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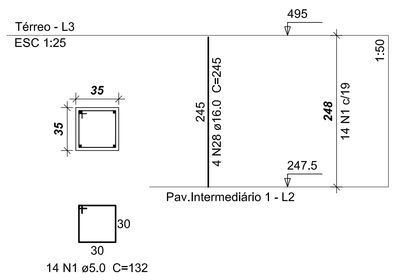
=P148=P154=P164=P180=P199=P207=P208



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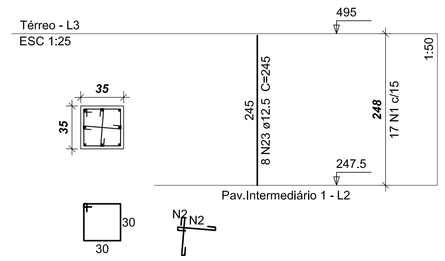

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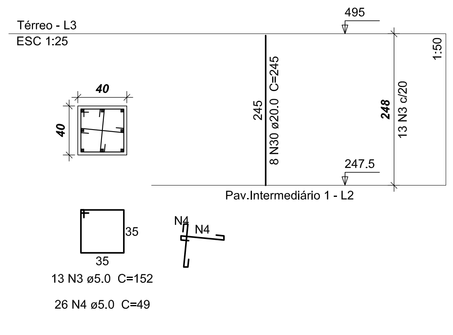

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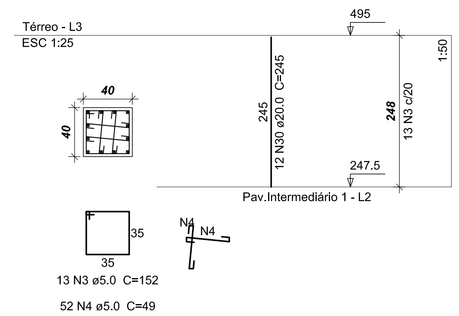
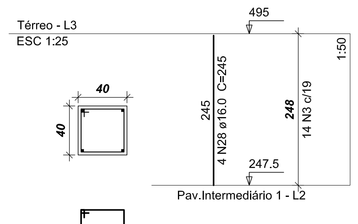


P114



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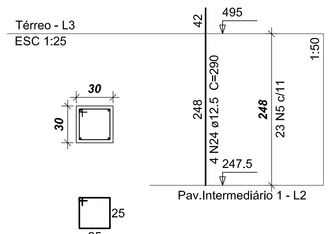

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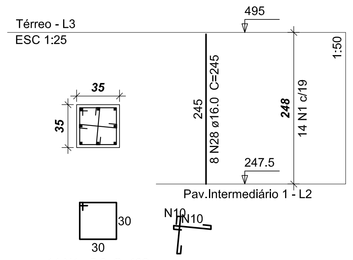


Relação do aço dos Pilares

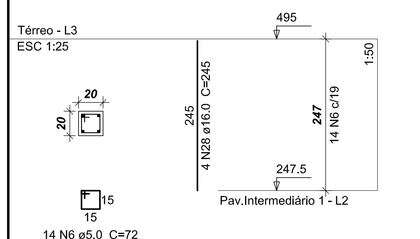
AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	354	132	46728
	2	5.0	170	45	7650
	3	5.0	313	152	47576
	4	5.0	806	49	39494
	5	5.0	462	112	51744
	6	5.0	426	72	30672
	7	5.0	102	50	5100
	8	5.0	1610	40	64400
	9	5.0	70	50	3500
	10	5.0	56	45	2520
	11	5.0	28	242	6776
	12	5.0	14	94	1316
	13	5.0	185	112	20720
	14	5.0	168	30	5040
	15	5.0	510	222	113220
	16	5.0	11	80	880
CA50	17	6.3	26	152	3952
	18	10.0	44	245	10780
	19	10.0	8	59	472
	20	10.0	24	121	2904
	21	10.0	20	281	5620
	22	10.0	16	183	2928
	23	12.5	596	245	146020
	24	12.5	312	290	90480
	25	12.5	4	83	332
	26	12.5	4	183	732
	27	12.5	4	121	484
	28	16.0	108	245	26460
	29	16.0	16	301	4816
	30	20.0	212	245	51940
	31	25.0	24	245	5880

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO (kg)
CA50	6.3	39.6	9.7
	10.0	227.1	140
	12.5	2380.5	2293.2
	16.0	312.8	493.6
	20.0	519.4	1280.9
	25.0	58.8	226.6
CA60	5.0	4473.4	689.5
PESO TOTAL			
CA50	4444		
CA60	689.5		

