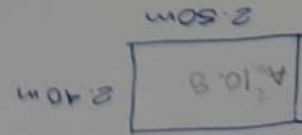
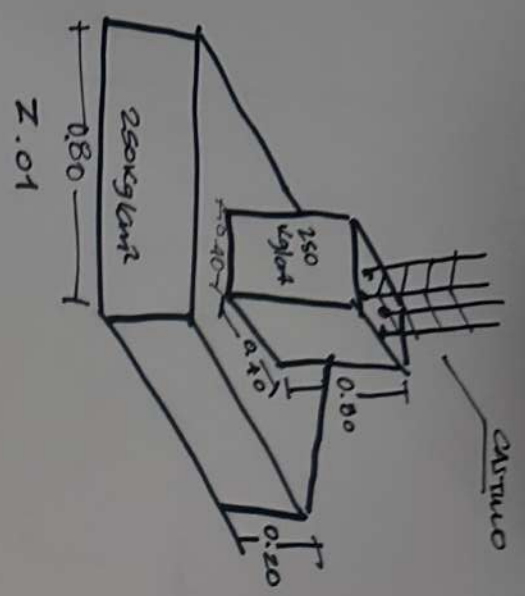


- ① 10.50 x 38.89 = 420.012 pzas = 421
- ② 10.80 x 60.76 = 656.208 pzas = 657
- ③ 10.90 x 72.92 = 789.536 pzas = 788
- ④ 10.80 x 29.17 = 315.036 pzas = 316
- ⑤ 10.50 x 54.69 = 590.652 pzas = 591
- ⑥ 10.80 x 41.26 = 182.688 pzas = 123
- ⑦ 10.80 x 17.86 = 192.888 pzas = 193
- ⑧ 10.80 x 41.36 = 122.688 pzas = 123
- ⑨ 10.80 x 14.71 = 158.868 pzas = 159

1.4 pzas 121, 657, 788
 TABLON 316, 591
 BLOCK 12, 123, 193
 BLOCK 15, 123, 159

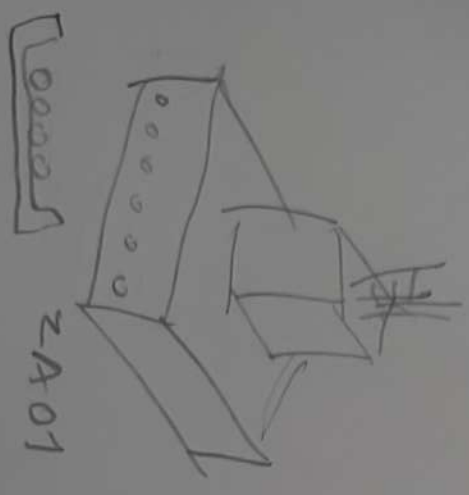




VOLUMEN ZAPATA = $0.80 \times 0.80 \times 0.20 = 0.128 \text{ m}^3 \times 0.388$
 VOLUMEN PADO = 0.128 m^3
 ≈ 0.04

ZAPATA

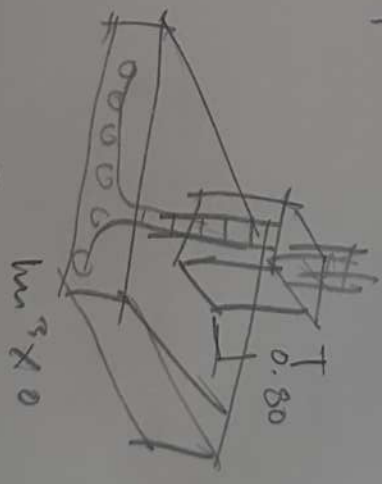
CEN	TON = $0.128 \times 0.388 = 0.04$
ARENA	$\text{m}^3 = 0.128 \times 0.531 = 0.06$
GRANA	$\text{m}^3 = 0.128 \times 0.620 = 0.080$
AGUA	$\text{m}^3 = 0.128 \times 0.202 = 0.025$



$V_{\text{CEN}} = 0.128 \text{ m}^3$
 $P_{\text{CEN}} = 12 \text{ PCS}$

VRS 3/8" @ 15 CM A.S

CONCRETO
 ZAPATA
 $0.80 \times 0.80 \times 0.20 = 0.128 \text{ m}^3$
 PADO
 $0.30 \times 0.30 \times 0.15 = 0.0135 \text{ m}^3$



