**Company:** PDelta Ingenieria Estructural S.A.S **Engineer:** Ing. Osvaldo Guzman A
**Project:** P046-2024 - PLAZA DOÑA CEIBA (LOCALES) 5:49:14 p. m. 26/06/2024
**File:** C:\Users\USER\OneDrive\PROYECTOS 2024\PROYECTO P-EXTERNOS\P046-2024- PLAZA DOÑA CEIBA- CICUCO\Mode

## MATERIALS

Number of materials = 1

REINFORCED CONCRETE

| Mat | Name | f'c Kg/cm2 | fy Kg/cm2 | fys1 Kg/cm2 | fys2 Kg/cm2 | E Kg/cm2 | G Kg/cm2 | w Kg/m3 |
|---|---|---|---|---|---|---|---|---|
| 1 | RConcrete1 | 210 | 4200 | 4200 | 4200 | 218540 | 87430 | 2400.0 |

f'c: Compressive strength of concrete
fy: Yield strength of longitudinal reinforcement
fys1: Yiel strength of shear reinforcement, bar sizes <= 3/8"
fys2: Yiel strength of shear reinforcement, bar sizes > 3/8"

## COLUMN SECTIONS

Number of prismatic sections = 1

| Sec | Name | Shape | b (cm) | h (cm) | tw (cm) | tf (cm) | P1 (cm) | P2 (cm) | A (cm2) | I2 (cm4) | I3 (cm4) | J (cm4) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | C-25X25 | Rectang | 25.00 | 25.00 | - | - | - | - | 625.0 | 32552 | 32552 | 48177 |

## Design Results - Columns (DMO)

| Column | Story | L (m) | Lu (m) | Sec Mat | bxh (cm) | TRANSVERSE REINFORCEMENT TIES | TRANSVERSE REINFORCEMENT XTIES | LONGITUDINAL REINFORCEMENT Sec | LdCmb critc | Pu (ton) | Mu2 (ton-m) | Mu3 (ton-m) | RHO - | As (cm2) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B-2 | 1 | 2.40 | 2.18 | 1 | 25x25 | 7 #3 @ 8 cm (end) | 1 (b) | Top | 20 | 3.93 | 1.64 | 0.34 | 0.0100 | 6.25 |
| | | | | 1 | | 7 #3 @ 16 cm (ctr) | 1 (h) | Bot | 20 | 3.93 | 1.64 | 0.35 | 0.0100 | 6.25 |
| A-2 | 1 | 2.40 | 2.18 | 1 | 25x25 | 7 #3 @ 8 cm (end) | 1 (b) | Top | 22 | 3.93 | 1.64 | 0.39 | 0.0100 | 6.25 |
| | | | | 1 | | 7 #3 @ 16 cm (ctr) | 1 (h) | Bot | 22 | 3.93 | 1.64 | 0.42 | 0.0100 | 6.25 |
| B-1 | 1 | 2.40 | 2.18 | 1 | 25x25 | 7 #3 @ 8 cm (end) | 1 (b) | Top | 21 | 3.93 | 1.64 | 0.39 | 0.0100 | 6.25 |
| | | | | 1 | | 7 #3 @ 16 cm (ctr) | 1 (h) | Bot | 21 | 3.93 | 1.64 | 0.42 | 0.0100 | 6.25 |
| A-1 | 1 | 2.40 | 2.18 | 1 | 25x25 | 7 #3 @ 8 cm (end) | 1 (b) | Top | 19 | 3.93 | 1.64 | 0.34 | 0.0100 | 6.25 |
| | | | | 1 | | 7 #3 @ 16 cm (ctr) | 1 (h) | Bot | 19 | 3.93 | 1.64 | 0.35 | 0.0100 | 6.25 |