

**Nombre:**  
**Jose Gabriel Mérida Nájera**

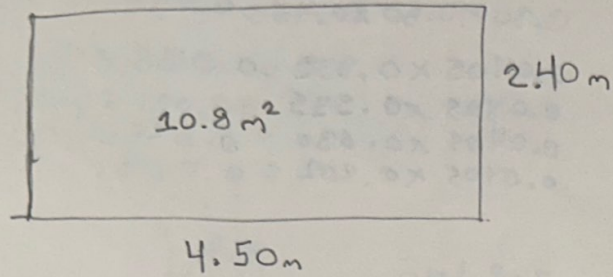
**Docente:**  
**Juan Albares**

**MATERIA:**  
**costos**

**CUATRIMESTRE:**  
**5**

**FECHA:**  
**14/03/2024**

①



7x14x28  
Ladrillo

$$38.89 \times 10.8 = 421$$

$$60.76 \times 10.8 = 657$$

$$72.92 \times 10.8 = 788$$

10x14x28  
Tabicon

$$29.17 \times 10.8 = 316$$

$$54.69 \times 10.8 = 591$$

12x20x40  
Block

$$11.36 \times 10.8 = 123$$

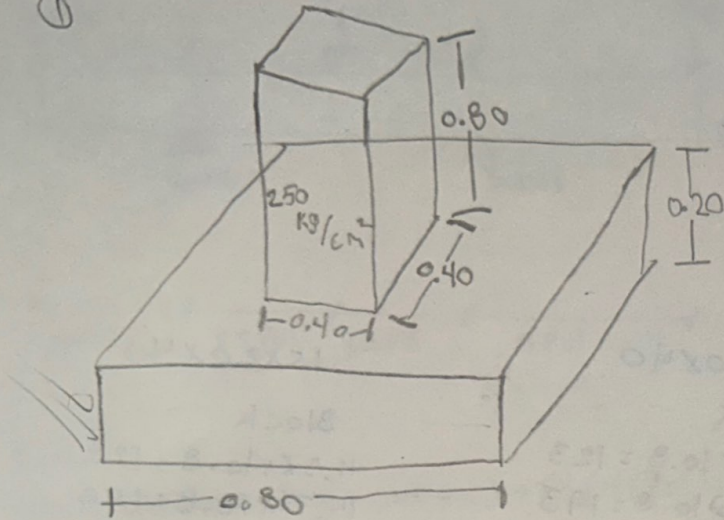
$$17.86 \times 10.8 = 193$$

15x20x40  
Block

$$11.36 \times 10.8 = 123$$

$$14.71 \times 10.8 = 159$$

①



Dado

$$0.30 \times 0.30 \times 0.45 = 0.0405$$

$$0.0405 \times 0.338 = 0.0136 \times 4 =$$

$$0.0405 \times 0.535 = 0.0216 \times 4 =$$

