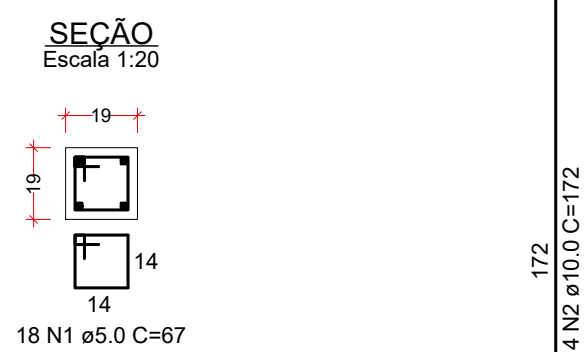


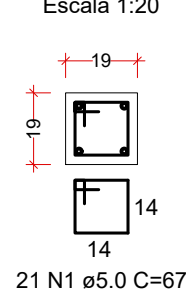
P22

COBERTURA - L3



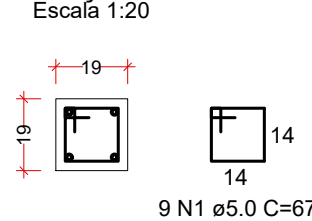
TÉRREO - L2

SEÇÃO



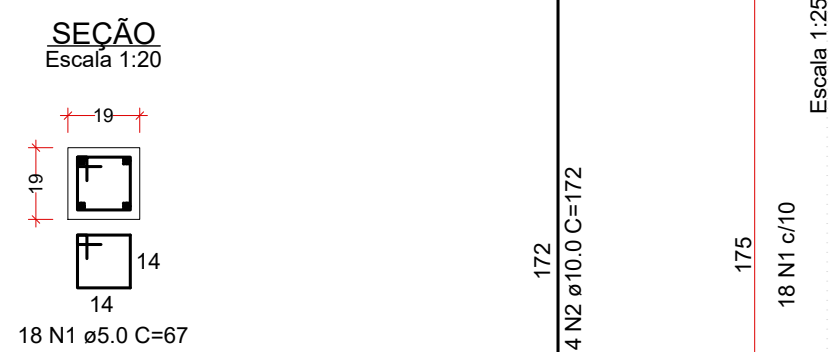
INFERIOR - L1

SEÇÃO



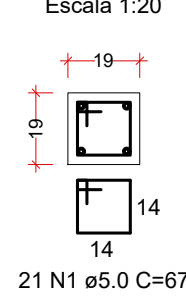
P23

COBERTURA - L3



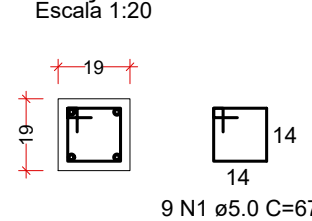
TÉRREO - L2

SEÇÃO



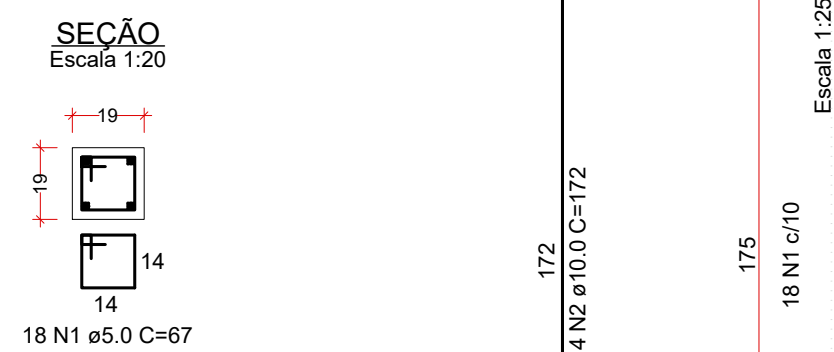
INFERIOR - L1

SEÇÃO



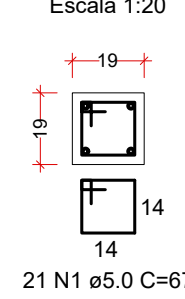
P24

COBERTURA - L3



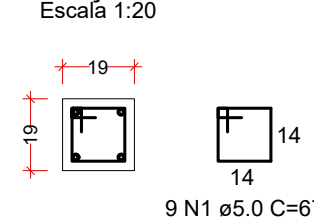
TÉRREO - L2

SEÇÃO



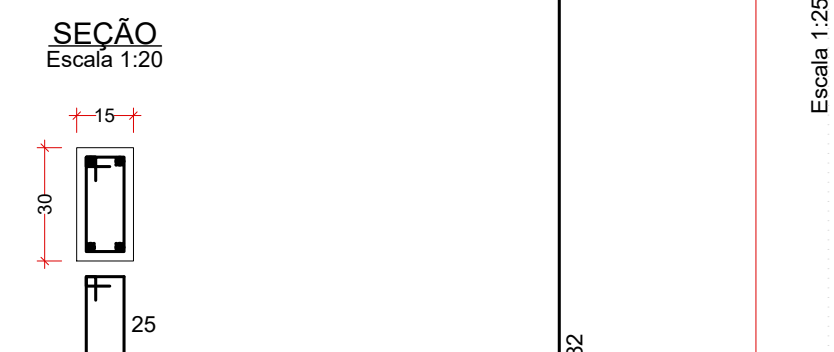
INFERIOR - L1

SEÇÃO



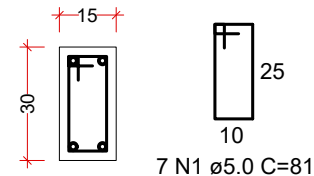
P25

COBERTURA - L3



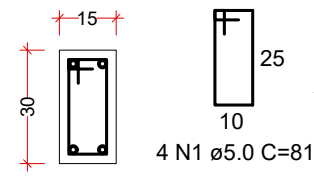
TÉRREO - L2

SEÇÃO



INFERIOR - L1

SEÇÃO



RELAÇÃO DO AÇO

ELEMENTO	AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
P22-L3	CA60	1	5.0	18	67	1206
P22-L3	CA50	2	10.0	4	172	688
P22-L2	CA60	1	5.0	21	67	1407
P22-L2	CA50	2	10.0	4	260	1040
P22-L1	CA60	1	5.0	9	67	603
P22-L1	CA50	2	10.0	4	154	616
P23-L3	CA60	1	5.0	18	67	1206
P23-L3	CA50	2	10.0	4	172	688
P23-L2	CA60	1	5.0	21	67	1407
