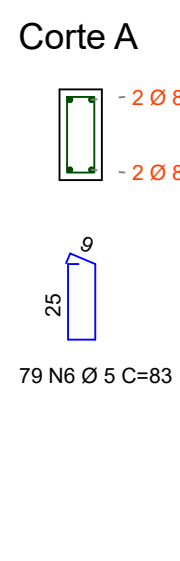
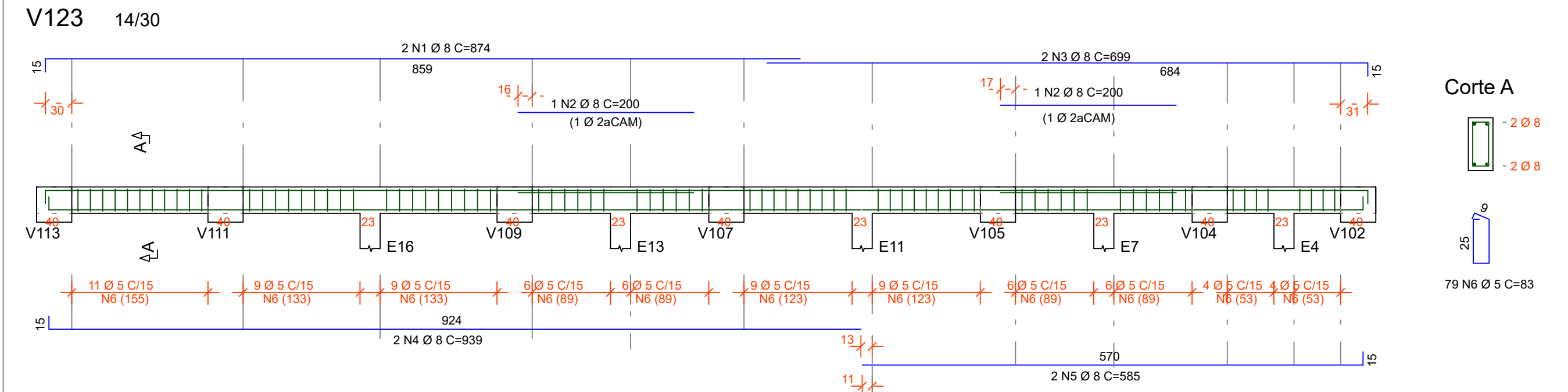
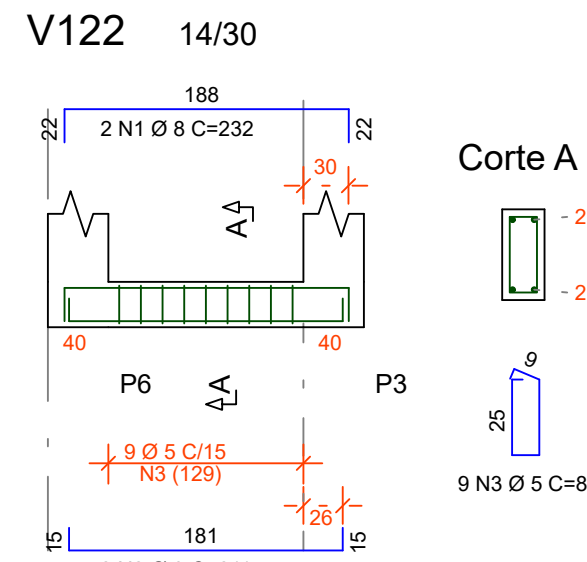
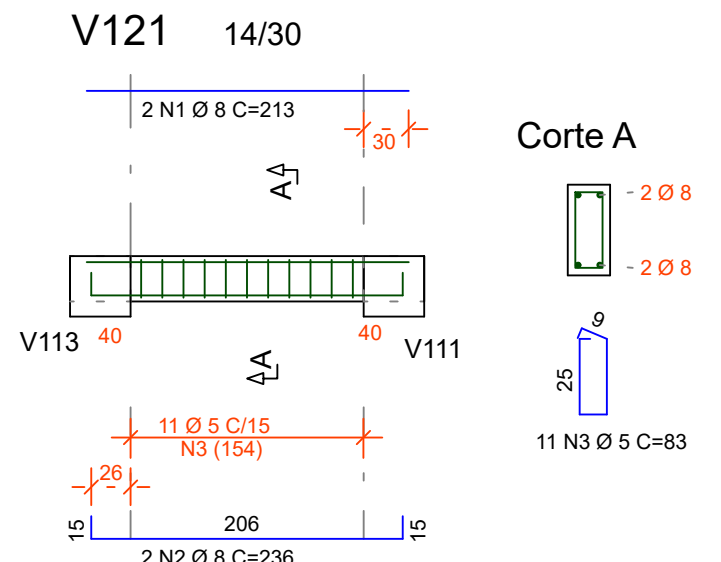
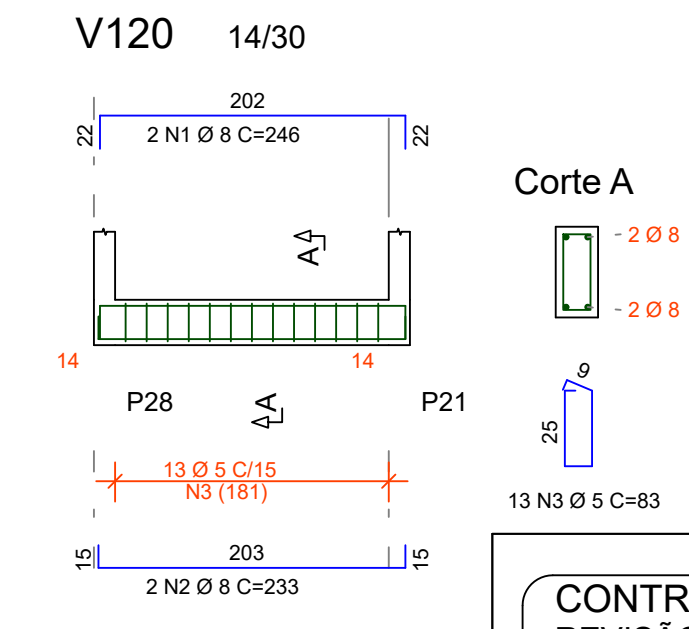
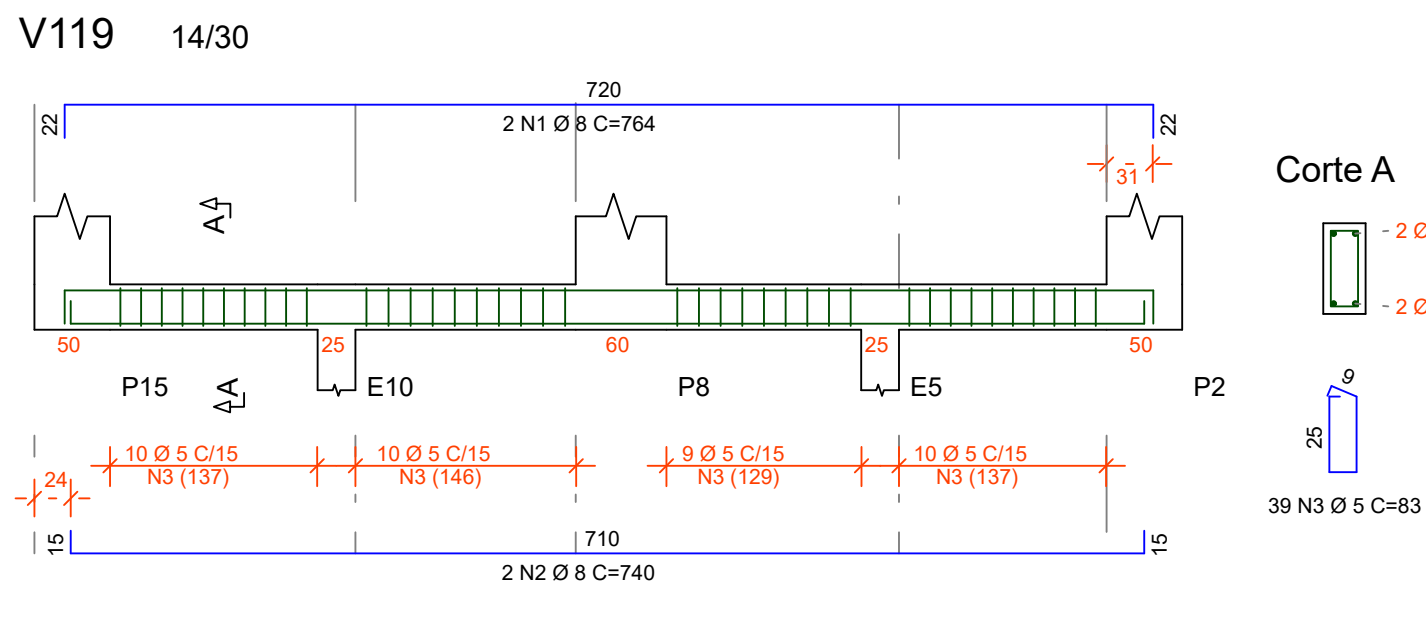
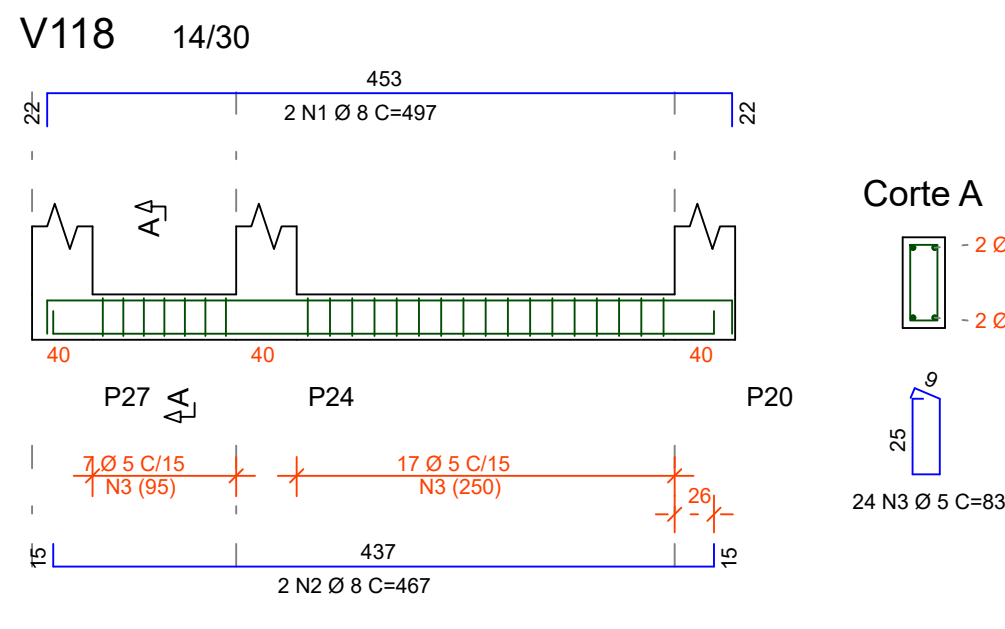
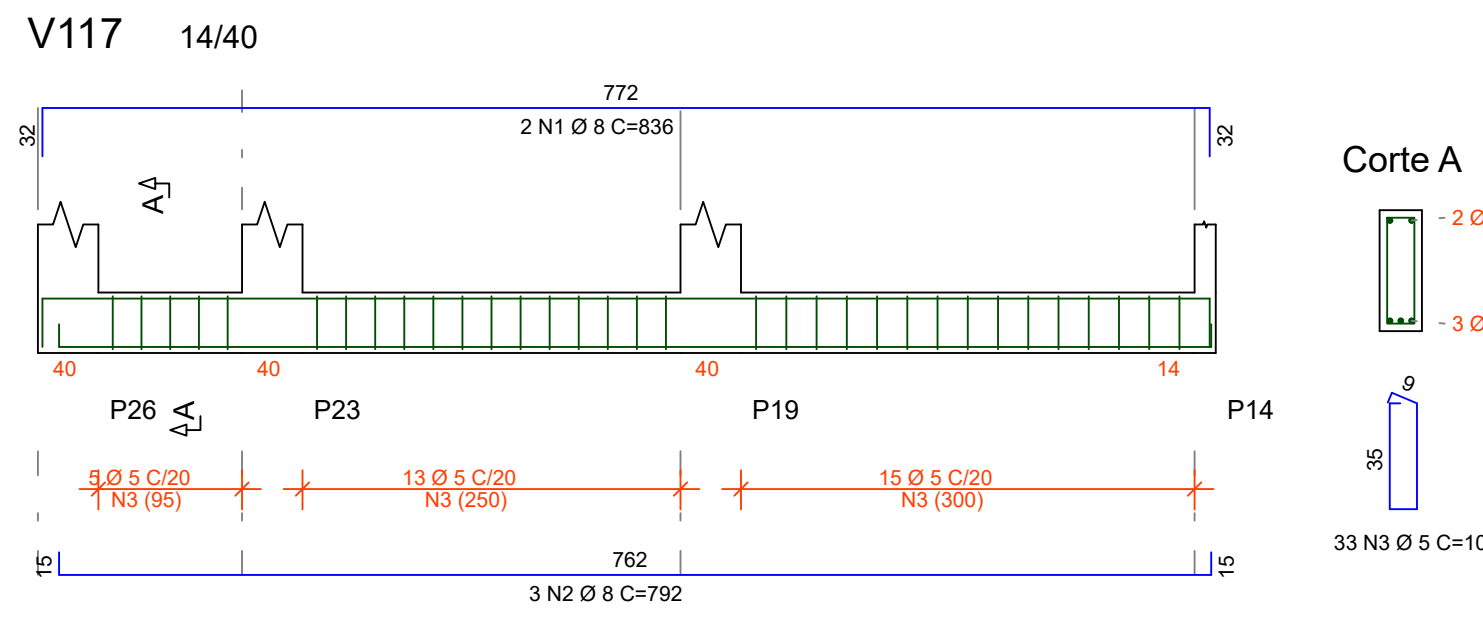
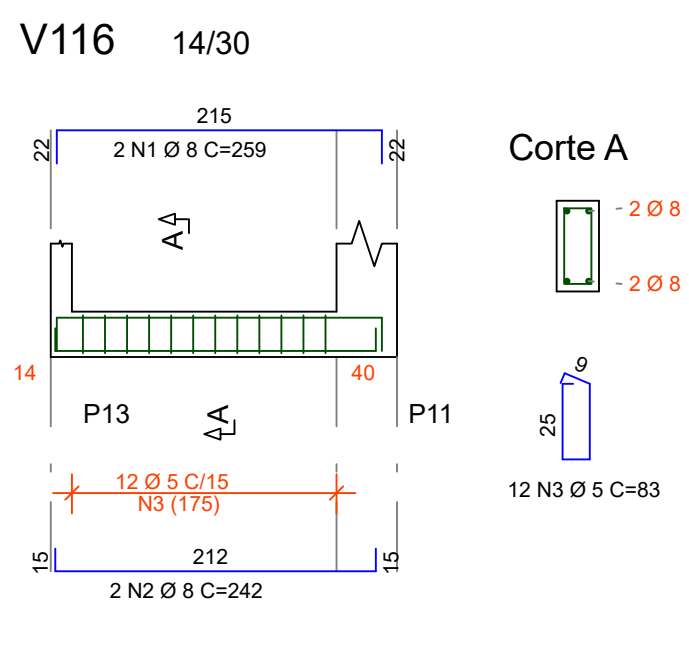
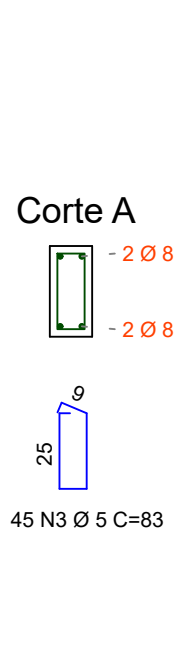
