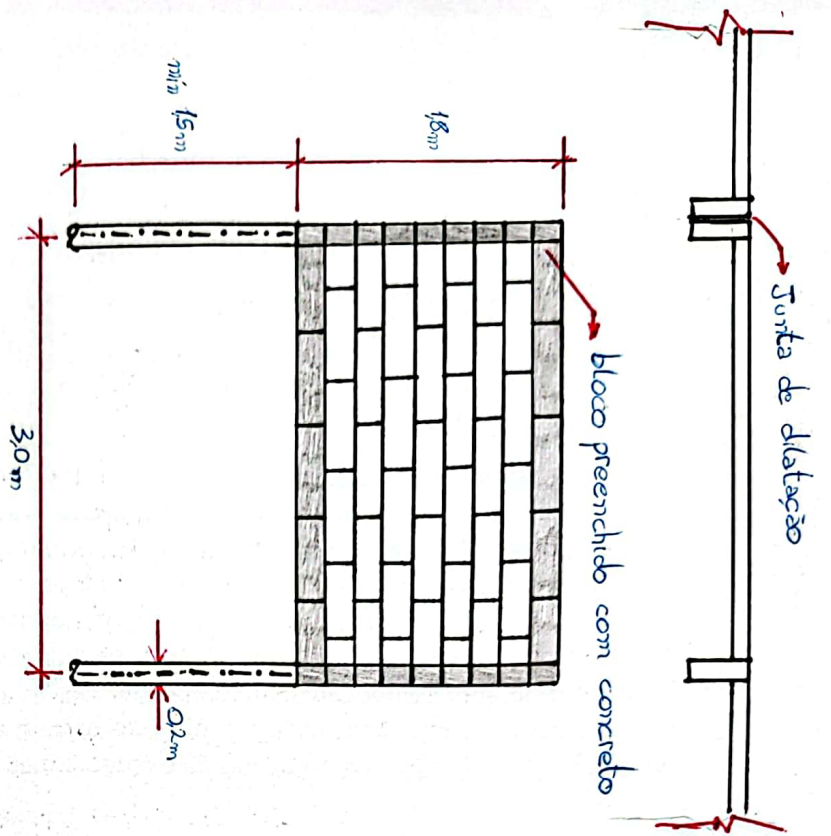




230 metros de muro.
 Junta de dilatação a cada 18,0m
 $\therefore$ 12 módulos de 18m + 14m.

Estacas: F_{ud} por módulo de 18m.

$$V_{est.} = 3,14 \times (0,10)^2 = 0,0471 \text{ m}^3$$

$$V_{mod} = 0,0471 \times T = 0,3287 \text{ m}^3$$

$$V_{total} = 0,3287 \times 13 = 4,28 \text{ m}^3$$

Armação: $3 \phi 8 \text{ mm}, C. 180$

$$\therefore (3 \times 18) \times T \times 13 = 491 \text{ m}$$

$1 \phi 5 \text{ mm}, C. 32$

$$\therefore 3,2 \times T \times 13 = 291 \text{ m}$$

$$V_{vias} = (0,16 \times 0,1 \times 2,30) \times 2 = 7,36 \text{ m}^3$$

baldrame $2 \phi 8 \text{ mm}, C. 230$

$$cinta \quad 2 \phi 8 \text{ mm}, C. 230 \quad] \quad 320 \text{ m}$$

Pilares: F_{ud} por módulo de 18m

$$V_{pl} = (0,16 \times 0,1 \times 1,8) = 0,0288$$

$$V_{mod} = 0,0288 \times T = 0,2016$$

$$V_{total} = 0,2016 \times 13 = 2,62 \text{ m}^3$$

Armação $4 \phi 8 \text{ mm}, C. 200$

$$4 \times 20 \times T \times 13 = 728 \text{ m}$$

$$V_{total} \text{ de concreto} = 4,30 + 7,36 + 2,62 = 14,30 \text{ m}^3$$

$$A_{total} \phi 8 \text{ mm} = (491 + 320 + 728) \times 0,335 = 845,0 \text{ kg}$$