P23-L2	CA50	2	10.0	4	260	1040
P23-L1	CA60	1	5.0	9	67	603
P23-L1	CA50	2	10.0	4	154	616
P24-L3	CA60	1	5.0	18	67	1206
P24-L3	CA50	2	10.0	4	172	688
P24-L2	CA60	1	5.0	9	67	603
P24-L2	CA50	2	10.0	4	154	616
P24-L1	CA60	1	5.0	9	67	603
P24-L1	CA50	2	10.0	4	154	616
P25-L3	CA60	1	5.0	19	81	1539
P25-L3	CA50	2	12.5	4	282	1128
P25-L2	CA60	1	5.0	7	81	567
P25-L2	CA50	2	12.5	6	150	600
P25-L1	CA60	1	5.0	4	81	324
P25-L1	CA50	2	12.5	4	113	452
P26-L3	CA60	1	5.0	19	81	1539
P26-L3	CA50	2	12.5	6	282	1692
P26-L2	CA60	1	5.0	7	81	567
P26-L2	CA50	2	12.5	6	150	900
P26-L1	CA60	1	5.0	4	81	324
P26-L1	CA50	2	12.5	6	113	678
P27-L3	CA60	1	5.0	29	81	2349
P27-L3	CA50	2	10.0	4	282	1128
P27-L2	CA60	1	5.0	10	81	810
P27-L2	CA50	2	10.0	4	150	600
P27-L1	CA60	1	5.0	5	81	405
P27-L1	CA50	2	10.0	4	114	456
P28-L3	CA60	1	5.0	29	81	2349
P28-L3	CA50	2	10.0	4	282	1128
P28-L2	CA60	1	5.0	18	81	1458
P28-L2	CA50	2	10.0	4	230	920
P28-L1	CA60	1	5.0	5	81	405
P28-L1	CA50	2	10.0	4	114	456
P29-L3	CA60	1	5.0	29	81	2349
P29-L3	CA50	2	10.0	4	282	1128
P29-L2	CA60	1	5.0	18	81	1458
P29-L2	CA50	2	10.0	4	230	920
P29-L1	CA60	1	5.0	5	81	405
P29-L1	CA50	2	10.0	4	114	456