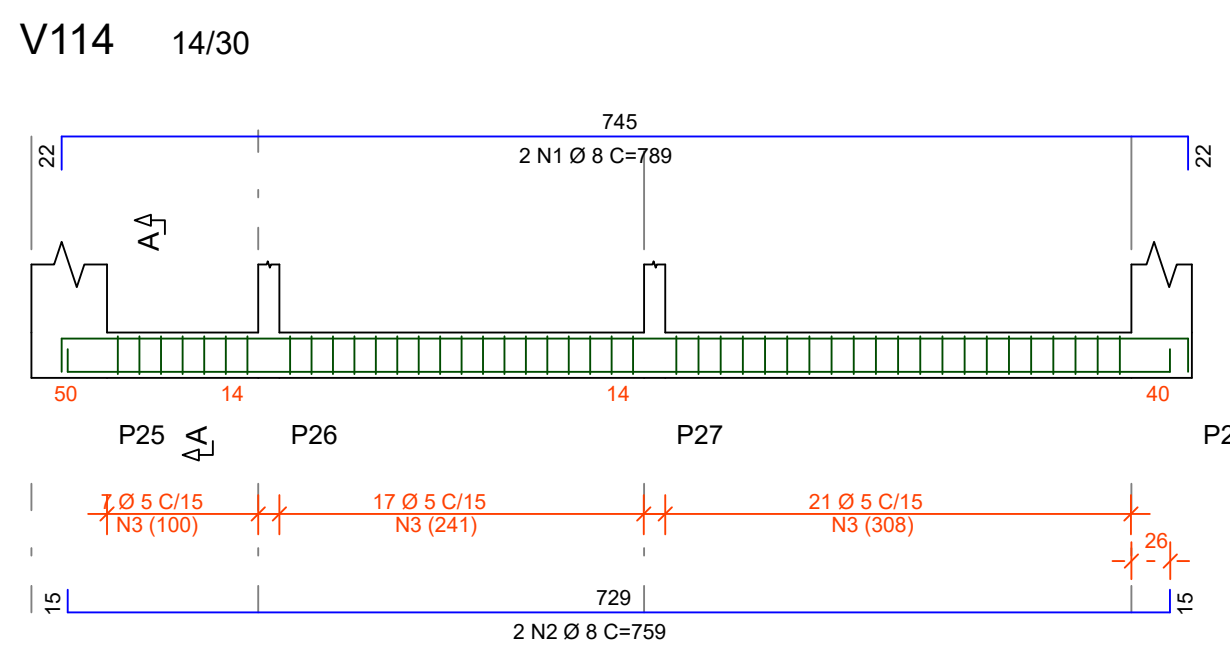
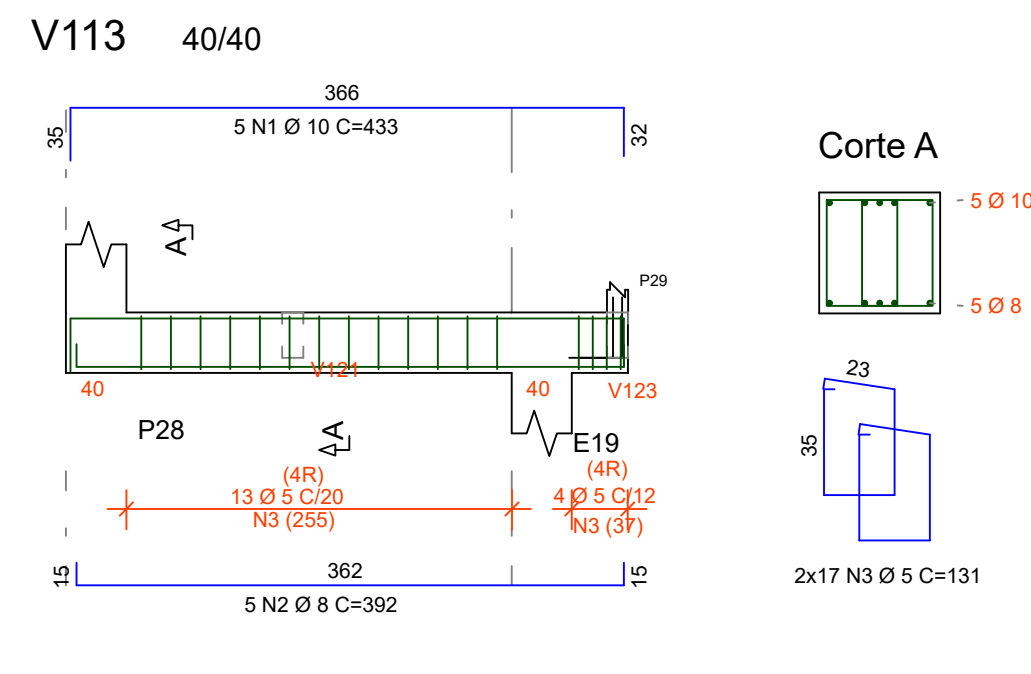
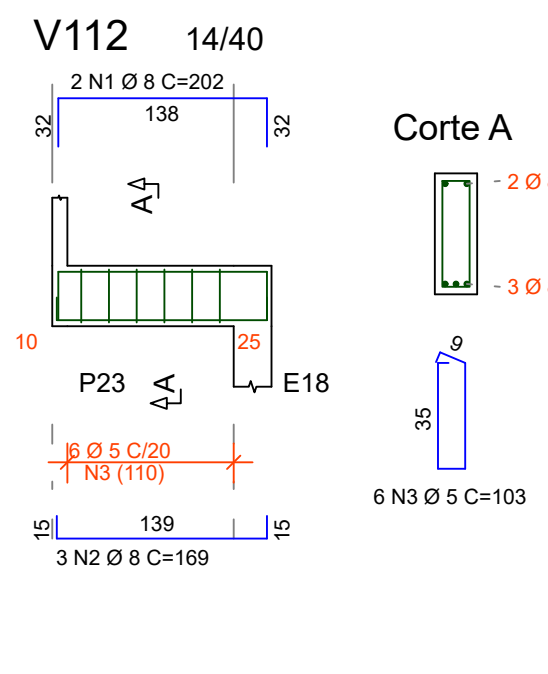
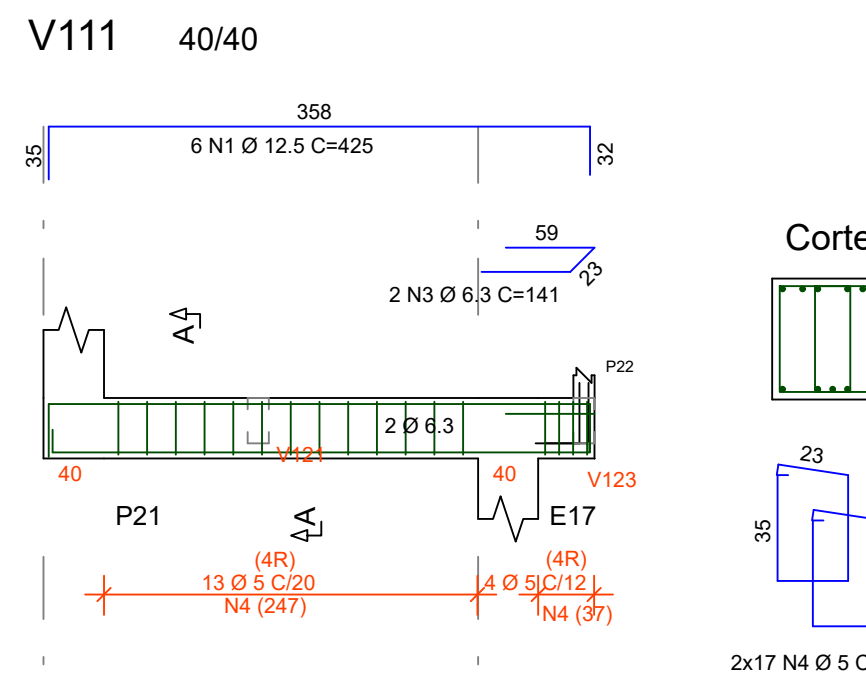
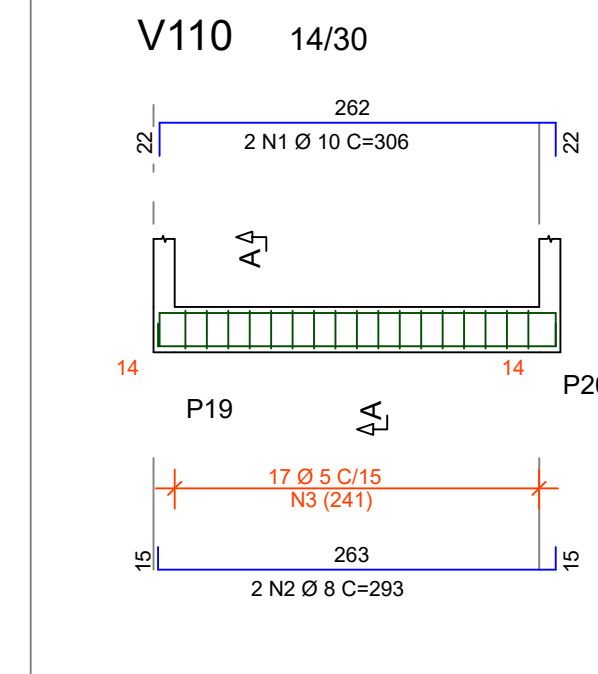
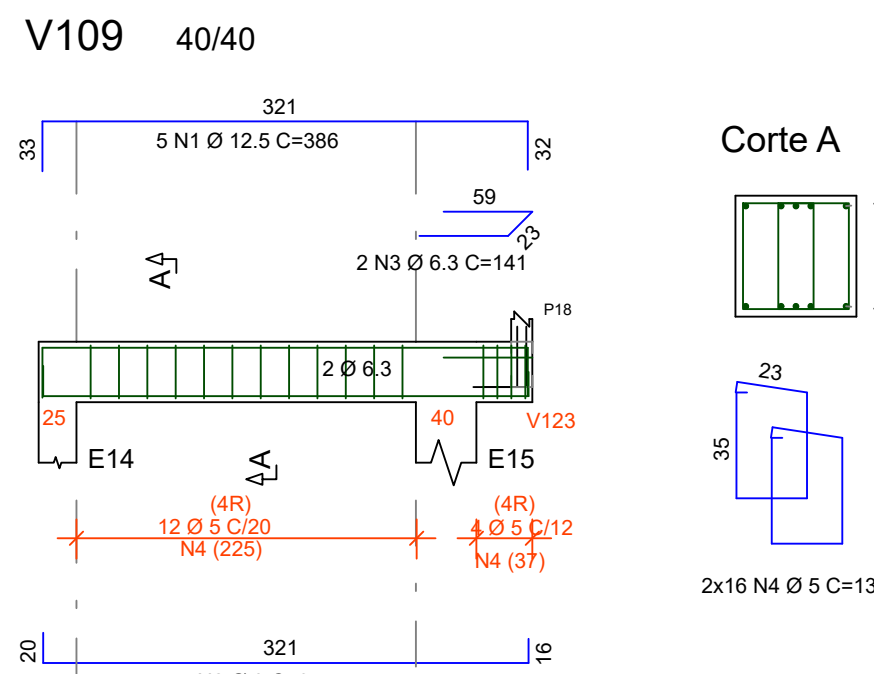
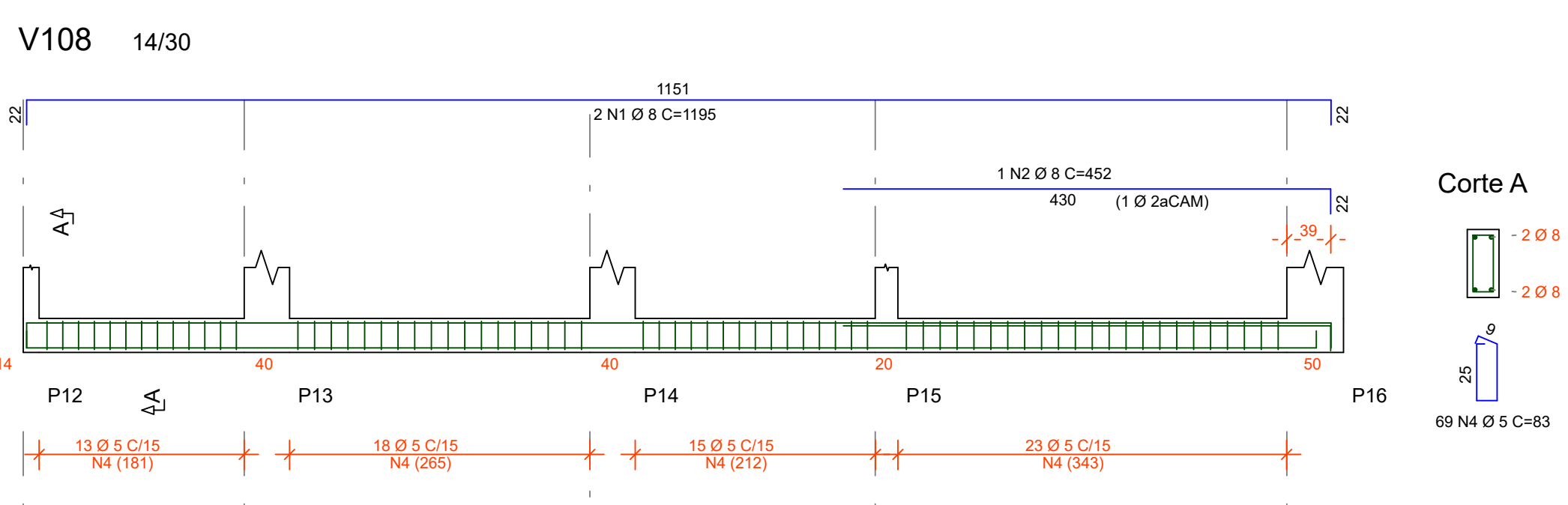
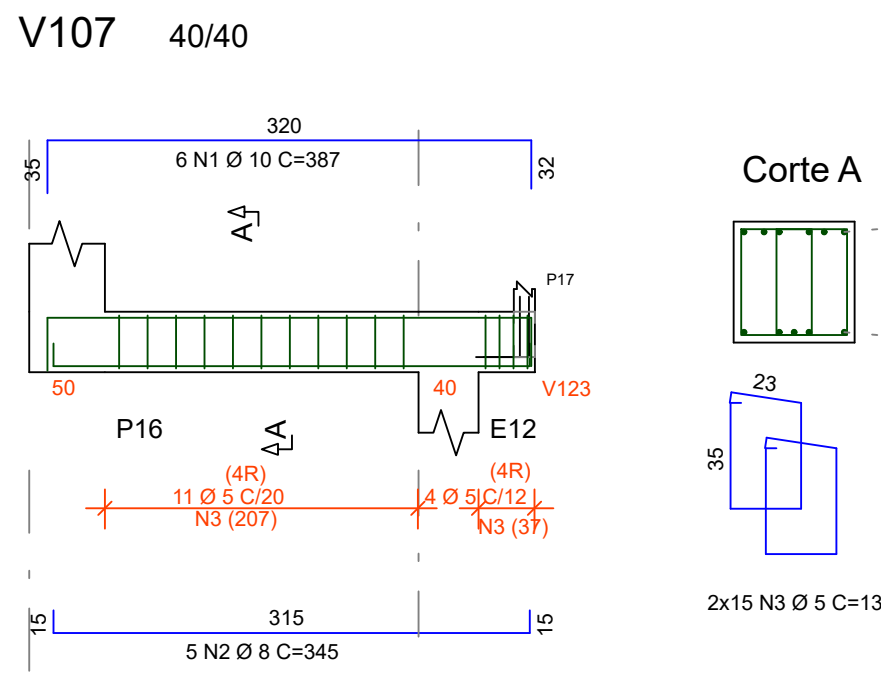
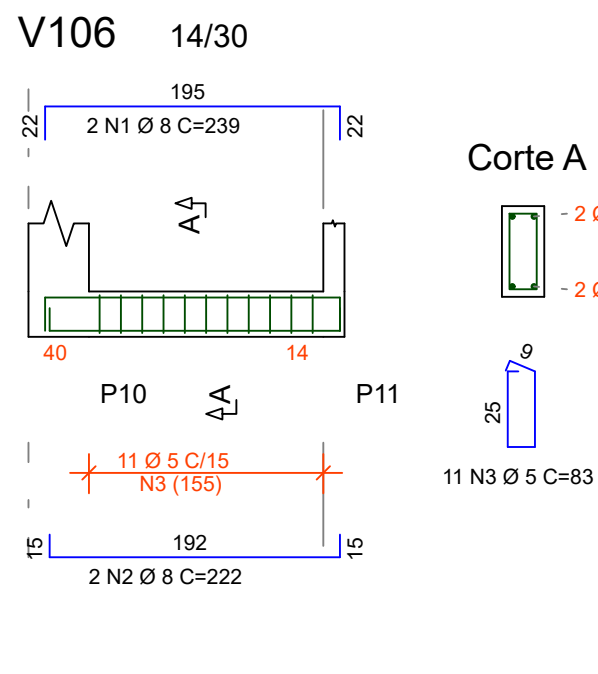
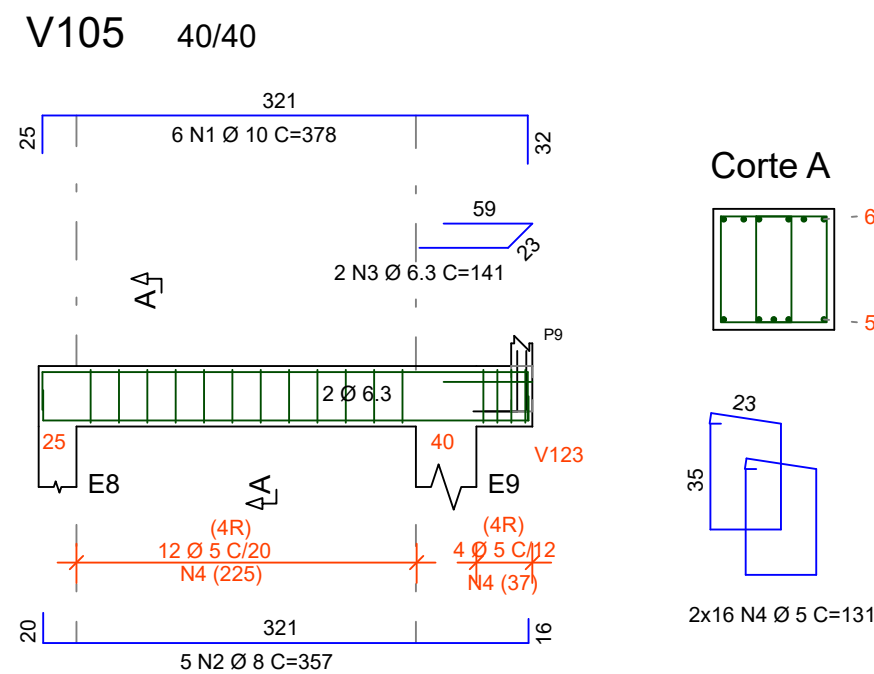


	AÇO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	TOTAL (cm)