$$0.0405 \times 0.630 = 0.0255 \times 4 =$$

$$0.0405 \times 0.202 = 0.0081 \times 4 =$$

Zapata

$$0.096 \times 0.338 = 0.0324 \times 4 =$$

$$0.096 \times 0.535 = 0.0513 \times 4 =$$

$$0.096 \times 0.630 = 0.0604 \times 4 =$$

$$0.096 \times 0.202 = 0.0193 \times 4 =$$

zapata

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

Cemento

$$0.80 \times 0.80 \times 0.20 = 0.128$$

$$0.128 \times 0.338 = 0.0433$$

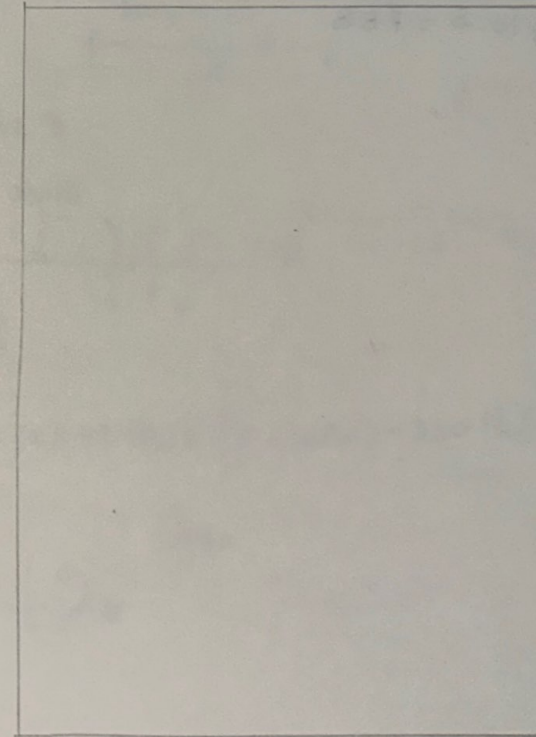
$$0.128 \times 0.535 = 0.0685$$

$$0.128 \times 0.630 = 0.0806$$

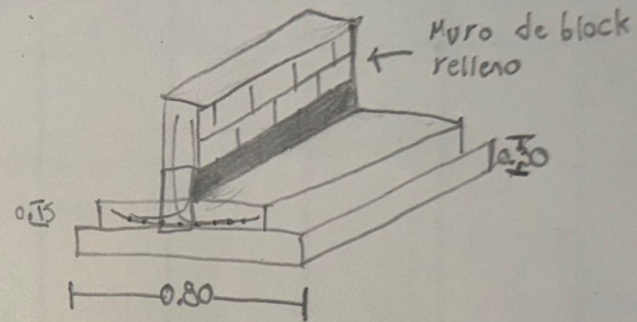
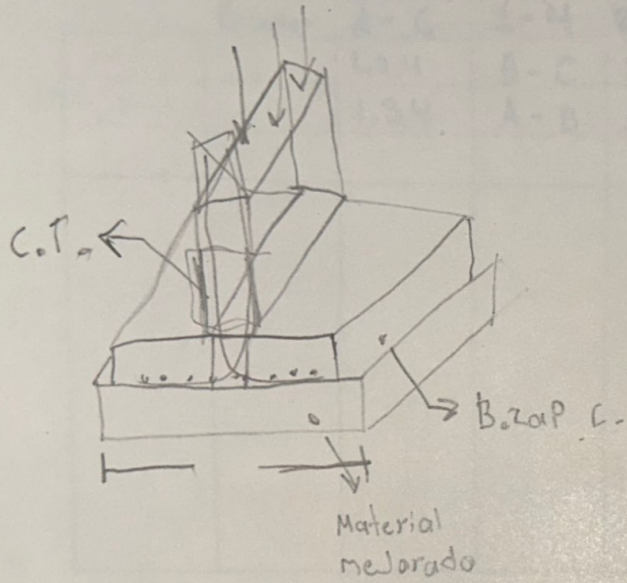
$$0.128 \times 0.202 = 0.0259$$

Dado

$$0.40 \times 0.40 \times 0.80 = 0.128$$

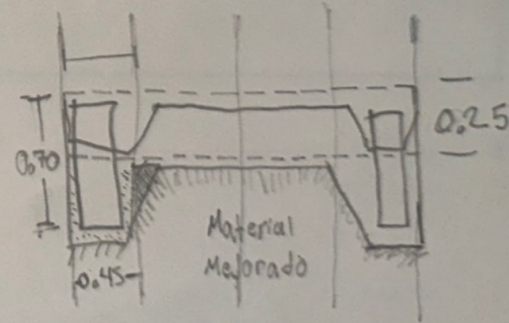
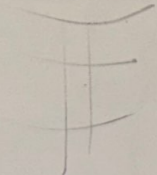


