Company: Company Engineer: Name
Project: IE HECTOR MANUEL VIDES BALLESTEROS (MÓDULO 2) 5:00:26 p. m. 26/06/2025
File: C:\IE REGIDOR\MOD2.rcb

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"

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-30X60	Rectang	30.00	60.00	-	-	-	-	1800.0	540000	135000	369900
2	VG-20X60	Rectang	20.00	60.00	-	-	-	-	1200.0	360000	40000	126400
3	VC-30X45	Rectang	30.00	45.00	-	-	-	-	1350.0	227812	101250	234900

Design Results - Beams (DMO)

BEAM: 7(A'-P) FLOOR: 2

Length: L = 1.31 m a = 0.00 m Section: b = 30.0 cm Sec: VG-30X60
Lu = 1.06 m c = 0.25 m h = 60.0 cm Mat: RConcrete2

X, m:	0.00	0.11	0.21	0.32	0.42	0.53	0.64	0.74	0.85	0.95	1.06
Mu(-), ton-m:	-0.05	-0.38	-0.72	-1.07	-1.42	-1.78	-2.15	-2.53	-2.92	-3.32	-3.72
Mu(+), ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
As(-), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
As(+), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Vu, ton:	3.07	3.15	3.23	3.31	3.39	3.46	3.46	3.46	3.46	3.46	3.46
Tu, ton-m:	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

A'-7 5 #3 @ 27.5 P-7

BEAM: 7(P-O) FLOOR: 2

Length: L = 8.07 m a = 0.25 m Section: b = 30.0 cm Sec: VG-30X60
Lu = 7.57 m c = 0.25 m h = 60.0 cm Mat: RConcrete2

X, m:	0.25	1.01	1.76	2.52	3.28	4.04	4.79	5.55	6.31	7.06	7.82
Mu(-), ton-m:	-9.63	-5.92	-3.02	-2.87	-2.87	-2.87	-2.87	-2.87	-5.54	-9.64	-14.36
Mu(+), ton-m:	4.10	4.68	5.03	4.96	4.28	3.57	3.33	3.07	2.87	2.87	4.79
As(-), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	7.33
As(+), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Vu, ton:	5.52	5.29	4.50	3.70	2.90	3.31	4.11	4.90	5.70	6.49	6.72
Tu, ton-m:	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	12.50	12.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	12.50	12.50

DESIGN

P-7 11 #3 @ 12.5 18 #3 @ 27.5 11 #3 @ 12.5 O-7

BEAM: P(7-11) FLOOR: 2

Length: L = 8.43 m a = 0.15 m Section: b = 30.0 cm Sec: VG-30X60
Lu = 8.13 m c = 0.15 m h = 60.0 cm Mat: RConcrete2

X, m:	0.15	0.96	1.78	2.59	3.40	4.22	5.03	5.84	6.65	7.47	8.28
Mu(-), ton-m:	-7.68	-4.19	-2.20	-2.20	-2.20	-2.20	-2.20	-2.20	-2.73	-6.54	-10.98
Mu(+), ton-m:	3.31	4.41	5.52	6.07	5.76	4.88	3.96	3.06	2.20	2.20	3.66
As(-), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.55
As(+), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Vu, ton:	4.91	4.69	4.02	3.35	2.11	2.51	3.22	4.40	5.07	5.74	5.96
Tu, ton-m:	0.16	0.16	0.16	0.16	0.02	0.02	0.02	0.12	0.12	0.12	0.12
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	12.50	12.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	12.50	12.50

DESIGN

P-7 11 #3 @ 12.5 20 #3 @ 27.5 11 #3 @ 12.5 P-11

BEAM: P(11-14) FLOOR: 2

Length: L = 8.43 m a = 0.15 m Section: b = 30.0 cm Sec: VG-30X60
Lu = 8.13 m c = 0.15 m h = 60.0 cm Mat: RConcrete2

