



Job Title

PAREDES DAS BAIAS - SECCAO A

General

Design code: Eurocode 2
Analysis: Failure surface

Loads: N, Mx

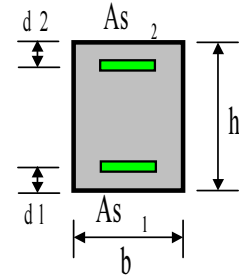
N<0 is compression !

Section

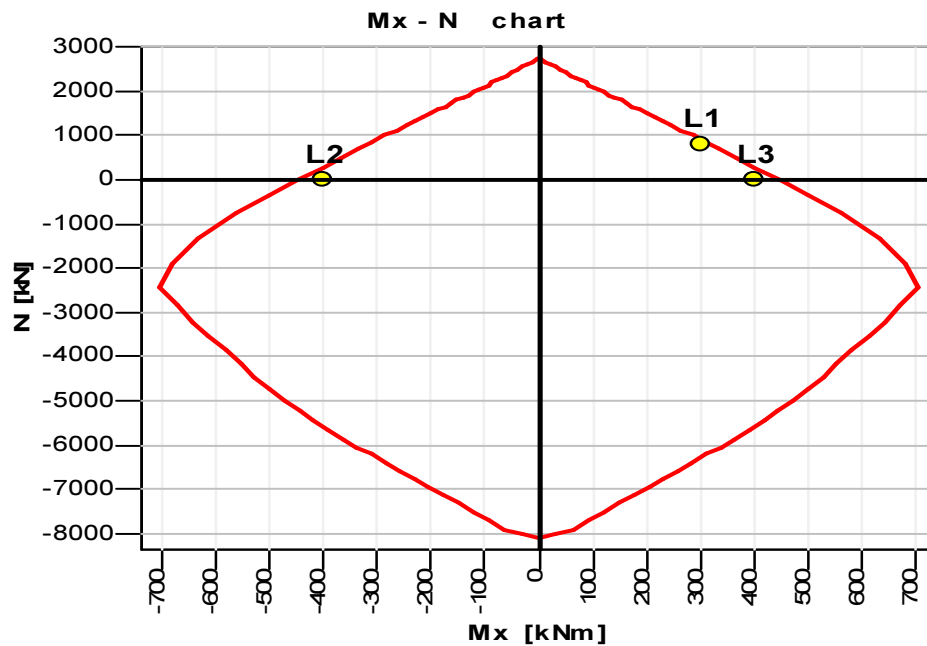
Data [cm]

b = 100
h = 40

d1 = 4
d2 = 4



Results



Materials

Concrete: C25/30
SSR: Parabolic - linear

Reinforcing steel: S500
SSR: Standard

fck = 25.00 MPa
Ec = 30471.58 MPa
ec2u = -3.500 o/oo
ec2 = -2.000 o/oo
n = 2.00

fyk = 500.00 MPa
Es = 200000.00 MPa
esu = 10.000 o/oo



Factors

Concrete: $\gamma_c = 1.50$
Steel: $\gamma_s = 1.15$

Reinforcement

Unsymmetric:

$A_{s1} = 31.42 \text{ cm}^2$ $A_{s2} = 31.42 \text{ cm}^2$

Solve data

II order moments: No

Section properties

Reinforcement :

$A_{s,tot} = 62.84 \text{ cm}^2$

Concrete section:

$A_c = 4000.00 \text{ cm}^2$

$I_{c,x} = 533333.33 \text{ cm}^4$

R/C section:

$A_{red} = 4349.61 \text{ cm}^2$

$I_{red,x} = 622833.48 \text{ cm}^4$

$r_x = 11.97 \text{ cm}$