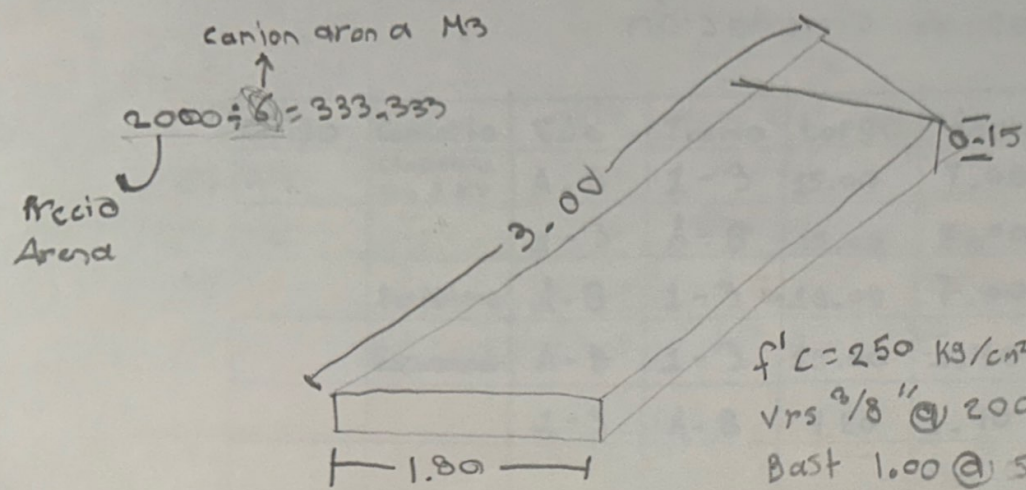
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Criterio de diseño de  
zapata corrida, barda  
Perimetral

.8





$f'c = 250 \text{ kg/cm}^2$   
 Vrs  $\frac{3}{8}$ " @ 20cm  
 Bast 1.00 @ 50cm  
 Perimetral  $\frac{3}{8}$