X, m:	0.15	0.96	1.78	2.59	3.40	4.22	5.03	5.84	6.65	7.47	8.28
Mu(-), ton-m:	-9.55	-5.79	-2.63	-1.91	-1.91	-1.91	-1.91	-1.91	-2.24	-5.17	-8.72
Mu(+), ton-m:	3.18	1.91	1.91	2.25	2.76	3.16	3.25	2.97	1.97	1.91	2.91
As(-), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
As(+), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Vu, ton:	5.23	5.00	4.33	3.66	2.55	1.84	2.27	3.41	4.08	4.75	4.97
Tu, ton-m:	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.05	0.05	0.05	0.05
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	12.50	12.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	12.50	12.50

DESIGN

P-11 11 #3 @ 12.5 20 #3 @ 27.5 11 #3 @ 12.5 P-14

BEAM: P(14-15) FLOOR: 2

Length: L = 8.43 m a = 0.15 m Section: b = 30.0 cm Sec: VG-30X60
Lu = 8.13 m c = 0.15 m h = 60.0 cm Mat: RConcrete2

X, m:	0.15	0.96	1.78	2.59	3.40	4.22	5.03	5.84	6.65	7.47	8.28
Mu(-), ton-m:	-8.72	-5.17	-2.24	-1.91	-1.91	-1.91	-1.91	-1.91	-2.63	-5.79	-9.55
Mu(+), ton-m:	2.91	1.91	1.97	2.97	3.25	3.16	2.76	2.25	1.91	1.91	3.18
As(-), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
As(+), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Vu, ton:	4.97	4.75	4.08	3.41	2.27	1.84	2.55	3.66	4.33	5.00	5.23
Tu, ton-m:	0.05	0.05	0.05	0.05	0.01	0.01	0.01	0.03	0.03	0.03	0.03
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	12.50	12.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	12.50	12.50

DESIGN

P-14 11 #3 @ 12.5 20 #3 @ 27.5 11 #3 @ 12.5 P-15

BEAM: P(15-16) FLOOR: 2

Length: L = 8.43 m a = 0.15 m Section: b = 30.0 cm Sec: VG-30X60
Lu = 8.13 m c = 0.15 m h = 60.0 cm Mat: RConcrete2

X, m:	0.15	0.96	1.78	2.59	3.40	4.22	5.03	5.84	6.65	7.47	8.28
Mu(-), ton-m:	-10.98	-6.54	-2.73	-2.20	-2.20	-2.20	-2.20	-2.20	-2.20	-4.19	-7.68
Mu(+), ton-m:	3.66	2.20	2.20	3.06	3.96	4.88	5.77	6.08	5.53	4.41	3.31
As(-), cm2:	5.55	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
As(+), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Vu, ton:	5.96	5.74	5.07	4.40	3.22	2.51	2.11	3.35	4.02	4.69	4.91
Tu, ton-m:	0.12	0.12	0.12	0.12	0.02	0.02	0.02	0.16	0.16	0.16	0.16
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	12.50	12.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	12.50	12.50

DESIGN

P-15 11 #3 @ 12.5 20 #3 @ 27.5 11 #3 @ 12.5 P-16

BEAM: O(7-11) FLOOR: 2

Length: L = 8.43 m a = 0.15 m Section: b = 30.0 cm Sec: VG-30X60
Lu = 8.13 m c = 0.15 m h = 60.0 cm Mat: RConcrete2

X, m:	0.15	0.96	1.78	2.59	3.40	4.22	5.03	5.84	6.65	7.47	8.28
Mu(-), ton-m:	-8.35	-4.38	-2.53	-2.53	-2.53	-2.53	-2.53	-2.53	-2.99	-7.50	-12.66
Mu(+), ton-m:	2.97	4.41	5.97	6.99	6.78	6.09	5.05	3.62	2.53	2.53	4.22
As(-), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	6.43
As(+), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Vu, ton:	5.66	5.44	4.79	4.14	2.20	2.80	3.49	5.45	6.10	6.75	6.97
Tu, ton-m:	0.25	0.25	0.25	0.25	0.02	0.02	0.02	0.20	0.20	0.20	0.20
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	12.50	12.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	12.50	12.50

