

MATERIALS

Number of materials = 2

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
2	RConcrete2	280	4200	4200	4200	252350	100940	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-30X50	Rectang	30.00	50.00	-	-	-	-	1500.0	312500	112500	279900

Design Results - Columns (DMO)

Column	Story	L (m)	Lu (m)	Sec Mat	bxh (cm)	TRANSVERSE REINFORCEMENT		LONGITUDINAL REINFORCEMENT						
						TIES	XTIES	Sec	LdCmb critc	Pu (ton)	Mu2 (ton-m)	Mu3 (ton-m)	RHO -	As (cm2)
O-16	1	3.65	3.13	1 2	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	23	16.69	1.48	6.78	0.0100	15.00
						10 #3 @ 20 cm (ctr)	1 (h)	Bot	21	17.66	3.31	8.30	0.0113	16.93
P-16	1	3.65	3.13	1 2	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	21	13.36	0.67	6.20	0.0100	15.00
						10 #3 @ 20 cm (ctr)	1 (h)	Bot	21	13.36	2.96	7.74	0.0107	16.05
O-15	1	3.65	3.13	1 2	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	20	32.30	5.88	5.91	0.0100	15.00
						10 #3 @ 20 cm (ctr)	1 (h)	Bot	28	23.38	3.54	7.52	0.0100	15.00
P-15	1	3.65	3.13	1 2	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	30	18.33	3.12	5.62	0.0100	15.00
						10 #3 @ 20 cm (ctr)	1 (h)	Bot	30	18.33	5.08	7.37	0.0107	16.05
O-14	1	3.65	3.13	1 2	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	28	21.09	3.53	4.99	0.0100	15.00
						10 #3 @ 20 cm (ctr)	1 (h)	Bot	28	21.09	2.97	6.96	0.0100	15.00
P-14	1	3.65	3.13	1 2	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	30	16.46	1.97	4.91	0.0100	15.00
						10 #3 @ 20 cm (ctr)	1 (h)	Bot	29	16.46	3.83	6.76	0.0100	15.00
O-11	1	3.65	3.13	1 2	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	23	32.30	5.88	5.84	0.0100	15.00
						10 #3 @ 20 cm (ctr)	1 (h)	Bot	28	22.51	4.47	6.92	0.0100	15.00
P-11	1	3.65	3.13	1 2	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	29	18.33	3.12	5.54	0.0100	15.00
						10 #3 @ 20 cm (ctr)	1 (h)	Bot	29	18.33	5.08	7.26	0.0101	15.18
O-7	1	3.65	3.13	1 2	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	20	16.69	1.48	6.84	0.0100	15.00
						10 #3 @ 20 cm (ctr)	1 (h)	Bot	22	17.66	3.31	8.21	0.0113	16.93
P-7	1	3.65	3.13	1 2	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	20	14.33	1.98	6.20	0.0100	15.00
						10 #3 @ 20 cm (ctr)	1 (h)	Bot	22	13.36	2.96	7.82	0.0107	16.05