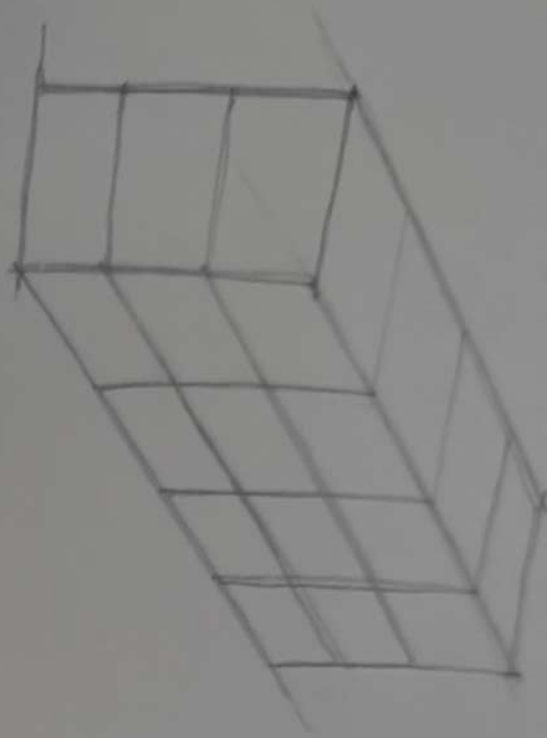
$\text{m}^3 \times 0$

08 ATRIEDU

PADO	$\text{m}^3 = 0.105 \times 0.388 = 0.0407$
ARENA	$\text{m}^3 = 0.105 \times 0.531 = 0.0557$
GRANA	$\text{m}^3 = 0.105 \times 0.620 = 0.0651$
AGUA	$\text{m}^3 = 0.105 \times 0.202 = 0.0212$

ZAPATA

CEN	TON = $0.0407 \times 0.388 = 0.0157$
ARENA	$\text{m}^3 = 0.0407 \times 0.531 = 0.0216$
GRANA	$\text{m}^3 = 0.0407 \times 0.620 = 0.0252$
AGUA	$\text{m}^3 = 0.0407 \times 0.202 = 0.0082$



ACEE0

L = 0.96

PZAS = 12

4 ZAPATA

12 x 4 = 48 PZAS

= 0.96 x 48 PZAS

$$= \frac{46.08}{12} = 3.84 = 4 \text{ zapatas}$$

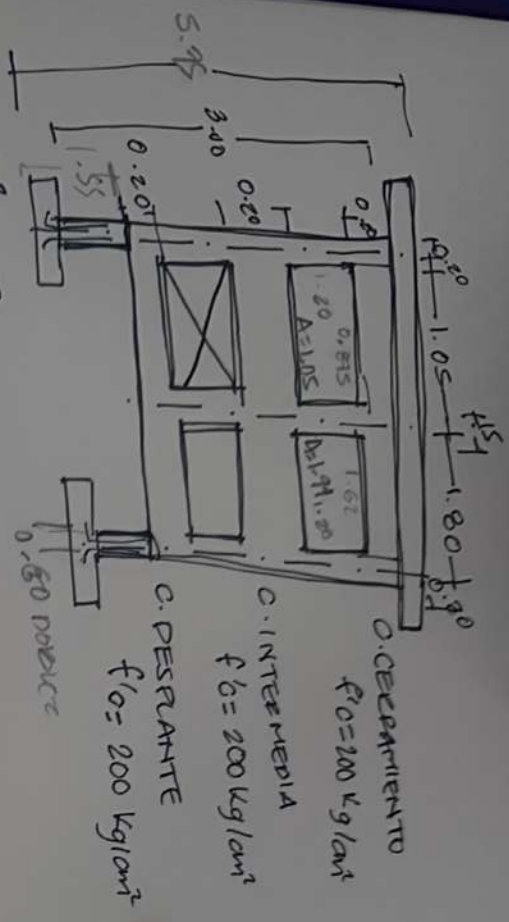
PH00

L = 130

PZAS = 130 x 4 = 5.2 x 4 = 20.8

PZAS = 5 PZAS x 4 ZAPATA = 20 PZAS





$A = 5.98 \text{ m}^2$
234 pzas



$A-D = 1.225 \times 0.20 \times 0.15 = 0.36$

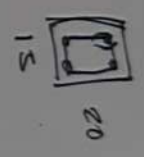
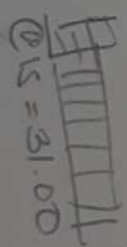
$B-D = (1.85 \times 0.70 \times 0.15) = 0.195$

$C-C = 1.120 \times 0.15 \times 0.15 = 0.255$

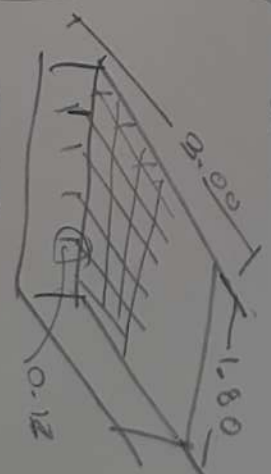
$S. 25 \times 4 \times 0.50 = 2.50 \text{ m}^2$