DESIGN

O-7 11 #3 @ 12.5 20 #3 @ 27.5 11 #3 @ 12.5 O-11

BEAM: O(11-14) FLOOR: 2

Length: L = 8.43 m a = 0.15 m Section: b = 30.0 cm Sec: VG-30X60
Lu = 8.13 m c = 0.15 m h = 60.0 cm Mat: RConcrete2

X, m:	0.15	0.96	1.78	2.59	3.40	4.22	5.03	5.84	6.65	7.47	8.28
Mu(-), ton-m:	-11.11	-6.70	-2.89	-2.22	-2.22	-2.22	-2.22	-2.22	-2.40	-5.94	-10.10
Mu(+), ton-m:	3.70	2.22	2.22	2.70	3.54	4.04	3.94	3.48	2.22	2.22	3.37
As(-), cm2:	5.62	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
As(+), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Vu, ton:	6.26	6.04	5.36	4.62	2.61	1.91	2.29	4.30	5.01	5.74	5.95
Tu, ton-m:	0.12	0.12	0.12	0.12	0.01	0.01	0.01	0.14	0.14	0.14	0.14
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	12.50	12.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	12.50	12.50

DESIGN

O-11 11 #3 @ 12.5 20 #3 @ 27.5 11 #3 @ 12.5 O-14

BEAM: O(14-15) FLOOR: 2

Length: L = 8.43 m a = 0.15 m Section: b = 30.0 cm Sec: VG-30X60
Lu = 8.13 m c = 0.15 m h = 60.0 cm Mat: RConcrete2

X, m:	0.15	0.96	1.78	2.59	3.40	4.22	5.03	5.84	6.65	7.47	8.28
Mu(-), ton-m:	-10.10	-5.94	-2.40	-2.22	-2.22	-2.22	-2.22	-2.22	-2.89	-6.70	-11.11
Mu(+), ton-m:	3.37	2.22	2.22	3.48	3.94	4.04	3.54	2.70	2.22	2.22	3.70
As(-), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.62
As(+), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Vu, ton:	5.95	5.74	5.01	4.30	2.29	1.91	2.61	4.62	5.36	6.04	6.26
Tu, ton-m:	0.14	0.14	0.14	0.14	0.01	0.01	0.01	0.12	0.12	0.12	0.12
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	12.50	12.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	12.50	12.50

DESIGN

O-14 11 #3 @ 12.5 20 #3 @ 27.5 11 #3 @ 12.5 O-15

BEAM: O(15-16) FLOOR: 2

Length: L = 8.43 m a = 0.15 m Section: b = 30.0 cm Sec: VG-30X60
Lu = 8.13 m c = 0.15 m h = 60.0 cm Mat: RConcrete2

X, m:	0.15	0.96	1.78	2.59	3.40	4.22	5.03	5.84	6.65	7.47	8.28
Mu(-), ton-m:	-12.66	-7.50	-2.99	-2.53	-2.53	-2.53	-2.53	-2.53	-2.53	-4.38	-8.35
Mu(+), ton-m:	4.22	2.53	2.53	3.62	5.06	6.09	6.78	6.99	5.97	4.42	2.97
As(-), cm2:	6.43	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
As(+), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Vu, ton:	6.97	6.75	6.10	5.45	3.49	2.80	2.20	4.14	4.79	5.45	5.66
Tu, ton-m:	0.20	0.20	0.20	0.20	0.02	0.02	0.02	0.25	0.25	0.25	0.25
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	12.50	12.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	12.50	12.50

DESIGN

O-15 11 #3 @ 12.5 20 #3 @ 27.5 11 #3 @ 12.5 O-16

BEAM: D'(7-11) FLOOR: 2

Length: L = 8.43 m a = 0.15 m Section: b = 20.0 cm Sec: VG-20X60
Lu = 8.13 m c = 0.15 m h = 60.0 cm Mat: RConcrete2