V101	50	1	8	2	1093	2186
	50	2	8	2	1067	2134
	60	3	5	63	83	5229
V102	50	1	8	5	290	1450
	50	2	8	5	259	1295
	60	3	5	24	131	3144
V103	50	1	8	2	378	610
	50	2	8	2	292	584
	60	3	5	16	83	1328
V104	50	1	10	6	290	1740
	50	2	8	5	259	1295
	60	3	5	24	131	3144
V105	50	1	10	6	378	2288
	50	2	8	5	357	1785
	50	3	6.3	2	141	282
	60	4	5	32	131	4192
V106	50	1	8	2	239	478
	50	2	8	2	222	444
	60	3	5	11	83	913
V107	50	1	10	6	387	2322
	50	2	8	5	345	1725
	60	3	5	30	131	3930
V108	50	1	8	2	1195	2390
	50	3	8	2	1168	2336
	60	4	5	69	83	5727
V109	50	1	12.5	5	386	1930
	50	2	8	5	357	1785
	50	3	6.3	2	141	282
	60	4	5	32	131	4192
V110	50	1	10	2	308	612
	50	2	8	2	293	586
	60	3	5	17	83	1411
V111	50	1	12.5	6	425	2550
	50	2	8	5	385	1925
	50	3	6.3	3	141	282
	60	4	5	34	131	4454
V112	50	1	8	2	202	404
	50	2	8	3	169	507
	60	3	5	6	103	618
V113	50	1	10	5	433	2165
