

Company: Company

Project: IE HECTOR MANUEL VIDES BALLESTEROS (MÓDULO 5)

File: C:\IE REGIDOR\MOD5.rcb

Engineer: Name

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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)
A-31	1	3.05	2.53	1 2	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	21	13.98	0.89	5.27	0.0100	15.00
						7 #3 @ 20 cm (ctr)	1 (h)	Bot	26	11.40	11.21	3.55	0.0107	16.05
C-31	1	3.05	2.53	1 2	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	21	17.90	2.04	6.24	0.0100	15.00
						7 #3 @ 20 cm (ctr)	1 (h)	Bot	26	19.41	10.39	3.91	0.0100	15.00
A-27	1	3.05	2.53	1 2	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	20	18.77	3.42	5.69	0.0100	15.00
						7 #3 @ 20 cm (ctr)	1 (h)	Bot	20	18.77	6.65	6.56	0.0101	15.18
C-27	1	3.05	2.53	1 2	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	22	26.24	5.76	6.30	0.0100	15.00
						7 #3 @ 20 cm (ctr)	1 (h)	Bot	22	26.24	3.26	7.06	0.0100	15.00
A-24	1	3.05	2.53	1 2	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	23	16.74	1.95	5.09	0.0100	15.00
						7 #3 @ 20 cm (ctr)	1 (h)	Bot	23	16.74	4.95	6.02	0.0100	15.00
C-24	1	3.05	2.53	1 2	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	21	23.71	4.48	5.56	0.0100	15.00
						7 #3 @ 20 cm (ctr)	1 (h)	Bot	29	16.77	2.82	6.01	0.0100	15.00
A-19	1	3.05	2.53	1 2	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	20	20.69	2.79	4.58	0.0100	15.00
						7 #3 @ 20 cm (ctr)	1 (h)	Bot	20	20.69	5.73	5.74	0.0100	15.00
C-19	1	3.05	2.53	1 2	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	22	28.53	5.67	4.98	0.0100	15.00
						7 #3 @ 20 cm (ctr)	1 (h)	Bot	22	28.53	3.21	6.07	0.0100	15.00
A-17	1	3.05	2.53	1 2	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	23	20.11	2.16	4.35	0.0100	15.00
						7 #3 @ 20 cm (ctr)	1 (h)	Bot	23	20.11	4.89	5.47	0.0100	15.00
C-17	1	3.05	2.53	1 2	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	21	27.86	5.34	4.63	0.0100	15.00
						7 #3 @ 20 cm (ctr)	1 (h)	Bot	29	19.97	2.88	5.48	0.0100	15.00
A-16	1	3.05	2.53	1 2	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	1	28.05	2.91	0.68	0.0100	15.00
						7 #3 @ 20 cm (ctr)	1 (h)	Bot	28	17.73	4.47	4.74	0.0100	15.00
C-16	1	3.05	2.53	1 2	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	22	33.64	9.24	4.20	0.0100	15.00
						7 #3 @ 20 cm (ctr)	1 (h)	Bot	22	33.64	4.63	4.87	0.0100	15.00
A-15	1	3.05	2.53	1 2	30x50	6 #3 @ 10 cm (end)	2 (b)	Top	28	13.19	1.83	4.37	0.0100	15.00
						7 #3 @ 20 cm (ctr)	1 (h)	Bot	20	18.56	4.65	5.80	0.0100	15.00

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Column	Story	L	Lu	Sec	bxh	TIES		XTIES	Sec	LdCmb	Pu	Mu2	Mu3	RHO	As
C-15	1	3.05	2.53	1	30x50	6 #3 @ 10 cm (end)	2 (b)	(b)	Top	22	25.26	4.76	5.07	0.0100	15.
				2		7 #3 @ 20 cm (ctr)	1 (h)		Bot	30	17.97	2.57	5.82	0.0100	15.
A-13	1	3.05	2.53	1	30x50	6 #3 @ 10 cm (end)	2 (b)	(b)	Top	22	11.13	1.34	4.15	0.0100	15.
				2		7 #3 @ 20 cm (ctr)	1 (h)		Bot	20	10.50	3.10	5.35	0.0100	15.
C-13	1	3.05	2.53	1	30x50	6 #3 @ 10 cm (end)	2 (b)	(b)	Top	28	11.56	0.37	4.17	0.0100	15.
				2		7 #3 @ 20 cm (ctr)	1 (h)		Bot	20	15.85	3.18	5.57	0.0100	15.
A-12	1	3.05	2.53	1	30x50	6 #3 @ 10 cm (end)	2 (b)	(b)	Top	23	19.12	2.78	4.63	0.0100	15.
				2		7 #3 @ 20 cm (ctr)	1 (h)		Bot	23	19.12	5.31	5.68	0.0100	15.
C-12	1	3.05	2.53	1	30x50	6 #3 @ 10 cm (end)	2 (b)	(b)	Top	21	26.35	5.44	5.02	0.0100	15.
				2		7 #3 @ 20 cm (ctr)	1 (h)		Bot	29	18.72	2.61	5.70	0.0100	15.
A-8	1	3.05	2.53	1	30x50	6 #3 @ 10 cm (end)	2 (b)	(b)	Top	28	12.35	2.08	4.78	0.0100	15.
				2		7 #3 @ 20 cm (ctr)	1 (h)		Bot	20	17.84	4.60	6.15	0.0100	15.
C-8	1	3.05	2.53	1	30x50	6 #3 @ 10 cm (end)	2 (b)	(b)	Top	22	24.82	5.96	5.63	0.0100	15.
				2		7 #3 @ 20 cm (ctr)	1 (h)		Bot	22	24.82	3.98	6.56	0.0100	15.
A-6	1	3.05	2.53	1	30x50	6 #3 @ 10 cm (end)	2 (b)	(b)	Top	21	3.51	1.47	3.13	0.0100	15.
				2		7 #3 @ 20 cm (ctr)	1 (h)		Bot	23	2.88	3.40	4.62	0.0100	15.
C-6	1	3.05	2.53	1	30x50	6 #3 @ 10 cm (end)	2 (b)	(b)	Top	23	5.98	2.94	3.13	0.0100	15.
				2		7 #3 @ 20 cm (ctr)	1 (h)		Bot	23	5.98	5.46	4.51	0.0100	15.