Vol. de concreto total (C-30) = 56.63 m³
Área de forma total = 649.83 m²

P118=P128



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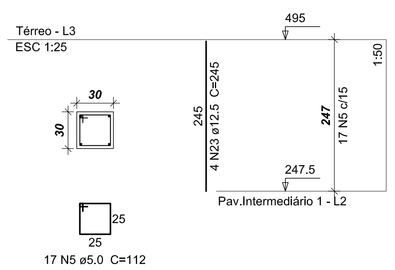
=P145=P146=P167=P168
=P169=P170=P171



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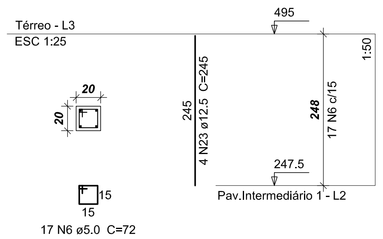

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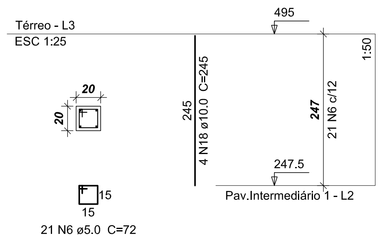

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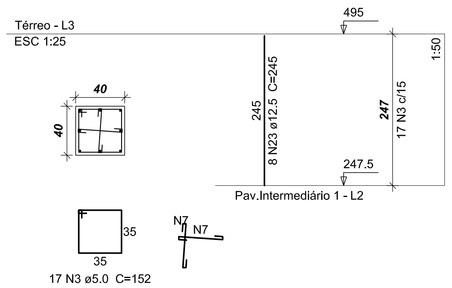

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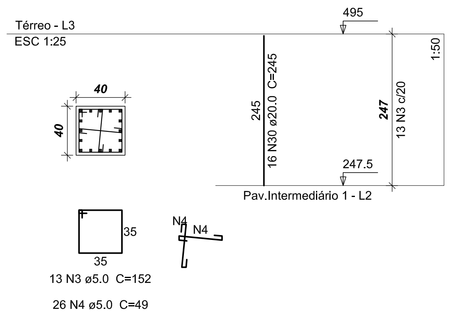

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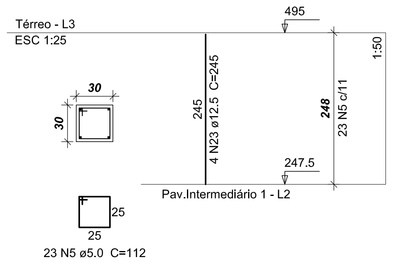

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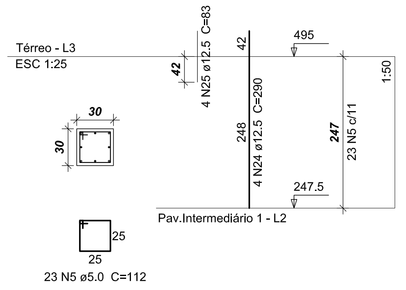

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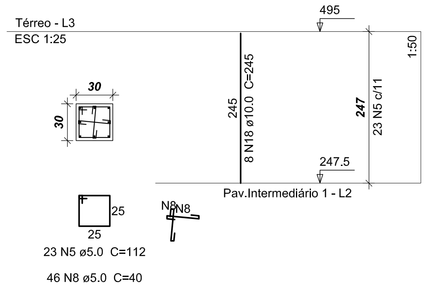

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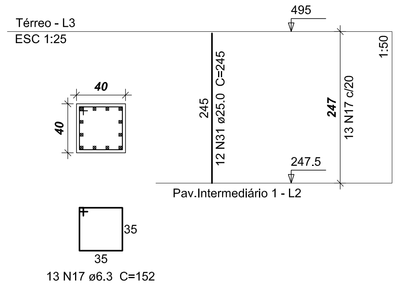

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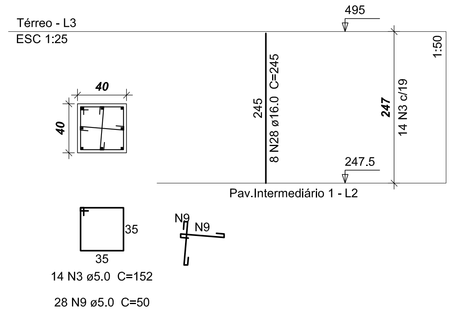