$15 \times 10 + 15 \times 10 = 300 \times 0.25 =$

$0.70 \times 0.25 \times 0.31 = 5.72 \text{ m}^2$



$K_2 = 15 \times 20 \text{ Est } @ 15 \text{ cm}$



$V_1 = 3 @ 1.20 \text{ m}$



$3.00 + 0.12 (1.80/2.00)$

3.12×10

$31.2 \text{ m} = 3 \text{ pzas}$



USA



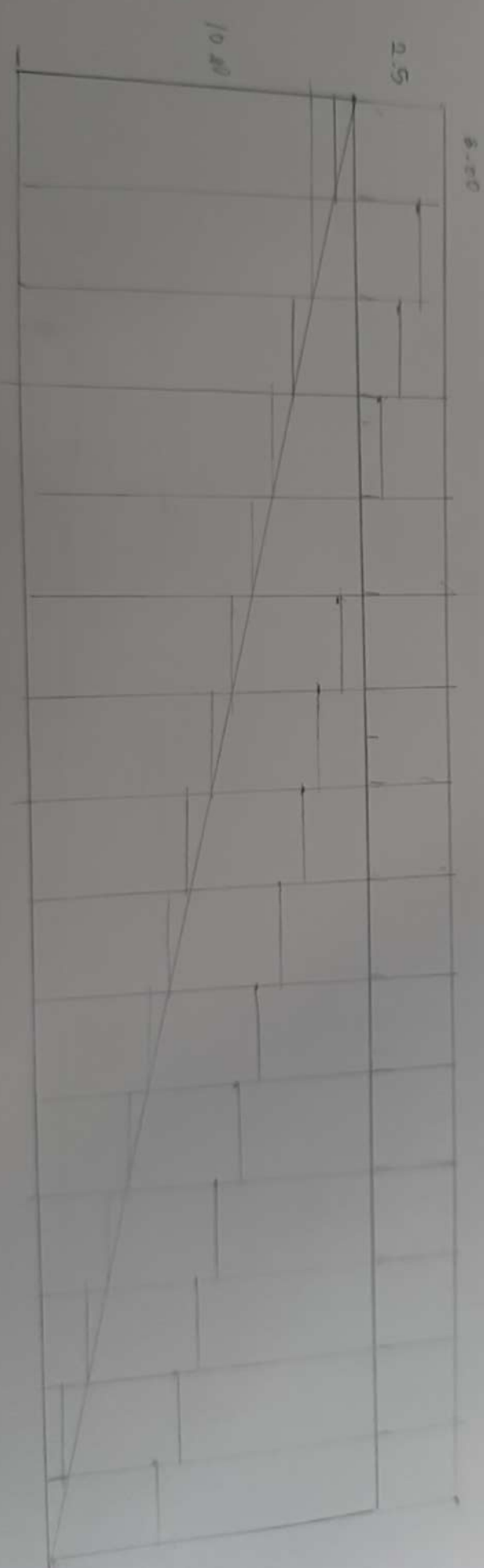
$\frac{3}{6} \text{ m}^3 = \frac{1.80 + 0.2 \times 1.80}{0.20}$

$= 10$

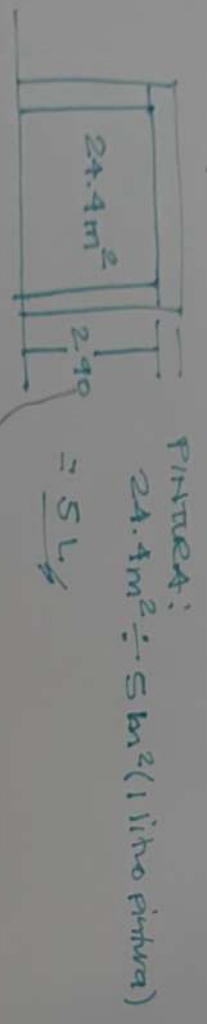
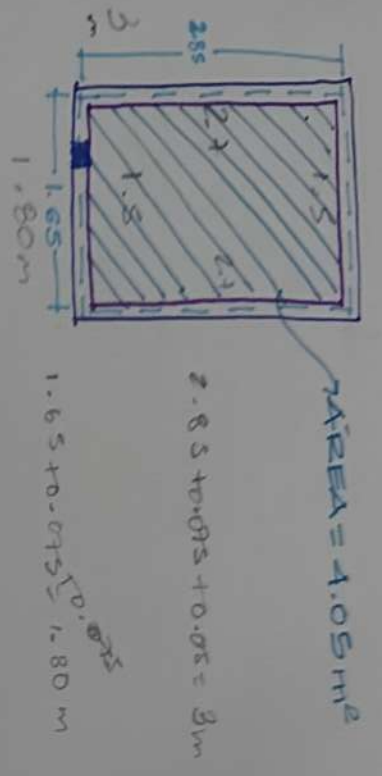
$1.97 \sqrt{10} = 19.720 \text{ m}$