X, m:	0.15	0.96	1.78	2.59	3.40	4.22	5.03	5.84	6.65	7.47	8.28
Mu(-), ton-m:	-0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.45	-4.13	-8.68
Mu(+), ton-m:	0.47	2.99	5.22	6.86	7.16	6.56	5.40	3.31	0.34	0.00	0.00
As(-), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	4.41
As(+), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Vu, ton:	3.29	3.07	2.41	1.75	0.42	1.08	1.74	3.95	4.60	5.26	5.48
Tu, ton-m:	0.06	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

D'-7 31 #3 @ 27.5 D'-11

BEAM: D'(11-14) FLOOR: 2

Length: L = 8.43 m a = 0.15 m Section: b = 20.0 cm Sec: VG-20X60
Lu = 8.13 m c = 0.15 m h = 60.0 cm Mat: RConcrete2

X, m:	0.15	0.96	1.78	2.59	3.40	4.22	5.03	5.84	6.65	7.47	8.28
Mu(-), ton-m:	-8.74	-4.85	-1.61	0.00	0.00	0.00	0.00	0.00	-0.60	-3.39	-6.92
Mu(+), ton-m:	0.00	0.00	0.13	1.29	2.70	3.16	3.06	2.02	0.21	0.00	0.00
As(-), cm2:	4.45	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
As(+), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Vu, ton:	4.68	4.46	3.80	3.14	0.88	0.22	0.44	2.70	3.35	4.01	4.23
Tu, ton-m:	0.03	0.03	0.03	0.03	0.00	0.00	0.00	0.02	0.02	0.02	0.02
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

D'-11 31 #3 @ 27.5 D'-14

BEAM: D'(14-15) FLOOR: 2

Length: L = 8.43 m a = 0.15 m Section: b = 20.0 cm Sec: VG-20X60
Lu = 8.13 m c = 0.15 m h = 60.0 cm Mat: RConcrete2

X, m:	0.15	0.96	1.78	2.59	3.40	4.22	5.03	5.84	6.65	7.47	8.28
Mu(-), ton-m:	-6.92	-3.39	-0.60	0.00	0.00	0.00	0.00	0.00	-1.61	-4.85	-8.74
Mu(+), ton-m:	0.00	0.00	0.21	2.02	3.06	3.16	2.70	1.29	0.13	0.00	0.00
As(-), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	4.45
As(+), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Vu, ton:	4.23	4.01	3.35	2.70	0.44	0.22	0.88	3.14	3.80	4.46	4.68
Tu, ton-m:	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.03	0.03	0.03	0.03
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

D'-14 31 #3 @ 27.5 D'-15

BEAM: D'(15-8') FLOOR: 2

Length: L = 5.62 m a = 0.15 m Section: b = 20.0 cm Sec: VG-20X60
Lu = 5.47 m c = 0.00 m h = 60.0 cm Mat: RConcrete2

X, m:	0.15	0.70	1.24	1.79	2.34	2.89	3.43	3.98	4.53	5.07	5.62
Mu(-), ton-m:	-8.66	-5.55	-2.67	-0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mu(+), ton-m:	0.00	0.00	0.00	0.37	2.36	4.40	5.45	6.27	6.85	7.18	7.28
As(-), cm2:	4.40	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
As(+), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.63	3.68
Vu, ton:	5.48	5.48	5.03	4.59	4.15	2.88	1.72	1.27	0.83	0.39	0.09
Tu, ton-m:	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

D'-15 21 #3 @ 27.5 D'-8'

BEAM: A'(7-11) FLOOR: 2

Length: L = 8.43 m a = 0.15 m Section: b = 20.0 cm Sec: VG-20X60
Lu = 8.13 m c = 0.15 m h = 60.0 cm Mat: RConcrete2