RESUMO DO AÇO

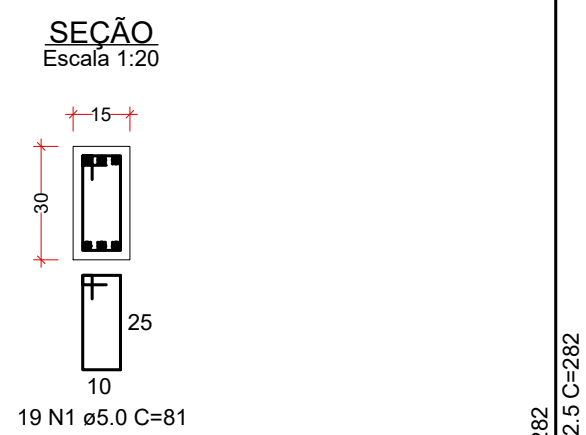
AÇO	DIAM (mm)	C.TOTAL (m)	QUANT + 0% (Barras)	PESO + 0% (kg)
CA50	10.0	142.2	12	87.7
CA60	5.0	84.5	23	62.5

PESO TOTAL (kg)
CA50 140.2
CA60 40.8

Volume de concreto (C-25) = 1.40 m³
Área de forma = 28.46 m²

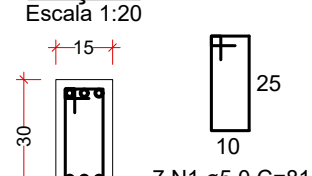
P26

COBERTURA - L3



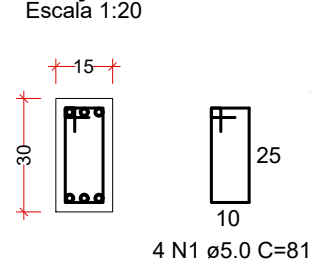
TÉRREO - L2

SEÇÃO



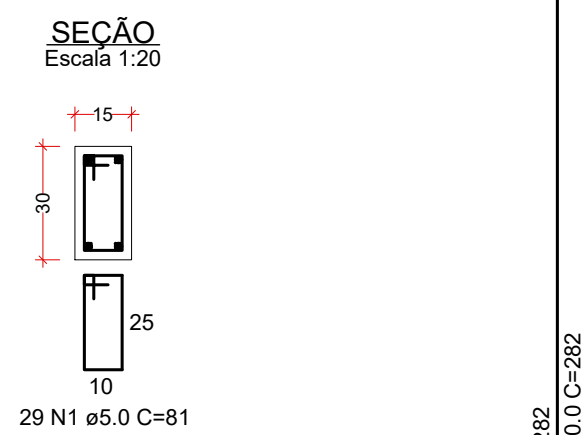
INFERIOR - L1

SEÇÃO



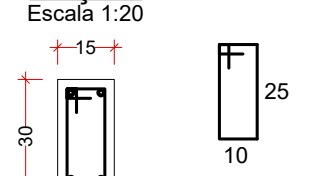
P27

COBERTURA - L3



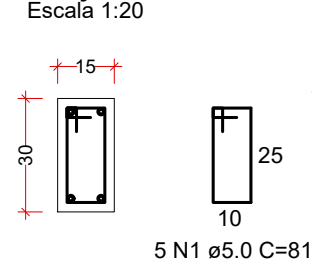
TÉRREO - L2

SEÇÃO



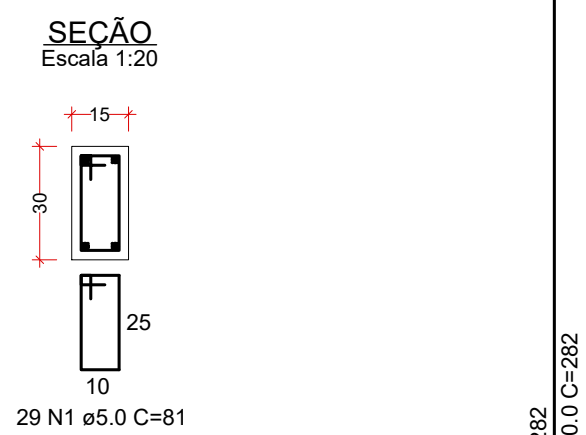
INFERIOR - L1

SEÇÃO



P28

COBERTURA - L3



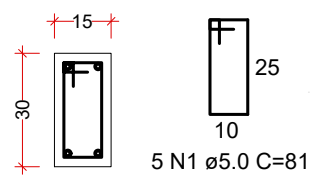