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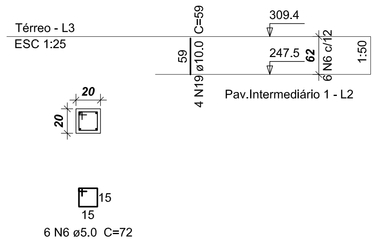

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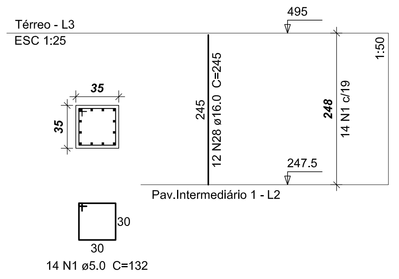

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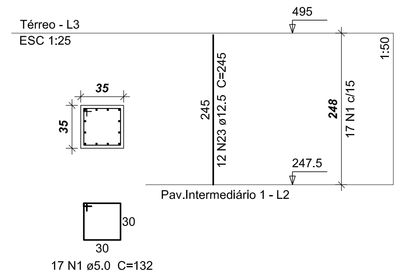

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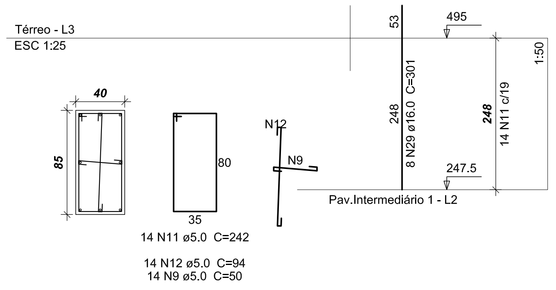

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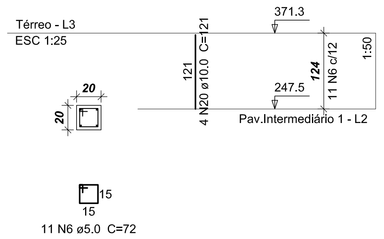

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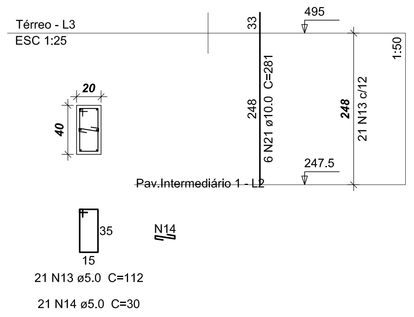

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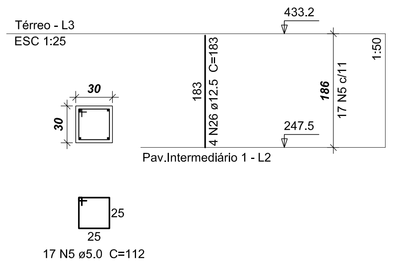

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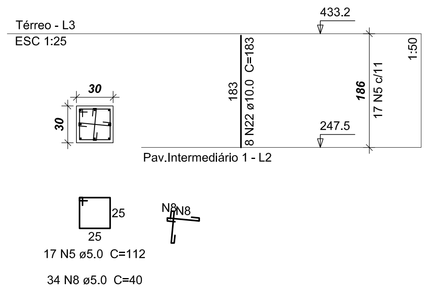

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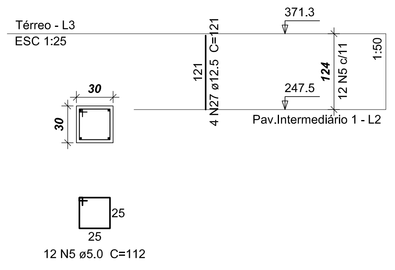

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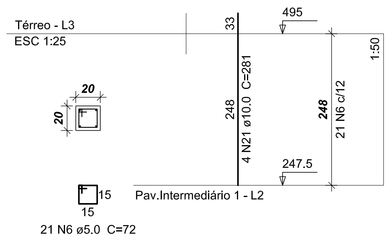

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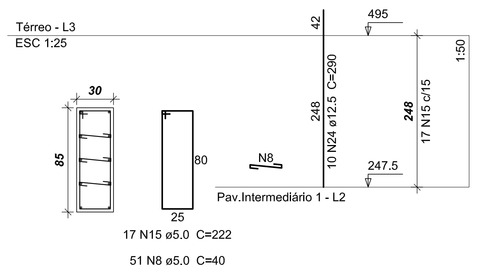