$$1.80 \div 0.20 = 9 + 1$$

$$3.00 + 0.12 (1.80 \div 0.20) =$$

$$3.12 \times 10 = 31.2$$

$$= 31.2$$

$$31.2 \times 0.56 = 47.472 \text{ kg}$$

$$1.80 + 0.12 (3 \div 0.20) =$$

$$1.92 \times 16 = 30.72$$

$$= 30.72$$

$$30.72 \times 0.56 = 47.203 \text{ kg}$$

Ared / concreto

$$1.80 \times 3 = 5.4 \times 0.15 = 0.81 \text{ m}^3$$

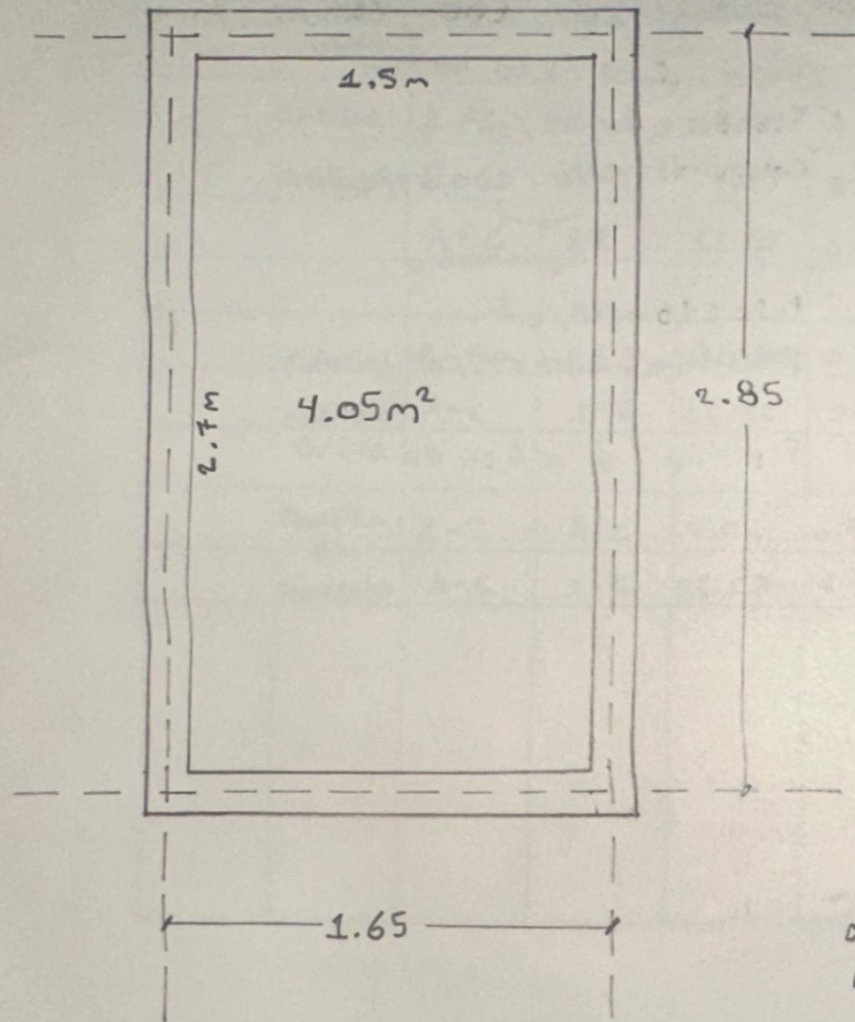
$$0.81 \times 0.388 = 0.31428 \times 1000 = 314.28$$

$$314.28 \div 50 = 6.2856 = 7$$

Arend =

$$0.81 \times 0.535 = 0.43335 \times 333.333 =$$

$$144.$$



Calcular repello en muro

0.03

$$A_1 = 8.4 \times 2.90 = 24.36$$

$$A_2 = 9.6 \times 3 = 28.8$$

$$\text{Plafon} = 2.7 \times 1.5 = 4.05$$

$$\underline{\hspace{10em}} 57.21\text{m}^2$$

$$57.21 \times 0.03 = 1.71\text{m}^3$$

Calcular pintura

$$1 \text{ litro} = 5\text{m}^2 = 4\text{m}^2 \text{ Variación}$$

$$A = 8.4 \times 2.90 = 24.36$$

$$\begin{array}{l} \nearrow \text{m}^2 \\ 5 \times 5 = 25 \\ \searrow \text{litros} \end{array}$$

$$\begin{array}{l} \nearrow \text{m}^2 \\ 7 \times 4 = 28 \\ \searrow \text{litros} \end{array}$$

Calcular firme concreto

$$2.7\text{m} \times 1.50\text{m} = 4.05\text{m}^2$$

Repello

$$\text{Cemento } 0.355 \times 1.71\text{m}^3 = 0.60705$$

$$\text{Arena } 1.243 \times 1.71\text{m}^3 = 2.12553$$

$$\text{Agua } 0.243 \times 1.71\text{m}^3 = 0.41553$$

# Concreto premezclado

- 100, 150, 180, 200, 250, 300 → concreto especial

Aditivos. → Acelerantes.  
• Acelera el proceso de secado.

Retardante.  
• Retarda

Kg/tiempo

Km/tiempo

Cimentación: 250 kg/cm<sup>2</sup>

Dado: 250 kg/cm<sup>2</sup>

Cadena: 150 kg/cm<sup>2</sup>

Castillos: 150 / 200 kg/cm<sup>2</sup>

Losa: 250 / 200 kg/cm<sup>2</sup>

Trabe: 200 kg/cm<sup>2</sup>

Columnas: 250 / 200 kg/cm<sup>2</sup>

Resistencia

Piso: 150 kg/cm<sup>2</sup>

Plantilla: 100 kg/cm<sup>2</sup>

Plantilla: 6 a 8 cm de ancho