

Company: Company
Project: IE HECTOR MANUEL VIDES BALLESTEROS (MÓDULO 9)
File: C:\IE REGIDOR\MOD9.rcb

Engineer: Name
10:30:25 a. m. 27/06/2025

GENERAL INPUT DATA

Structure type: Three-Dimensional Frame Structure
Number of Floor Grids = 1
Building total length = 9.9 m
Building total width = 6.18 m

STORY INFORMATION

Number of Stories = 1
Total Frame Height = 3.3 m

Floor	Story Height	Grid No
1	3.30	1
2	-	1

* Story Height in (m)

STRUCTURAL GRID INFORMATION

GRID No 1

Grid Point	X	Y
A-1'	0.00	0.00
B-1'	0.00	3.00
C-1'	0.00	5.00
A'-1'	0.00	6.18
A-1	1.05	0.00
B-1	1.05	3.00
C-1	1.05	5.00
A'-1	1.05	6.18
A-2	4.33	0.00
B-2	4.33	3.00
C-2	4.33	5.00
A'-2	4.33	6.18
A-2'	6.59	0.00
B-2'	6.59	3.00
C-2'	6.59	5.00
A'-2'	6.59	6.18
A-3	8.85	0.00
B-3	8.85	3.00
C-3	8.85	5.00
A'-3	8.85	6.18
A-3'	9.90	0.00
B-3'	9.90	3.00
C-3'	9.90	5.00
A'-3'	9.90	6.18

* Coordinates X & Y are in (m)

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"

Company: Company

Project: IE HECTOR MANUEL VIDES BALLESTEROS (MÓDULO 9)

Engineer: Name

10:30:25 a. m. 27/06/2025

MEMBER DATA

Total number of members..... = 47
 Number of columns..... = 9
 Number of beams = 50
 Number of braces = 0

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-30X30	Rectang	30.00	30.00	-	-	-	-	900.0	67500	67500	99900

COLUMNS

Column	Story	L (m)	Lu (m)	a (m)	c (m)	Theta (o)	Sec -	Mat -	System -
C-3	1	3.30	2.98	0.00	0.33	90.0	1	2	G&L
B-3	1	3.30	2.98	0.00	0.33	90.0	1	2	G&L
A-3	1	3.30	2.98	0.00	0.33	90.0	1	2	G&L
C-2	1	3.30	2.98	0.00	0.33	90.0	1	2	G&L
B-2	1	3.30	2.98	0.00	0.33	90.0	1	2	G&L
A-2	1	3.30	2.98	0.00	0.33	90.0	1	2	G&L
C-1	1	3.30	2.98	0.00	0.33	90.0	1	2	G&L
B-1	1	3.30	2.98	0.00	0.33	90.0	1	2	G&L
A-1	1	3.30	2.98	0.00	0.33	90.0	1	2	G&L

BEAM SECTIONS

Number of prismatic sections = 3

Sec	Name	Shape	b (cm)	h (cm)	tw (cm)	tf (cm)	P1 (cm)	P2 (cm)	A (cm2)	I2 (cm4)	I3 (cm4)	J (cm4)
1	VG-30X40	Rectang	30.00	40.00	-	-	-	-	1200.0	160000	90000	189900
2	VG-20X40	Rectang	20.00	40.00	-	-	-	-	800.0	106667	26667	73067
3	VC-30X45	Rectang	30.00	45.00	-	-	-	-	1350.0	227812	101250	234900

BEAMS

Beam	Floor	L (m)	Lu (m)	a (m)	c (m)	Sec -	Mat -	System -
A(1-2)	1	3.28	2.98	0.15	0.15	3	2	G&L
A(2-3)	1	4.52	4.22	0.15	0.15	3	2	G&L
B(1-2)	1	3.28	2.98	0.15	0.15	3	2	G&L
B(2-3)	1	4.52	4.22	0.15	0.15	3	2	G&L
C(1-2)	1	3.28	2.98	0.15	0.15	3	2	G&L
C(2-3)	1	4.52	4.22	0.15	0.15	3	2	G&L
A(1'-1)	2	1.05	0.90	0.00	0.15	1	2	G&L
A(1-2)	2	3.28	2.98	0.15	0.15	1	2	G&L
A(2-2')	2	2.26	2.11	0.15	0.00	1	2	G&L
A(2'-3)	2	2.26	2.11	0.00	0.15	1	2	G&L
A(3-3')	2	1.05	0.90	0.15	0.00	1	2	G&L
B(1'-1)	2	1.05	0.90	0.00	0.15	1	2	G&L
B(1-2)	2	3.28	2.98	0.15	0.15	1	2	G&L
B(2-2')	2	2.26	2.11	0.15	0.00	1	2	G&L
B(2'-3)	2	2.26	2.11	0.00	0.15	1	2	G&L
B(3-3')	2	1.05	0.90	0.15	0.00	1	2	G&L
C(1'-1)	2	1.05	0.90	0.00	0.15	1	2	G&L

