

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)
I-30	1	3.65	3.13	1	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	23	16.72	1.53	6.74	0.0100	15.00
				2		10 #3 @ 20 cm (ctr)	1 (h)	Bot	21	17.62	2.87	8.19	0.0107	16.05
F-30	1	3.65	3.13	1	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	23	14.36	1.97	6.19	0.0100	15.00
				2		10 #3 @ 20 cm (ctr)	1 (h)	Bot	21	13.46	2.56	7.57	0.0101	15.18
I-26	1	3.65	3.13	1	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	20	31.97	5.66	5.87	0.0100	15.00
				2		10 #3 @ 20 cm (ctr)	1 (h)	Bot	28	23.16	3.42	7.37	0.0100	15.00
F-26	1	3.65	3.13	1	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	30	18.18	2.78	5.49	0.0100	15.00
				2		10 #3 @ 20 cm (ctr)	1 (h)	Bot	22	25.02	5.27	7.28	0.0100	15.00
I-22	1	3.65	3.13	1	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	23	31.97	5.66	5.78	0.0100	15.00
				2		10 #3 @ 20 cm (ctr)	1 (h)	Bot	31	23.16	3.42	7.26	0.0100	15.00
F-22	1	3.65	3.13	1	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	29	18.18	2.78	5.41	0.0100	15.00
				2		10 #3 @ 20 cm (ctr)	1 (h)	Bot	29	18.18	4.58	7.05	0.0100	15.00
I-18	1	3.65	3.13	1	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	20	16.72	1.53	6.80	0.0100	15.00
				2		10 #3 @ 20 cm (ctr)	1 (h)	Bot	20	16.72	2.10	8.19	0.0107	16.05
F-18	1	3.65	3.13	1	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	20	14.36	1.97	6.13	0.0100	15.00
				2		10 #3 @ 20 cm (ctr)	1 (h)	Bot	20	14.36	2.41	7.57	0.0101	15.18