X, m:	0.15	0.96	1.78	2.59	3.40	4.22	5.03	5.84	6.65	7.47	8.28
Mu(-), ton-m:	-0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.53	-3.31	-6.85
Mu(+), ton-m:	0.36	2.24	3.81	4.80	5.05	4.66	3.70	2.09	0.21	0.00	0.00
As(-), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
As(+), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Vu, ton:	2.49	2.26	1.57	0.88	0.14	0.83	1.52	2.63	3.32	4.01	4.24
Tu, ton-m:	0.05	0.05	0.05	0.05	0.01	0.01	0.01	0.02	0.02	0.02	0.02
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

A'-7 31 #3 @ 27.5 A'-11

BEAM: A'(11-14) FLOOR: 2

Length: L = 8.43 m a = 0.15 m Section: b = 20.0 cm Sec: VG-20X60
Lu = 8.13 m c = 0.15 m h = 60.0 cm Mat: RConcrete2

X, m:	0.15	0.96	1.78	2.59	3.40	4.22	5.03	5.84	6.65	7.47	8.28
Mu(-), ton-m:	-6.86	-3.76	-1.28	0.00	0.00	0.00	0.00	0.00	-0.26	-2.29	-5.02
Mu(+), ton-m:	0.00	0.00	0.07	0.77	1.93	2.39	2.28	1.49	0.15	0.00	0.00
As(-), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
As(+), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Vu, ton:	3.70	3.47	2.78	2.09	0.91	0.22	0.47	1.63	2.32	3.01	3.24
Tu, ton-m:	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

A'-11 31 #3 @ 27.5 A'-14

BEAM: A'(14-15) FLOOR: 2

Length: L = 8.43 m a = 0.15 m Section: b = 20.0 cm Sec: VG-20X60
Lu = 8.13 m c = 0.15 m h = 60.0 cm Mat: RConcrete2

X, m:	0.15	0.96	1.78	2.59	3.40	4.22	5.03	5.84	6.65	7.47	8.28
Mu(-), ton-m:	-5.02	-2.29	-0.26	0.00	0.00	0.00	0.00	0.00	-1.28	-3.76	-6.86
Mu(+), ton-m:	0.00	0.00	0.15	1.49	2.28	2.39	1.93	0.77	0.07	0.00	0.00
As(-), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
As(+), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Vu, ton:	3.24	3.01	2.32	1.63	0.47	0.22	0.91	2.09	2.78	3.47	3.70
Tu, ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

A'-14 31 #3 @ 27.5 A'-15

BEAM: A'(15-16) FLOOR: 2

Length: L = 8.43 m a = 0.15 m Section: b = 20.0 cm Sec: VG-20X60
Lu = 8.13 m c = 0.15 m h = 60.0 cm Mat: RConcrete2

X, m:	0.15	0.96	1.78	2.59	3.40	4.22	5.03	5.84	6.65	7.47	8.28
Mu(-), ton-m:	-6.85	-3.31	-0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.23
Mu(+), ton-m:	0.00	0.00	0.21	2.09	3.70	4.66	5.05	4.80	3.81	2.24	0.36
As(-), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
As(+), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Vu, ton:	4.24	4.01	3.32	2.63	1.52	0.83	0.14	0.88	1.57	2.26	2.49
Tu, ton-m:	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.05	0.05	0.05	0.05
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

A'-15 31 #3 @ 27.5 A'-16

BEAM: O(7-11) FLOOR: 1

Length: L = 8.43 m a = 0.15 m Section: b = 30.0 cm Sec: VC-30X45
Lu = 8.13 m c = 0.15 m h = 45.0 cm Mat: RConcrete2

X, m:	0.15	0.96	1.78	2.59	3.40	4.22	5.03	5.84	6.65	7.47	8.28
Mu(-), ton-m:	-2.29	-1.08	-0.18	0.00	0.00	0.00	0.00	0.00	-0.18	-1.08	-2.29
Mu(+), ton-m:	0.00	0.00	0.06	0.57	0.99	1.13	0.99	0.57	0.06	0.00	0.00
As(-), cm2:	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
As(+), cm2:	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
Vu, ton:	1.51	1.34	1.00	0.67	0.33	0.00	0.33	0.67	1.00	1.34	1.51
Tu, ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	9.00	9.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	9.00	9.00

