Arquitectura

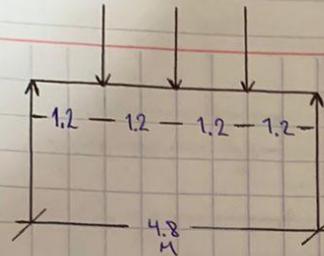Nombre del Alumno: Aguilar Villar Luis Enrique

Nombre de la Materia: ANALISIS DE ESTRUCTURAS

Nombre del profesor: Pedro Alberto García López

Nombre de la Licenciatura: Arquitectura

Cuatrimestre: 5to

$$M = \frac{F \cdot L}{2} \qquad R_A = R_B = \frac{3F}{2}$$

$$M = \frac{1.42\,(4.8)}{2} = 3.41$$

$$M_u = 3.41 \cdot 11 = 409.200$$

$$q\sqrt{\frac{-409.200}{0.9 \times 20 \times 36^2 \times 136}} \quad (c_2)+1 = 0.861$$

$$\frac{(0.861+1)\,(136\,kg/cm^2)}{4200} = 0.0045$$

$$A_S = 0.0045\,(20)\,(36) = 3.24$$
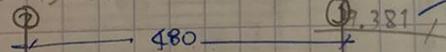
$$\text{Diseño} = \frac{3.24}{2} = 1.62$$

$$A_S = 0.000235\,(20)\,(36) = 1.692 = 0.846 \rightarrow 2\#4$$
$$\text{min.}$$

$$\frac{4.86}{4} = 1.2 =)$$

$$3\#4 = 3.81\,cm^2$$

$$2\#5 = 1.99 \times 2 = 1.92$$

$$\frac{3.93}{2036} = 0.00065$$

$$\frac{2}{1.2} = \frac{1.2}{0.15} = 8 \quad Max = 0.2$$

$$C_{s\,t} = 26\,P2\,(1.04) = 27$$

$$+10 = \frac{29.2}{11} = 2.47 = 1\,P2a$$

$$UCR = R_A = R_B = \frac{3\,(1.42)}{2} = 2.93$$

$$U_U = 2.13\,(1.4) = 2.982 \rightarrow UR2 = 1.3\,(0.8) \cdot 20 \cdot 35 \sqrt{170^2}$$

2.381

480

$$S_{ext} =$$
$$S_{cahl} =$$

3#4   2#4

4u   4u

2#4

8#4