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Materia:
Taller de construcción

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Arquitectura, quinto cuatrimestre
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EXAMEN

~~X~~ EXCAVACIÓN

$$(1)(6.85)(115) = \underline{7.6475 \text{ m}^3}$$

ABUNTAMIENTO - 30%

$$(7.6475 \text{ m}^3)(1.3) \\ = \underline{9.94175 \text{ m}^3}$$

~~X~~ CONCRETO F/100 Kg/m²

$$\begin{array}{l} \text{ANCHURA} = 1 \\ \text{LONG} = 6.85 \\ \text{ALT} = 0.05 \end{array} \quad \begin{array}{l} (1)(6.85)(0.05) \\ = 0.3425 \\ \text{DESPERDICIO } 10\% \\ = (0.3425)(1.1) \\ = \underline{0.37675 \text{ m}^3} \end{array}$$

~~X~~ CONCRETO F/200 Kg/m²

BASE

$$\begin{array}{l} \text{ANCHURA} = 0.80 \\ \text{LONG} = 6.65 \\ \text{ALT} = 0.15 \end{array} \quad \begin{array}{l} (0.80)(6.65)(0.15) \\ = \underline{0.798 \text{ m}^3} \end{array}$$

CONTRATRABE

$$\begin{array}{l} \text{ANCHURA} = 0.15 \\ \text{LONG} = 6 \\ \text{ALT} = 0.35 \end{array} \quad \begin{array}{l} (0.15)(6)(0.35) \\ = \underline{0.315 \text{ m}^3} \end{array}$$

DESPERDICIO 5%

$$(1.113 \text{ m}^3)(1.05) = \underline{1.16865 \text{ m}^3}$$

* VARILLA CORRUGADA # 3 TRASVERSALES

$$\text{DOBLES} = 3/8 (0.264) = 0.009525 \times 12 = 11.45$$

$$\text{DOBLES} = \underline{\underline{12}}$$

$$\begin{array}{c} 0.12 \text{ | } \text{-----} \text{ | } 0.12 \\ \text{ | } 0.80 \text{ | } \\ \text{LONG} = 0.24 + 0.80 = \underline{\underline{1.04 \text{ m}}} \end{array}$$

$$\begin{array}{l} \text{NUM DE PIEZAS} \\ 6.65 / 0.15 + 1 \\ = \underline{\underline{45.333}} \end{array}$$

* LONGITUDINALES

$$\begin{array}{c} 0.12 \text{ | } \text{-----} \text{ | } 0.12 \\ \text{ | } 6.65 \text{ | } \\ \text{LONG} = 0.24 + 6.65 = \underline{\underline{6.89 \text{ m}}} \end{array}$$

METROS DE VARILLA

$$6.89 \text{ m} (4) = \underline{\underline{27.56 \text{ m}}}$$

* CONTRATEBES

$$\begin{array}{c} 0.12 \text{ | } \text{-----} \text{ | } 0.12 \\ \text{ | } 6 \text{ | } \\ \text{LONG} = 6 + 0.24 = 6.24 \text{ m} \\ 2 \text{ PZAS} (6.24) = \underline{\underline{12.48 \text{ m}}} \end{array}$$

$$\begin{array}{l} \text{SUMATORIA TOTAL} \\ = 85.3733 \text{ m} \end{array}$$

$$\begin{array}{l} \text{DESPERDICIO } 3\% \\ (85.3733) (1.03) \end{array}$$

$$= \frac{87.934499}{12}$$

$$= \underline{\underline{7.483522223}}$$

$$\text{PZAS} = \underline{\underline{8}}$$

$$\text{Kg} = \underline{\underline{49.77092643 \text{ Kg}}}$$

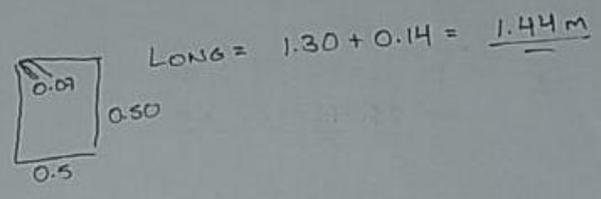
~~X~~ VARILLA # 4
 DOBLES = (12) (1.270) = 15.24
 = 15

0.15 |-----| 0.15
 |-----6-----|
 LONGITUD = 6 + 0.30 = 6.30 m
 (2 Pzas) (6.30 m) = 12.6 m

DESPERDICIO 5%
 (12.6 m) (1.05)
 = 13.23 m

Pzas = $\frac{13.23}{12} = 1.1025 = \underline{2 \text{ Pzas}}$
 PESO = (13.23) (0.997 kg) = 13.19031 Kg

~~X~~ VARILLA # 2
 DOBLES = 0.07



NUM Pzas
 6 / 0.15 + 1 = 41
 METROS
 (41 Pzas) (1.44 m) = 59.04 m

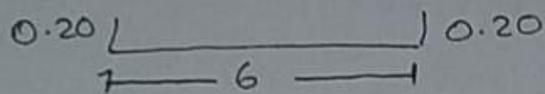
DESPERDICIO 3%
 (59.04 m) (1.03)
 = 60.8112 m

TOTAL kg = (60.8112) (0.25)
 = 15.2028 kg

~~X~~ VARILLAS # 5

$$\text{DOBLES} = (1.587)(12) = 19.044 \\ = \underline{20 \#}$$

LONGITUD



$$\text{LONG} = 6 \text{ m} + 0.40 \text{ m} = 6.40 \text{ m}$$

METROS :

$$(6.40 \text{ m})(2 \text{ pzas}) = 12.80 \text{ m}$$

DESPERDICIO DEL 7%

$$(12.80 \text{ m})(1.07) \\ = \frac{13.696 \text{ m}}{12}$$

$$\text{Pzas} = \underline{2 \text{ pzas}}$$

$$\text{Kg} = (13.696 \text{ m})(1.566) \\ = \underline{\underline{21.447936 \text{ Kg}}}$$