DESIGN

O-7 11 #3 @ 9 32 #3 @ 19 11 #3 @ 9 O-11

BEAM: O(11-14) FLOOR: 1

Length: L = 8.43 m a = 0.15 m Section: b = 30.0 cm Sec: VC-30X45
Lu = 8.13 m c = 0.15 m h = 45.0 cm Mat: RConcrete2

X, m:	0.15	0.96	1.78	2.59	3.40	4.22	5.03	5.84	6.65	7.47	8.28
Mu(-), ton-m:	-2.29	-1.08	-0.18	0.00	0.00	0.00	0.00	0.00	-0.18	-1.08	-2.29
Mu(+), ton-m:	0.00	0.00	0.06	0.57	0.99	1.13	0.99	0.57	0.06	0.00	0.00
As(-), cm2:	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
As(+), cm2:	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
Vu, ton:	1.51	1.34	1.00	0.67	0.33	0.00	0.33	0.67	1.00	1.34	1.51
Tu, ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	9.00	9.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	9.00	9.00

DESIGN

O-11 11 #3 @ 9 32 #3 @ 19 11 #3 @ 9 O-14

BEAM: O(14-15) FLOOR: 1

Length: L = 8.43 m a = 0.15 m Section: b = 30.0 cm Sec: VC-30X45
Lu = 8.13 m c = 0.15 m h = 45.0 cm Mat: RConcrete2

X, m:	0.15	0.96	1.78	2.59	3.40	4.22	5.03	5.84	6.65	7.47	8.28
Mu(-), ton-m:	-2.29	-1.08	-0.18	0.00	0.00	0.00	0.00	0.00	-0.18	-1.08	-2.29
Mu(+), ton-m:	0.00	0.00	0.06	0.57	0.99	1.13	0.99	0.57	0.06	0.00	0.00
As(-), cm2:	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
As(+), cm2:	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
Vu, ton:	1.51	1.34	1.00	0.67	0.33	0.00	0.33	0.67	1.00	1.34	1.51
Tu, ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	9.00	9.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	9.00	9.00

DESIGN

O-14 11 #3 @ 9 32 #3 @ 19 11 #3 @ 9 O-15

BEAM: O(15-16) FLOOR: 1

Length: L = 8.43 m a = 0.15 m Section: b = 30.0 cm Sec: VC-30X45
Lu = 8.13 m c = 0.15 m h = 45.0 cm Mat: RConcrete2

X, m:	0.15	0.96	1.78	2.59	3.40	4.22	5.03	5.84	6.65	7.47	8.28
Mu(-), ton-m:	-2.29	-1.08	-0.18	0.00	0.00	0.00	0.00	0.00	-0.18	-1.08	-2.29
Mu(+), ton-m:	0.00	0.00	0.06	0.57	0.99	1.13	0.99	0.57	0.06	0.00	0.00
As(-), cm2:	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
As(+), cm2:	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
Vu, ton:	1.51	1.34	1.00	0.67	0.33	0.00	0.33	0.67	1.00	1.34	1.51
Tu, ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	9.00	9.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	9.00	9.00

DESIGN

O-15 11 #3 @ 9 32 #3 @ 19 11 #3 @ 9 O-16

BEAM: 16(P-O) FLOOR: 1

Length: L = 8.07 m a = 0.25 m Section: b = 30.0 cm Sec: VC-30X45
Lu = 7.57 m c = 0.25 m h = 45.0 cm Mat: RConcrete2