	50	2	8	5	392	1960
	60	3	5	34	131	4454
V114	50	1	8	2	789	1578
	50	2	8	2	759	1518
	60	3	5	45	83	3735
V115	50	1	8	2	612	1224
	50	2	8	2	582	1164
	60	3	5	33	83	2739
V116	50	1	8	2	259	518
	50	2	8	2	242	484
	60	3	5	12	83	996
V117	50	1	8	2	836	1672
	50	2	8	3	792	2376
	60	3	5	33	103	3399
V118	50	1	8	2	497	994
	50	2	8	2	467	934
	60	3	5	24	83	1992
V119	50	1	8	2	764	1528
	50	2	8	2	740	1480
	60	3	5	39	83	3237
V120	50	1	8	2	246	492
	50	2	8	2	233	466
	60	3	5	13	83	1079
V121	50	1	8	2	213	426
	50	2	8	2	236	472
	60	3	5	11	83	913
V122	50	1	8	2	232	464
	50	2	8	2	211	422
	60	3	5	9	83	747
V123	50	1	8	2	674	1348
	50	2	8	2	200	400
	50	3	8	2	699	1398
	50	4	8	2	939	1878
	50	5	8	2	585	1170
	60	6	5	79	83	6557

RESUMO AÇO CA 50-60			
AÇO	BIT (mm)	COMPR (m)	PESO (kg)
60	5	681	105
50	6.3	8	2
50	8	511	202
50	10	91	56
50	12.5	45	43
Peso Total	60 =		105 kg
Peso Total	50 =		303 kg

