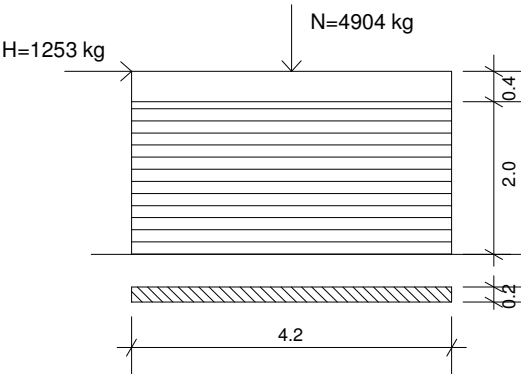


RESULTADOS GUÍA N°8

EJE B



MURO EN ALBAÑILERÍA SIMPLE
Santiago, Zona 2, coef. sísm. 0,27

$$\tau = \frac{N}{A} \pm \frac{M}{W}$$

$$\tau = \frac{4904}{20 \cdot 420} \pm \frac{300720}{\frac{20 \cdot 420^2}{6}}$$

$$\tau = 0,58 \pm 0,51$$

$$V = \frac{H}{0,66 A}$$

$$V = \frac{1253}{0,66 \cdot (20 \cdot 420)}$$

$$V = 0,23 < 2 \text{ kg/cm}^2$$

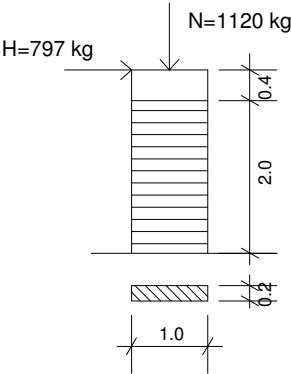
$$0,58 \quad \boxed{} \quad 0,58$$

$$-0,51 \quad \boxed{} \quad 0,51$$

$$0,07 \quad \boxed{} \quad 1,09$$

No aparecen tracciones.
Compresión no supera 20 kg/cm²
Corte no supera 2 kg/cm²

EJE 1



MURO EN ALBAÑILERÍA SIMPLE
Santiago, Zona 2, coef. sísm. 0,27

$$\tau = \frac{N}{A} \pm \frac{M}{W}$$

$$\tau = \frac{1120}{20 \cdot 100} \pm \frac{191280}{\frac{20 \cdot 100^2}{6}}$$

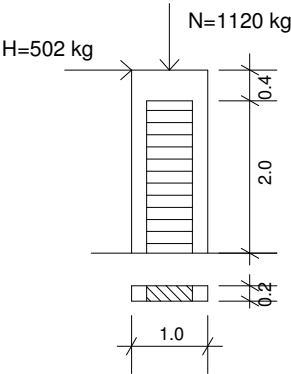
$$\tau = 0,56 \pm 5,74$$

$$0,56 \quad \boxed{} \quad 0,56$$

$$-5,74 \quad \boxed{} \quad 5,74$$

$$-5,18 \quad \boxed{} \quad 6,3$$

Colapsa por aparición de tracciones.
Compresión no supera 20 kg/cm²



MURO EN ALBAÑILERÍA CONFINADA
Santiago, Zona 2, coef. sísm. 0,17

$$\tau = \frac{N}{A} \pm \frac{M}{W}$$

$$\tau = \frac{1120}{20 \cdot 100} \pm \frac{120480}{\frac{246667}{6}}$$

$$\tau = 0,56 \pm 0,49$$

$$V = \frac{H}{0,85 A}$$

$$V = \frac{502}{0,85 \cdot (20 \cdot 100)}$$

$$V = 0,3 < 2 \text{ kg/cm}^2$$

$$0,56 \quad \boxed{} \quad 0,56$$

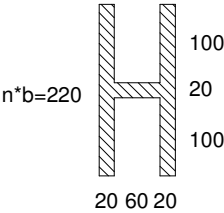
$$-0,49 \quad \boxed{} \quad 0,49$$

$$0,07 \quad \boxed{} \quad 1,05$$

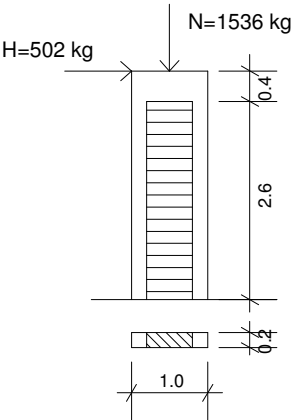
No aparecen tracciones.
Compresión no supera 20 kg/cm²
Corte no supera 2 kg/cm .

