

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-40X40	Rectang	40.00	40.00	-	-	-	-	1600.0	213333	213333	315733

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)
Q-10	1	3.65	3.13	1	40x40	6 #3 @ 10 cm (end)	1 (b)	Top	13	16.43	3.92	8.68	0.0100	16.00
				2		10 #3 @ 20 cm (ctr)	1 (h)	Bot	22	13.05	8.14	5.88	0.0100	16.00
R-10	1	3.65	3.13	1	40x40	6 #3 @ 10 cm (end)	1 (b)	Top	20	13.05	5.76	7.50	0.0100	16.00
				2		10 #3 @ 20 cm (ctr)	1 (h)	Bot	20	13.05	8.14	6.40	0.0101	16.19
Q-7	1	3.65	3.13	1	40x40	6 #3 @ 10 cm (end)	1 (b)	Top	25	19.51	5.39	11.10	0.0119	19.00
				2		10 #3 @ 20 cm (ctr)	1 (h)	Bot	25	19.51	4.49	11.59	0.0119	19.00
R-7	1	3.65	3.13	1	40x40	6 #3 @ 10 cm (end)	1 (b)	Top	26	19.52	5.39	11.19	0.0119	19.00
				2		10 #3 @ 20 cm (ctr)	1 (h)	Bot	26	19.52	4.49	11.75	0.0119	19.00