X, m:	0.25	1.01	1.76	2.52	3.28	4.04	4.79	5.55	6.31	7.06	7.82
Mu(-), ton-m:	-2.00	-0.95	-0.20	0.00	0.00	0.00	0.00	0.00	-0.20	-0.95	-2.00
Mu(+), ton-m:	0.00	0.00	0.08	0.48	0.85	0.98	0.85	0.48	0.08	0.00	0.00
As(-), cm2:	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
As(+), cm2:	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
Vu, ton:	1.40	1.25	0.93	0.62	0.31	0.00	0.31	0.62	0.93	1.25	1.40
Tu, ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	9.00	9.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	9.00	9.00

DESIGN

P-16 11 #3 @ 9 29 #3 @ 19 11 #3 @ 9 O-16

BEAM: P(7-11) FLOOR: 1

Length: L = 8.43 m a = 0.15 m Section: b = 30.0 cm Sec: VC-30X45
Lu = 8.13 m c = 0.15 m h = 45.0 cm Mat: RConcrete2

X, m:	0.15	0.96	1.78	2.59	3.40	4.22	5.03	5.84	6.65	7.47	8.28
Mu(-), ton-m:	-2.29	-1.08	-0.18	0.00	0.00	0.00	0.00	0.00	-0.18	-1.08	-2.29
Mu(+), ton-m:	0.00	0.00	0.06	0.57	0.99	1.13	0.99	0.57	0.06	0.00	0.00
As(-), cm2:	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
As(+), cm2:	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
Vu, ton:	1.51	1.34	1.00	0.67	0.33	0.00	0.33	0.67	1.00	1.34	1.51
Tu, ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	9.00	9.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	9.00	9.00

DESIGN

P-7 11 #3 @ 9 32 #3 @ 19 11 #3 @ 9 P-11

BEAM: P(11-14) FLOOR: 1

Length: L = 8.43 m a = 0.15 m Section: b = 30.0 cm Sec: VC-30X45
Lu = 8.13 m c = 0.15 m h = 45.0 cm Mat: RConcrete2

X, m:	0.15	0.96	1.78	2.59	3.40	4.22	5.03	5.84	6.65	7.47	8.28
Mu(-), ton-m:	-2.29	-1.08	-0.18	0.00	0.00	0.00	0.00	0.00	-0.18	-1.08	-2.29
Mu(+), ton-m:	0.00	0.00	0.06	0.57	0.99	1.13	0.99	0.57	0.06	0.00	0.00
As(-), cm2:	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
As(+), cm2:	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
Vu, ton:	1.51	1.34	1.00	0.67	0.33	0.00	0.33	0.67	1.00	1.34	1.51
Tu, ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	9.00	9.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	9.00	9.00

DESIGN

P-11 11 #3 @ 9 32 #3 @ 19 11 #3 @ 9 P-14

BEAM: P(14-15) FLOOR: 1

Length: L = 8.43 m a = 0.15 m Section: b = 30.0 cm Sec: VC-30X45
Lu = 8.13 m c = 0.15 m h = 45.0 cm Mat: RConcrete2

X, m:	0.15	0.96	1.78	2.59	3.40	4.22	5.03	5.84	6.65	7.47	8.28
Mu(-), ton-m:	-2.29	-1.08	-0.18	0.00	0.00	0.00	0.00	0.00	-0.18	-1.08	-2.29
Mu(+), ton-m:	0.00	0.00	0.06	0.57	0.99	1.13	0.99	0.57	0.06	0.00	0.00
As(-), cm2:	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
As(+), cm2:	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
Vu, ton:	1.51	1.34	1.00	0.67	0.33	0.00	0.33	0.67	1.00	1.34	1.51
Tu, ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	9.00	9.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	9.00	9.00

DESIGN

P-14 11 #3 @ 9 32 #3 @ 19 11 #3 @ 9 P-15

BEAM: P(15-16) FLOOR: 1

Length: L = 8.43 m a = 0.15 m Section: b = 30.0 cm Sec: VC-30X45
Lu = 8.13 m c = 0.15 m h = 45.0 cm Mat: RConcrete2