HOMOLOGACIÓN

$$n = 220.000/20.000 = 11$$



EJE 3



MURO EN ALBAÑILERÍA CONFINADA
Santiago, Zona 2, coef. sísm. 0,17

$$\tau = \frac{N}{A} \pm \frac{M}{W}$$

$$\tau = \frac{1536}{20 \cdot 100} \pm \frac{150600}{\frac{246667}{6}}$$

$$\tau = 0,77 \pm 0,61$$

$$V = \frac{H}{0,85 A}$$

$$V = \frac{502}{0,85 \cdot (20 \cdot 100)}$$

$$V = 0,3 < 2 \text{ kg/cm}^2$$

$$0,77 \quad \boxed{} \quad 0,77$$

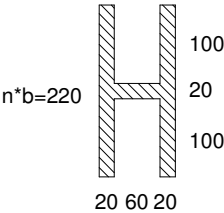
$$-0,61 \quad \boxed{} \quad 0,61$$

$$0,16 \quad \boxed{} \quad 1,38$$

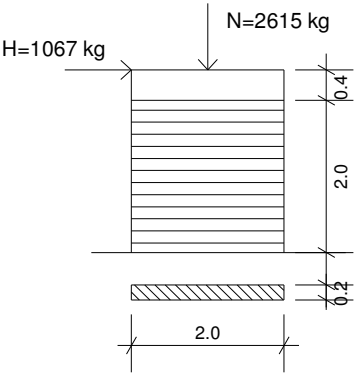
No aparecen tracciones.
Compresión no supera 20 kg/cm²
Corte no supera 2 kg/cm .

HOMOLOGACIÓN

$$n = 220.000/20.000 = 11$$

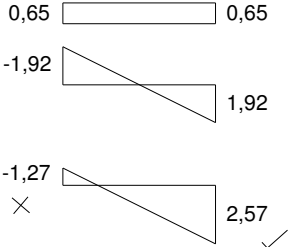


EJE 2

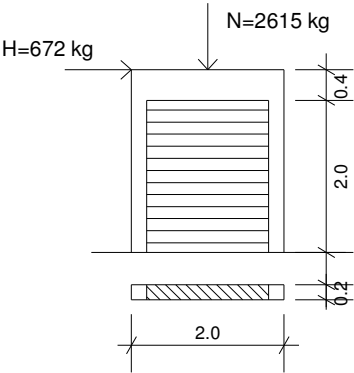


MURO EN ALBAÑILERÍA SIMPLE
Santiago, Zona 2, coef. sísm. 0,27

$$\tau = \frac{N}{A} \pm \frac{M}{W}$$
$$\tau = \frac{2615}{20 \cdot 200} \pm \frac{256080}{\frac{20 \cdot 200^2}{6}}$$
$$\tau = 0,65 \pm 1,92$$

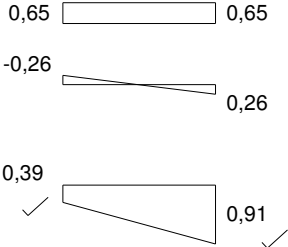


Colapsa por aparición de tracciones.
Compresión no supera 20 kg/cm².



MURO EN ALBAÑILERÍA CONFINADA
Santiago, Zona 2, coef. sísm. 0,17

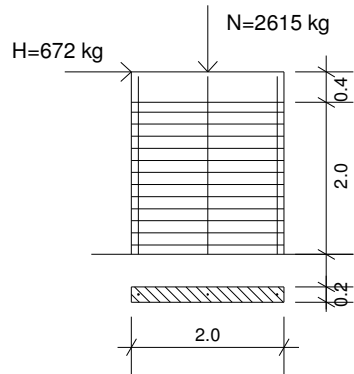
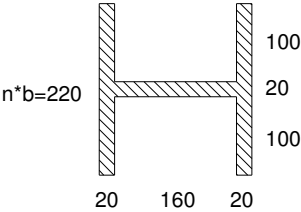
$$\tau = \frac{N}{A} \pm \frac{M}{W}$$
$$\tau = \frac{2615}{20 \cdot 200} \pm \frac{161280}{613333}$$
$$\tau = 0,65 \pm 0,26$$



No aparecen tracciones.
Compresión no supera 20 kg/cm².
Corte no supera 2 kg/cm .