Company: Company
Project: IE HECTOR MANUEL VIDES BALLESTEROS (MÓDULO 9)

Engineer: Name
10:30:25 a. m. 27/06/2025

Beam	Floor	L	Lu	a	c	Sec	Mat	System
C (1-2)	2	3.28	2.98	0.15	0.15	1	2	G&L
C (2-2')	2	2.26	2.11	0.15	0.00	1	2	G&L
C (2'-3)	2	2.26	2.11	0.00	0.15	1	2	G&L
C (3-3')	2	1.05	0.90	0.15	0.00	1	2	G&L
A' (1'-1)	2	1.05	0.90	0.00	0.15	2	2	G
A' (1-2)	2	3.28	2.98	0.15	0.15	2	2	G
A' (2-2')	2	2.26	2.11	0.15	0.00	2	2	G
A' (2'-3)	2	2.26	2.11	0.00	0.15	2	2	G
A' (3-3')	2	1.05	0.90	0.15	0.00	2	2	G
1 (A-B)	1	3.00	2.70	0.15	0.15	3	2	G&L
1 (B-C)	1	2.00	1.70	0.15	0.15	3	2	G&L
2 (A-B)	1	3.00	2.70	0.15	0.15	3	2	G&L
2 (B-C)	1	2.00	1.70	0.15	0.15	3	2	G&L
3 (A-B)	1	3.00	2.70	0.15	0.15	3	2	G&L
3 (B-C)	1	2.00	1.70	0.15	0.15	3	2	G&L
1' (A-B)	2	3.00	2.70	0.15	0.15	2	2	G
1' (B-C)	2	2.00	1.70	0.15	0.15	2	2	G
1' (C-A')	2	1.18	1.03	0.15	0.00	2	2	G
1 (A-B)	2	3.00	2.70	0.15	0.15	1	2	G&L
1 (B-C)	2	2.00	1.70	0.15	0.15	1	2	G&L
1 (C-A')	2	1.18	1.03	0.15	0.00	1	2	G&L
2 (A-B)	2	3.00	2.70	0.15	0.15	1	2	G&L
2 (B-C)	2	2.00	1.70	0.15	0.15	1	2	G&L
2 (C-A')	2	1.18	1.03	0.15	0.00	1	2	G&L
2' (A-B)	2	3.00	2.70	0.15	0.15	2	2	G
2' (B-C)	2	2.00	1.70	0.15	0.15	2	2	G
2' (C-A')	2	1.18	1.03	0.15	0.00	2	2	G
3 (A-B)	2	3.00	2.70	0.15	0.15	1	2	G&L
3 (B-C)	2	2.00	1.70	0.15	0.15	1	2	G&L
3 (C-A')	2	1.18	1.03	0.15	0.00	1	2	G&L
3' (A-B)	2	3.00	2.70	0.15	0.15	2	2	G
3' (B-C)	2	2.00	1.70	0.15	0.15	2	2	G
3' (C-A')	2	1.18	1.03	0.15	0.00	2	2	G

FOUNDATION SOIL PROPERTIES

Number of soil properties = 1

Soil	Name	Pressure Distribution	Allowable gross pres. Pa T/m2	Increase Pa Combinations incl.EQ & WL (%)	MODULUS OF SUBGRADE REACTION Gravity load Analysis, Kg T/m3	Lateral load Analysis, Ks T/m3
1	Soil1	Linear	7.4	33	400.0	400.0

* Values of subgrade reaction are used only on footings with rotations and/or vert-displac. permitted.

FOUNDATION BEAM DATA

Number of foundation beams = 12

FOUNDATION BEAMS

Beam	Floor	L (m)	Lu (m)	a (m)	c (m)	TWidth (m)	Sec -	Mat -	Soil -	System -
A (1-2)	1	3.28	2.98	0.15	0.15	1.00	3	2	1	G&L
A (2-3)	1	4.52	4.22	0.15	0.15	1.00	3	2	1	G&L
B (1-2)	1	3.28	2.98	0.15	0.15	1.00	3	2	1	G&L
B (2-3)	1	4.52	4.22	0.15	0.15	1.00	3	2	1	G&L
C (1-2)	1	3.28	2.98	0.15	0.15	1.00	3	2	1	G&L
C (2-3)	1	4.52	4.22	0.15	0.15	1.00	3	2	1	G&L
1 (A-B)	1	3.00	2.70	0.15	0.15	1.00	3	2	1	G&L
1 (B-C)	1	2.00	1.70	0.15	0.15	1.00	3	2	1	G&L
2 (A-B)	1	3.00	2.70	0.15	0.15	1.00	3	2	1	G&L
2 (B-C)	1	2.00	1.70	0.15	0.15	1.00	3	2	1	G&L
3 (A-B)	1	3.00	2.70	0.15	0.15	1.00	3	2	1	G&L
3 (B-C)	1	2.00	1.70	0.15	0.15	1.00	3	2	1	G&L