Elxo Faces  
Volume de concreto de VIGAS (m³) 7.0 5.9



CONTROLE DAS REVISÕES:		
REVISÃO	DATA	DESCRIÇÃO

**YUTAKA KOBAYASHI**  
Engenharia de Estruturas  
Rua Antônio Felipe, 2360 - CENTRO - Paranavai - Paraná - CEP: 87704-030  
(44) 9.8827-4040 - yk@ykengeharia.com.br - Visite nosso site! http://www.ykengeharia.com.br

PROJETO:  
**ESTRUTURAL EM CONCRETO ARMADO**

CLIENTE:  
**VANESSA APARECIDA HENRIQUE BALAN**  
OBRA:  
PARA CONSTRUÇÃO DE UMA EDIFICAÇÃO COMERCIAL EM CONCRETO ARMADO  
LOCAL:  
RUA MACHADO DE ASSIS, 173 / RUA SANTA JOAQUINA DE VEDRUNA, 141 ZONA 06 - MARINGÁ - PR

REFERÊNCIA(s): Detalhes das Vigas do Têrreo (Baldrame);	REVISÃO: <b>R-00</b>	PRANCHA: <b>15</b>
RESPONSÁVEL TÉCNICO: Eng. MSc. Exp. Yutaka Mario Kobayashi Júnior CREA PR-80.748/D	DATA CRIAÇÃO: 23/11/2020	FCk (MPa): 30 MPa
ART Nº: 172020534237	PROJETO Nº: P-489	ESCALA: 1:50