$19.20 \times \dots = 20 \text{ pzas}$

BARRA PERIMETRAL EN PENDIENTE



• SE VERA AÑO MÁX = 3,5m



REPELLO:

- 1 m² indiana
- 1.5 + 1.5 + 2.7 + 2.7 = 8.4 x 2.90 = 24.36
- more exterior
- 3 + 1.80 + 3 + 1.50 = 9.6 x 3.5 = 28.8

Plafón = 4.05 m²

24.36 + 28.8 + 4.05 = 57.21 m²

57.21 x 0.03 = 1.7163 m³

G.O.S.O.R
Vapello

8 UTO DE OBRERA TO:

0.2933 x 1000 ÷ 50 = 9.866 OBRERO

WATERBOM REPELLO: 1:2:6

Cemento	0.2933	1 OBRERO 1/2
GRU H1004	0.36365	
ARENA	1.51411	
AGUA	0.4396	

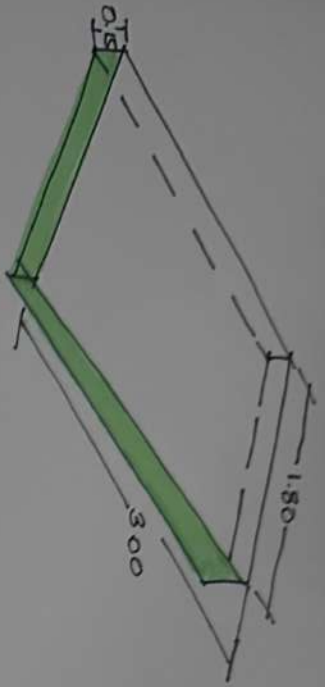
1 LATA = 19 LTS 1 LT = 1 KG

f.c = 200 kg / cm²

CEMENTO	0.248 ton
ARENA	0.265 m ³
AGUA	0.630 m ³

COSTOS Y PRESUPUESTO → LOSA PANTO

27/08/2025



• ESPECIFICACIONES

$f'c = 250 \text{ Kg/cm}^2$

$\phi \# 3 @ 20 \text{ cm}$

BASTONES 1.00 @ 50cm

PERIMETRAL

• CONCRETO

$l_0 = 0.81 \text{ m}^3$

• CEMENTO

$0.81 \times 0.268 = 0.214 \text{ m}^3 = 7 \text{ PZAS}$

• ARENA

$0.81 \times 0.353 = 0.285 \text{ m}^3 = 1 \text{ m}^3$

• GRAVA

$0.81 \times 0.620 = 0.510 \text{ m}^3 = 1 \text{ m}^3$

• ARMADO

1 PZA = 8.05

$3 \div 0.20 = 15 + 1 = 16 \text{ PZA} \times 3.05 = 48.8 \text{ m}$

$18 \div 0.20 = 9 + 1 = 10 \text{ PZA} \times 1.85 = 18.5 \text{ m}$

• BASTONES

1 PZA = 1.85

$3 \div 0.50 = 6 \text{ PZAS} + 1 = 7 \text{ PZAS} \times 1.10 = 7.70 \times 2$

$1.8 \div 0.50 = 4 \text{ PZAS} = 7.10 = 4.40 \text{ m}$

$\frac{79.1}{12} = 7 \text{ PZAS}$

• ARMADO LOSA

$18.8 \text{ m} \times 0.566 = 27.62 \text{ kg}$

$18.5 \text{ m} \times 0.566 = 10.47 \text{ kg}$

• BASTONES

$15.4 \times 0.566 = 8.71 \text{ kg}$

$8.80 \times 0.566 = 4.98 \text{ kg}$

$\frac{51.70}{8} = 8 \text{ P}$

PRECIO

MATERIAL	PZA, RESO, CANT	PRECIO	TOTAL
CEMENTO	7 PZAS	\$250.00	\$1,750.00
ARENA	1 m ³	\$333.00	\$333.00
GRAVA	1 m ³	\$333.00	\$333.00
ARMADO $\phi \# 3$	8 PZAS	\$119.00	\$952.00
ALAMBIRTO	2.71 kg	\$75.00	\$203.00
	TOTAL		\$4,025.00