HOMOLOGACIÓN

$$n = 220.000/20.000 = 11$$



MURO EN ALBAÑILERÍA ARMADA
Santiago, Zona 2, coef. sísm. 0,17

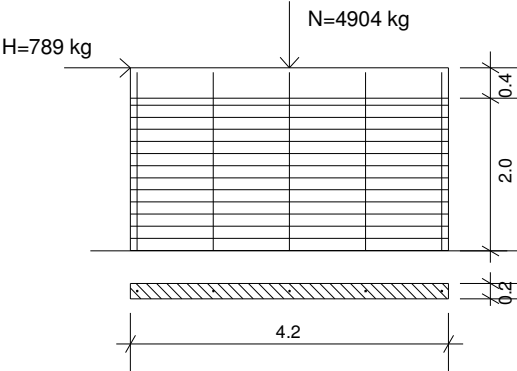
$$As = \frac{M - N (h/2 - x/3)}{fs \cdot z}$$
$$As = \frac{161280 - 2615 (100 - 26,66)}{1400 \cdot 170}$$
$$As = 0,42 \text{ cm}^2$$

$$fm = \frac{2 (M + N (h/2 - e))}{b \cdot x \cdot z}$$
$$fm = \frac{2 (161280 + 2615 (100 - 7))}{20 \cdot 80 \cdot 170}$$
$$fm = 2,97 \text{ kg/cm}^2$$

$$V = \frac{H}{b \cdot d}$$
$$V = \frac{672}{3860}$$
$$V = 0,17 < 2,5 \text{ kg/cm}^2$$

Armadura de tracción mínima 1Ø12 en cada extremo.
Compresión no supera 25 kg/cm².
Corte no supera 2,5 kg/cm².

EJE B



MURO EN ALBAÑILERÍA ARMADA
Santiago, Zona 2, coef. sísm. 0,17

$$As = \frac{M - N (h/2 - x/3)}{fs * z}$$

$$As = \frac{189312 - 4904 (210 - 56)}{1400*357}$$

$$As = -1,13 \text{ cm}^2$$

$$V = \frac{H}{b*d}$$

$$V = \frac{789}{8260}$$

$$V = 0,09 < 2,5 \text{ kg/cm}^2$$

$$fm = \frac{2 (M + N (h/2 - e))}{b*x*z}$$

$$fm = \frac{2(189312 + 4904 (210 - 7))}{20*168*357}$$

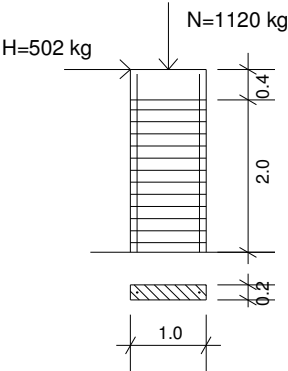
$$fm = 1,98 \text{ kg/cm}^2$$

No necesita armadura de tracción. Mín 1Ø12 en cada extremo.

Compresión no supera 25 kg/cm²

Corte no supera 2,5 kg/cm²

EJE 1



MURO EN ALBAÑILERÍA ARMADA
Santiago, Zona 2, coef. sísm. 0,17

$$As = \frac{M - N (h/2 - x/3)}{fs * z}$$

$$As = \frac{120480 - 1120 (50 - 13,33)}{1400*85}$$

$$As = 0,67 \text{ cm}^2$$

$$V = \frac{H}{b*d}$$

$$V = \frac{502}{1860}$$

$$V = 0,27 < 2,5 \text{ kg/cm}^2$$

$$fm = \frac{2 (M + N (h/2 - e))}{b*x*z}$$

$$fm = \frac{2(120480 + 1120 (50 - 7))}{20*40*85}$$

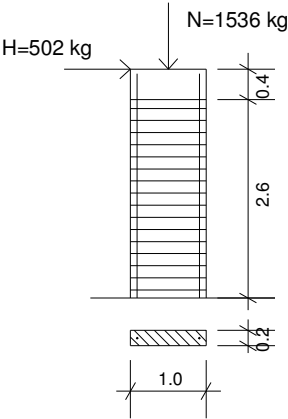
$$fm = 4,96 \text{ kg/cm}^2$$

Armadura de tracción mínima 1Ø12 en cada extremo.

Compresión no supera 25 kg/cm²

Corte no supera 2,5 kg/cm²

EJE 3



MURO EN ALBAÑILERÍA ARMADA
Santiago, Zona 2, coef. sísm. 0,17

$$As = \frac{M - N (h/2 - x/3)}{fs * z}$$

$$As = \frac{150600 - 1536 (50 - 13,33)}{1400*85}$$

$$As = 0,79 \text{ cm}^2$$

$$V = \frac{H}{b*d}$$

$$V = \frac{502}{1860}$$

$$V = 0,27 < 2,5 \text{ kg/cm}^2$$

$$fm = \frac{2 (M + N (h/2 - e))}{b*x*z}$$

$$fm = \frac{2(150600 + 1536 (50 - 7))}{20*40*85}$$

$$fm = 6,37 \text{ kg/cm}^2$$

Armadura de tracción mínima 1Ø12 en cada extremo.

Compresión no supera 25 kg/cm²

Corte no supera 2,5 kg/cm²