

Company: Company
Project: IE HECTOR MANUEL VIDES BALLESTEROS (MÓDULO 1)
File: C:\IE REGIDOR\MOD1.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-30X40	Rectang	30.00	40.00	-	-	-	-	1200.0	160000	90000	189900

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)
H-34	1	3.55	3.03	1	30x40	6 #3 @ 10 cm (end)	2 (b)	Top	27	20.07	4.10	7.15	0.0136	16.36
				2		10 #3 @ 20 cm (ctr)	1 (h)	Bot	27	20.07	4.41	7.56	0.0154	18.47
J-34	1	3.55	3.03	1	30x40	6 #3 @ 10 cm (end)	2 (b)	Top	24	32.29	3.41	8.24	0.0136	16.36
				2		10 #3 @ 20 cm (ctr)	1 (h)	Bot	24	32.29	1.96	7.42	0.0101	12.14
K-34	1	3.55	3.03	1	30x40	6 #3 @ 10 cm (end)	2 (b)	Top	25	22.51	1.84	4.85	0.0100	12.00
				2		10 #3 @ 20 cm (ctr)	1 (h)	Bot	33	16.48	1.66	5.77	0.0100	12.00
LI-34	1	3.55	3.03	1	30x40	6 #3 @ 10 cm (end)	2 (b)	Top	24	14.26	0.55	5.14	0.0100	12.00
				2		10 #3 @ 20 cm (ctr)	1 (h)	Bot	24	14.26	1.23	6.30	0.0100	12.00
H-33	1	3.55	3.03	1	30x40	6 #3 @ 10 cm (end)	2 (b)	Top	27	6.48	2.60	5.88	0.0119	14.25
				2		10 #3 @ 20 cm (ctr)	1 (h)	Bot	27	6.48	3.34	6.57	0.0142	17.06
J-33	1	3.55	3.03	1	30x40	6 #3 @ 10 cm (end)	2 (b)	Top	26	4.96	2.13	5.80	0.0113	13.55
				2		10 #3 @ 20 cm (ctr)	1 (h)	Bot	26	4.96	2.64	6.77	0.0142	17.06
J-32	1	3.55	3.03	1	30x40	6 #3 @ 10 cm (end)	2 (b)	Top	27	7.26	1.58	3.48	0.0100	12.00
				2		10 #3 @ 20 cm (ctr)	1 (h)	Bot	34	0.93	1.61	4.53	0.0100	12.00
K-32	1	3.55	3.03	1	30x40	6 #3 @ 10 cm (end)	2 (b)	Top	35	16.20	1.53	4.46	0.0100	12.00
				2		10 #3 @ 20 cm (ctr)	1 (h)	Bot	35	16.20	1.53	5.35	0.0100	12.00
LI-32	1	3.55	3.03	1	30x40	6 #3 @ 10 cm (end)	2 (b)	Top	24	15.65	1.62	4.74	0.0100	12.00
				2		10 #3 @ 20 cm (ctr)	1 (h)	Bot	24	15.65	2.00	5.67	0.0100	12.00
K-31	1	3.55	3.03	1	30x40	6 #3 @ 10 cm (end)	2 (b)	Top	25	14.34	1.15	4.38	0.0100	12.00
				2		10 #3 @ 20 cm (ctr)	1 (h)	Bot	25	14.34	1.48	4.99	0.0100	12.00
LI-31	1	3.55	3.03	1	30x40	6 #3 @ 10 cm (end)	2 (b)	Top	24	14.79	1.33	4.57	0.0100	12.00
				2		10 #3 @ 20 cm (ctr)	1 (h)	Bot	24	14.79	1.79	5.26	0.0100	12.00
K-30	1	3.55	3.03	1	30x40	6 #3 @ 10 cm (end)	2 (b)	Top	25	14.10	0.94	3.99	0.0100	12.00
				2		10 #3 @ 20 cm (ctr)	1 (h)	Bot	33	10.71	1.26	4.23	0.0100	12.00
LI-30	1	3.55	3.03	1	30x40	6 #3 @ 10 cm (end)	2 (b)	Top	24	14.01	1.44	4.09	0.0100	12.00
				2		10 #3 @ 20 cm (ctr)	1 (h)	Bot	24	14.01	1.87	4.65	0.0100	12.00

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Column	Story	L	Lu	Sec	bxh	TIES		XTIES	Sec	LdCmb	Pu	Mu2	Mu3	RHO	As
K-27	1	3.55	3.03	1	30x40	6 #3 @ 10 cm	(end)	2 (b)	Top	25	13.42	1.08	3.85	0.0100	12.00
				2		10 #3 @ 20 cm	(ctr)	1 (h)	Bot	25	13.42	1.42	4.36	0.0100	12.00
LI-27	1	3.55	3.03	1	30x40	6 #3 @ 10 cm	(end)	2 (b)	Top	24	13.48	1.35	3.86	0.0100	12.00
				2		10 #3 @ 20 cm	(ctr)	1 (h)	Bot	24	13.48	1.80	4.37	0.0100	12.00
K-26	1	3.55	3.03	1	30x40	6 #3 @ 10 cm	(end)	2 (b)	Top	25	13.53	1.06	3.79	0.0100	12.00
				2		10 #3 @ 20 cm	(ctr)	1 (h)	Bot	25	13.53	1.41	4.26	0.0100	12.00
LI-26	1	3.55	3.03	1	30x40	6 #3 @ 10 cm	(end)	2 (b)	Top	24	13.42	1.37	3.70	0.0100	12.00
				2		10 #3 @ 20 cm	(ctr)	1 (h)	Bot	24	13.42	1.82	4.15	0.0100	12.00
K-23	1	3.55	3.03	1	30x40	6 #3 @ 10 cm	(end)	2 (b)	Top	21	12.18	2.99	2.32	0.0100	12.00
				2		10 #3 @ 20 cm	(ctr)	1 (h)	Bot	33	10.02	1.31	3.84	0.0100	12.00
LI-23	1	3.55	3.03	1	30x40	6 #3 @ 10 cm	(end)	2 (b)	Top	24	13.29	1.37	3.53	0.0100	12.00
				2		10 #3 @ 20 cm	(ctr)	1 (h)	Bot	32	10.06	1.87	3.67	0.0100	12.00
K-22	1	3.55	3.03	1	30x40	6 #3 @ 10 cm	(end)	2 (b)	Top	21	13.69	3.27	2.45	0.0100	12.00
				2		10 #3 @ 20 cm	(ctr)	1 (h)	Bot	21	13.69	4.21	2.41	0.0100	12.00
LI-22	1	3.55	3.03	1	30x40	6 #3 @ 10 cm	(end)	2 (b)	Top	24	13.60	1.31	3.43	0.0100	12.00
				2		10 #3 @ 20 cm	(ctr)	1 (h)	Bot	28	8.90	3.97	1.79	0.0100	12.00
K-20	1	3.55	3.03	1	30x40	6 #3 @ 10 cm	(end)	2 (b)	Top	25	9.43	0.26	3.07	0.0100	12.00
				2		10 #3 @ 20 cm	(ctr)	1 (h)	Bot	21	7.57	3.13	2.09	0.0100	12.00
LI-20	1	3.55	3.03	1	30x40	6 #3 @ 10 cm	(end)	2 (b)	Top	24	10.21	1.71	2.70	0.0100	12.00
				2		10 #3 @ 20 cm	(ctr)	1 (h)	Bot	24	10.21	2.06	3.11	0.0100	12.00