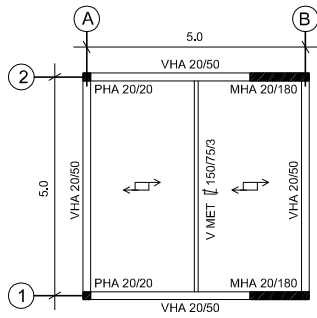


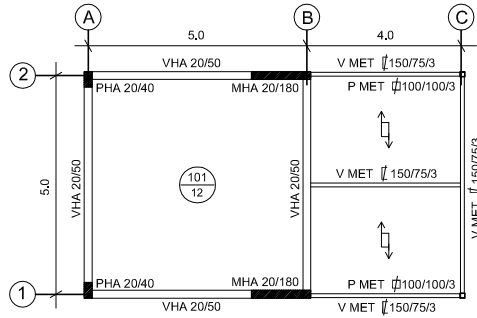
GUÍA N°4 - RESULTADOS

Profesores: Verónica Veas B.

Ayudante: Preeti Bellani



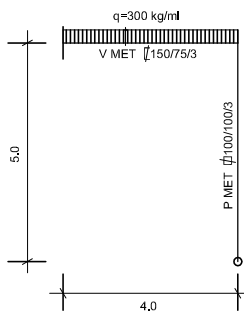
PLANTA ESTRUCTURAS 2º PISO



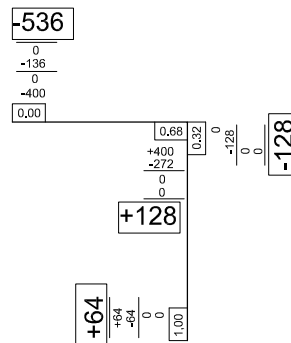
PLANTA ESTRUCTURAS 1º PISO

DATOS	
Envigado + SU = 240 kg/m ²	
Losa HA + SU = 500 kg/m ²	
$k = 4EI/L$	$f = M / W$
$I = bh^3/12$	
ϕ 100/100/3 $I = 177 \text{ cm}^4$	
\square 150/75/3 $I = 311 \text{ cm}^4$	

1)



DCL EJE 1 (entre ejes B y C)



DESARROLLO MÉTODO DE CROSS EN EJE 1 (entre ejes B y C)

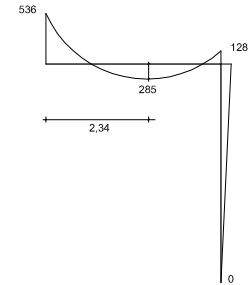
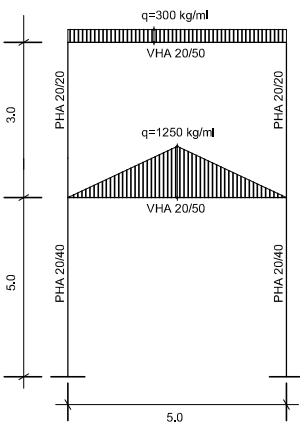
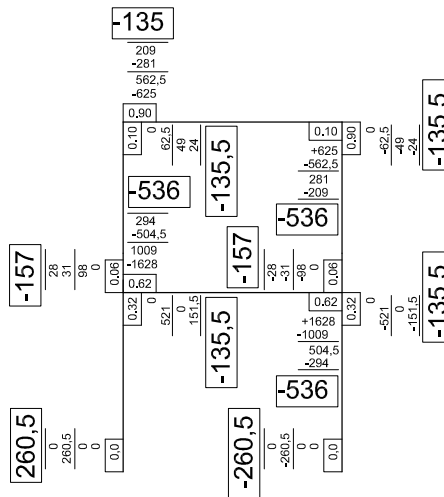


GRAFICO DE CORTE EJE 1 (entre ejes B y C)

2)



DCL EJE A



DESARROLLO MÉTODO DE CROSS EN EJE A

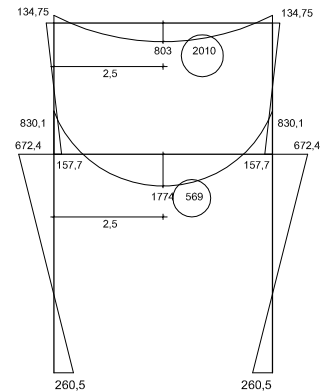


GRAFICO DE CORTE EJE A

3)

VERIFICACION POR RESISTENCIA MARCO EJE 1

$$W = \frac{I}{V} = \frac{311}{7,5} = 41.5 \text{ cm}^3$$

$$fd = \frac{M}{W} = \frac{53600}{41,5} \text{ kgcm} = 1291,5 \rightarrow \text{Si resiste}$$