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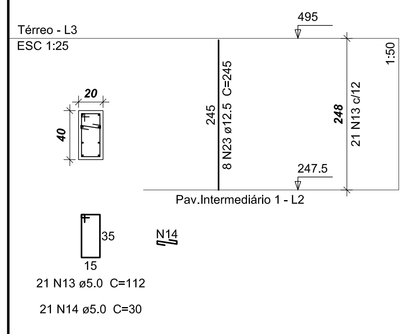

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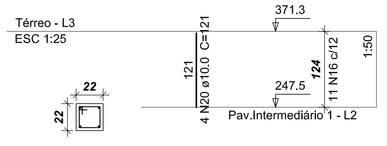

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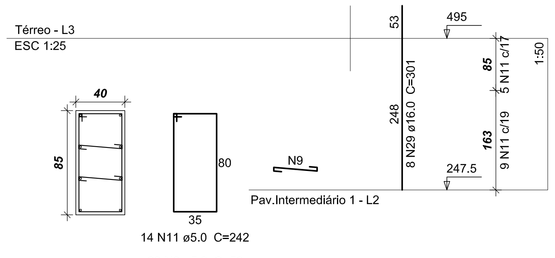
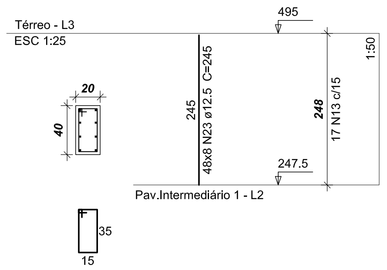


PA (x48)



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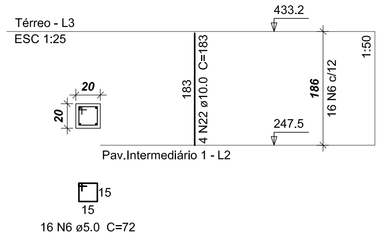
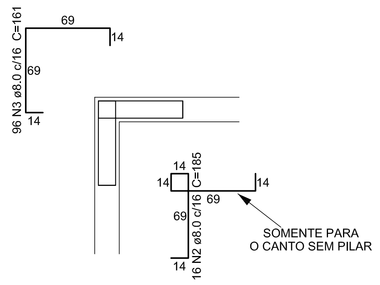


MURO DE ARRIMO

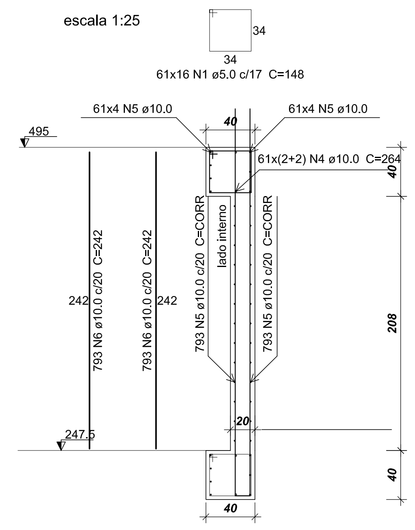
PAR x PAR

escala 1:25



PAR

escala 1:25



Relação do aço Muro de Arrimo

AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	976	148	144448
CA50	2	8.0	16	185	2960
	3	8.0	96	161	15456
	4	10.0	244	264	64416
	5	10.0	2074	CORR	559980
	6	10.0	1586	242	383812

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO (kg)
CA50	8.0	184.2	72.7
	10.0	10082.1	6216
CA60	5.0	1444.5	222.6
PESO TOTAL			
CA50	6288.6		
CA60	222.6		

Vol. de concreto total (C-30) = 96.62 m³
Área de forma total = 865.59 m²

AS BUILT PROJETOS
Rua Jovino do Rosário, 1564 – Boa Vista
CEP 82560-435 – Curitiba – Paraná

OBRA:	GALPÃO DE ENGENHARIA – TEÓFILO OTONI
PROPRIETÁRIO:	UNIVERSIDADE DOS VALES DO JEQUITINHONHA E MUCURI – UFVJM
ENDEREÇO:	AVENIDA DR. LUIS BOALI PORTO SALMAN, S/Nº – BAIRRO IPIRANGA – TEÓFILO OTONI/MG
PROJETO ESTRUTURAL	
REFERÊNCIA:	FERRAGEM DOS PILARES: NO PAVIMENTO INTERMEDIÁRIO 1 FERRAGEM MURO DE ARRIMO – PAV. TÉRREO
AUTOR DO PROJETO:	ENG. CIVIL CARLOS HENRIQUE DE S. GONÇALVES — CREA: 7.982-D/PR
PRANCHA:	EST 22 de 28
ARQUIVO:	CARLOS
DESENHO:	CARLOS
DATA:	27/09/2012
ESCALA:	INDICADA