULO	PROJETO
CIE - CENTRO DE INICIAÇÃO AO ESPORTE	

PROJETO	PROJETO
28/11/13	01/07/16
28/11/13	01/07/16
1:50	1:50