Company: Company

Project: IE HECTOR MANUEL VIDES BALLESTEROS (MÓDULO 9)

Engineer: Name

10:30:25 a. m. 27/06/2025

GROUND SUPPORT DATA

Total number of ground supports = 9

K = Spring constant(ton/cm)

Characteristics for All Degrees of Freedom
Value = K Dash = free C = constrained

Support	Floor	Type	Ux	Uy	Uz	TetX	TetY	TetZ
A-1	1	Fixed	C	C	C	C	C	C
B-1	1	Fixed	C	C	C	C	C	C
C-1	1	Fixed	C	C	C	C	C	C
A-2	1	Fixed	C	C	C	C	C	C
B-2	1	Fixed	C	C	C	C	C	C
C-2	1	Fixed	C	C	C	C	C	C
A-3	1	Fixed	C	C	C	C	C	C
B-3	1	Fixed	C	C	C	C	C	C
C-3	1	Fixed	C	C	C	C	C	C

SUMMARY OF TOTAL FLOOR LOADS**LOAD CASE 1 : SELFW (D0)**

Floor	Force (ton)			Moment (ton-m)		
	Px	Py	Pz	Mx	My	Mz
2	0.00	0.00	25.14	0.0	0.0	0.0
1	0.00	0.00	8.29	0.0	0.0	0.0
Total	0.00	0.00	33.43	0.0	0.0	0.0

LOAD CASE 2 : DEAD (DL)

Floor	Force (ton)			Moment (ton-m)		
	Px	Py	Pz	Mx	My	Mz
2	0.00	0.00	26.92	0.0	0.0	0.0
1	0.00	0.00	0.00	0.0	0.0	0.0
Total	0.00	0.00	26.92	0.0	0.0	0.0

LOAD CASE 3 : ROOF L (RFL)

Floor	Force (ton)			Moment (ton-m)		
	Px	Py	Pz	Mx	My	Mz
2	0.00	0.00	12.24	0.0	0.0	0.0
1	0.00	0.00	0.00	0.0	0.0	0.0
Total	0.00	0.00	12.24	0.0	0.0	0.0

LOAD CASE 4 : EARTHQUAKE X (EQX) - TYPE : SPECTRAL

Floor	Force (ton)			Acc. Tors. Mom. (ton-m)		
	Px	Py	Pz	Mx	My	Mz
2	37.16	0.00	0.00	0.0	0.0	11.7
1	0.00	0.00	0.00	0.0	0.0	0.0
Total	37.16	0.00	0.00	0.0	0.0	11.7

Company: Company

Project: IE HECTOR MANUEL VIDES BALLESTEROS (MÓDULO 9)

Engineer: Name

10:30:25 a. m. 27/06/2025

LOAD CASE 5 : EQUAKE Y (EQY) - TYPE : SPECTRAL

Floor	Force (ton)			Acc. Tors. Mom. (ton-m)		
	Px	Py	Pz	Mx	My	Mz
2	0.00	37.32	0.00	0.0	0.0	18.3
1	0.00	0.00	0.00	0.0	0.0	0.0
Total	0.00	37.32	0.00	0.0	0.0	18.3

LOAD CASE 6 : WIND X (WLX)

Floor	Force (ton)			Moment (ton-m)		
	Px	Py	Pz	Mx	My	Mz
2	0.68	0.00	0.00	0.0	0.0	0.2
1	0.55	0.00	0.00	0.0	0.0	0.0
Total	1.22	0.00	0.00	0.0	0.0	0.2

LOAD CASE 7 : WIND Y (WLY)

Floor	Force (ton)			Moment (ton-m)		
	Px	Py	Pz	Mx	My	Mz
2	0.00	1.18	0.00	0.0	0.0	0.6
1	0.00	0.39	0.00	0.0	0.0	0.0
Total	0.00	1.58	0.00	0.0	0.0	0.6

SUMMARY QUANTITY OF MATERIALS**COLUMNS**

Item	Section	Material	Length m	Weight/Len ton/m	Total Weight ton
1	C-30X30	RConcrete2	26.78	0.216	5.78
TOTAL =					5.78

BEAMS

Item	Section	Material	Length m	Weight/Len ton/m	Total Weight ton
1	VG-30X40	RConcrete2	45.76	0.288	13.18
2	VG-20X40	RConcrete2	26.87	0.192	5.16
TOTAL =					18.34

FOUNDATION BEAMS

Item	Section	Material	Length m	Weight/Len ton/m	Total Weight ton
1	VC-30X45	RConcrete2	36.60	0.324	11.86
TOTAL =					11.86

SLABS

Item	Section	Material	Area m²	Weight/Area ton/m²	Total Weight ton
1	Cubierta Plana	w =2.4	61.18	0.240	14.68
TOTAL =					14.68