TÉRREO - L2

SEÇÃO



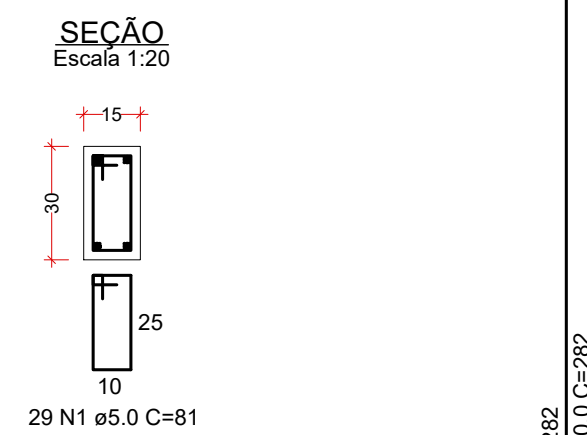
INFERIOR - L1

SEÇÃO



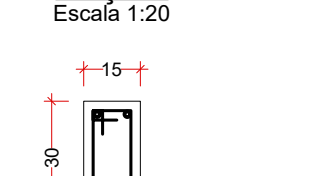
P29

COBERTURA - L3



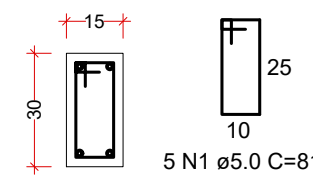
TÉRREO - L2

SEÇÃO



INFERIOR - L1

SEÇÃO

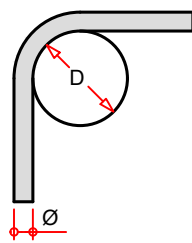


DETALHE DE DOBRAS
SEM ESCALA

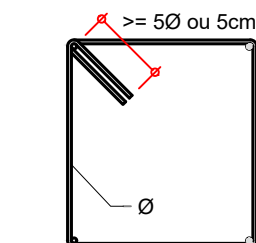
DIÂMETRO MÍNIMO DOS PINOS DE DOBRAMENTO DAS BARRAS:

ESTRIBOS	Ø (mm)	D (mm)
5,0	15,0	
6,3	18,9	
8,0	24,0	
10,0	30,0	
12,5	62,5	
16,0	80,0	
>= 20,0	8xø	

BARRAS DE TRAÇÃO	Ø (mm)	D (mm)
5,0	30,0	
6,3	31,5	
8,0	40,0	
10,0	50,0	
12,5	62,5	
16,0	80,0	
>= 20,0	8xø	

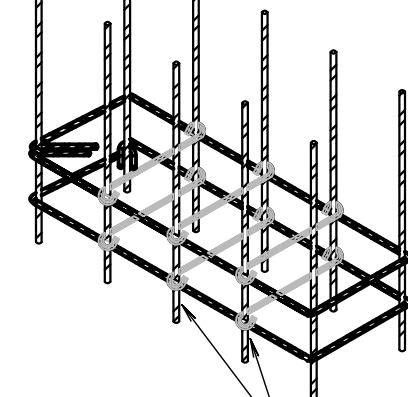


GANCHO DOS ESTRIBOS:



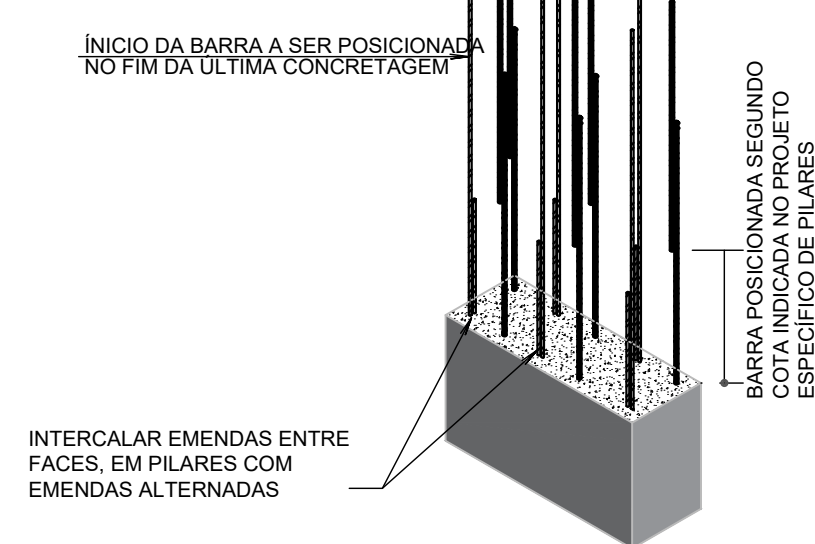
NOTA: gancho em ângulo de 45°

POSICIONAMENTO DOS
GANCHOS
SEM ESCALA



GANCHOS "ABRACAM" APENAS A ARMADURA LONGITUDINAL DO PILAR, SEM ENVOLVER O ESTRIBO.

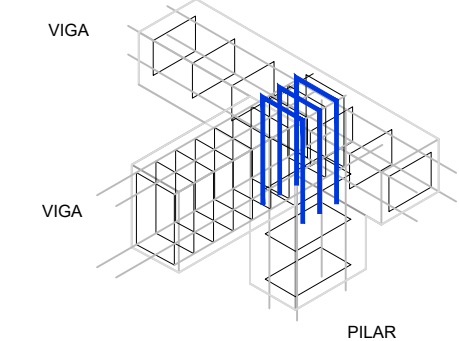
MONTAGEM DE ARMADURAS
ALTERNADAS NOS PILARES
SEM ESCALA



INÍCIO DA BARRA A SER POSICIONADA NO FIM DA ÚLTIMA CONCRETAGEM

INTERCALAR EMENDAS ENTRE FACES, EM PILARES COM EMENDAS ALTERNADAS

GRAMPOS DE ANCORAGEM
SEM ESCALA



IMPORTANTE: OS GRAMPOS VERTICAIS DEVEM AMARRAR OS FERROS PRINCIPAIS DOS PILARES COM OS FERROS HORIZONTAIS DAS VIGAS. A QUANTIDADE DE GRAMPOS DEVE SER VERIFICADA NO DETALHAMENTO DO ÚLTIMO LANCE DO PILAR.

LEGENDA DAS BARRAS DOS PILARES

- BARRA QUE NASCE
- BARRA QUE MORRE
- BARRA QUE PASSA



Prefeitura Municipal
de Pouso Alegre

PROJETO



Rua Miguel Vianna, nº 81, 2ª Andar
Bairro Morro Chic
CEP: 37500-080 - Itajubá / MG
Tel: (35) 3623-8846
www.dacengenharia.com.br

COORDENAÇÃO

ALOÍSIO CAETANO FERREIRA

RESPONSÁVEL TÉCNICO E AUTOR

ENG. CIVIL FLÁVIA BARBOSA CREA MG-187.842/D

EMPREENDIMENTO

REVITALIZAÇÃO DO PARQUE NATURAL MUNICIPAL DE POUSO ALEGRE

ENDEREÇO

AVENIDA WALDEMAR AZEVEDO JUNQUEIRA
POUSO ALEGRE - MINAS GERAIS

ASSUNTO

RESTAURANTE
PROJETO ESTRUTURAL EM CONCRETO ARMADO
DETALHAMENTO DOS PILARES

DISCIPLINA

ESTRUTURAL

FASE DO PROJETO

EXECUTIVO

FOLHA Nº

13/32

DATA INICIAL

02/05/2023

ESCALA

INDICADA

REVISÃO

ROO

ARQUIVO

DAC-PMPA-PNM-RES-PE-EST-ROO.DWG