X, m:	0.15	0.96	1.78	2.59	3.40	4.22	5.03	5.84	6.65	7.47	8.28
Mu(-), ton-m:	-2.29	-1.08	-0.18	0.00	0.00	0.00	0.00	0.00	-0.18	-1.08	-2.29
Mu(+), ton-m:	0.00	0.00	0.06	0.57	0.99	1.13	0.99	0.57	0.06	0.00	0.00
As(-), cm2:	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
As(+), cm2:	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
Vu, ton:	1.51	1.34	1.00	0.67	0.33	0.00	0.33	0.67	1.00	1.34	1.51
Tu, ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	9.00	9.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	9.00	9.00

DESIGN

P-15 11 #3 @ 9 32 #3 @ 19 11 #3 @ 9 P-16

BEAM: 7(P-O) FLOOR: 1

Length: L = 8.07 m a = 0.25 m Section: b = 30.0 cm Sec: VC-30X45
Lu = 7.57 m c = 0.25 m h = 45.0 cm Mat: RConcrete2

X, m:	0.25	1.01	1.76	2.52	3.28	4.04	4.79	5.55	6.31	7.06	7.82
Mu(-), ton-m:	-2.00	-0.95	-0.20	0.00	0.00	0.00	0.00	0.00	-0.20	-0.95	-2.00
Mu(+), ton-m:	0.00	0.00	0.08	0.48	0.85	0.98	0.85	0.48	0.08	0.00	0.00
As(-), cm2:	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
As(+), cm2:	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
Vu, ton:	1.40	1.25	0.93	0.62	0.31	0.00	0.31	0.62	0.93	1.25	1.40
Tu, ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	9.00	9.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	9.00	9.00

DESIGN

P-7 11 #3 @ 9 29 #3 @ 19 11 #3 @ 9 O-7

BEAM: 11(P-O) FLOOR: 1

Length: L = 8.07 m a = 0.25 m Section: b = 30.0 cm Sec: VC-30X45
Lu = 7.57 m c = 0.25 m h = 45.0 cm Mat: RConcrete2

X, m:	0.25	1.01	1.76	2.52	3.28	4.04	4.79	5.55	6.31	7.06	7.82
Mu(-), ton-m:	-2.00	-0.95	-0.20	0.00	0.00	0.00	0.00	0.00	-0.20	-0.95	-2.00
Mu(+), ton-m:	0.00	0.00	0.08	0.48	0.85	0.98	0.85	0.48	0.08	0.00	0.00
As(-), cm2:	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
As(+), cm2:	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
Vu, ton:	1.40	1.25	0.93	0.62	0.31	0.00	0.31	0.62	0.93	1.25	1.40
Tu, ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	9.00	9.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	9.00	9.00

DESIGN

P-11 11 #3 @ 9 29 #3 @ 19 11 #3 @ 9 O-11

BEAM: 14(P-O) FLOOR: 1

Length: L = 8.07 m a = 0.25 m Section: b = 30.0 cm Sec: VC-30X45
Lu = 7.57 m c = 0.25 m h = 45.0 cm Mat: RConcrete2

X, m:	0.25	1.01	1.76	2.52	3.28	4.04	4.79	5.55	6.31	7.06	7.82
Mu(-), ton-m:	-2.00	-0.95	-0.20	0.00	0.00	0.00	0.00	0.00	-0.20	-0.95	-2.00
Mu(+), ton-m:	0.00	0.00	0.08	0.48	0.85	0.98	0.85	0.48	0.08	0.00	0.00
As(-), cm2:	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
As(+), cm2:	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
Vu, ton:	1.40	1.25	0.93	0.62	0.31	0.00	0.31	0.62	0.93	1.25	1.40
Tu, ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	9.00	9.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	9.00	9.00

DESIGN

P-14 11 #3 @ 9 29 #3 @ 19 11 #3 @ 9 O-14

BEAM: 15(P-O) FLOOR: 1

Length: L = 8.07 m a = 0.25 m Section: b = 30.0 cm Sec: VC-30X45
Lu = 7.57 m c = 0.25 m h = 45.0 cm Mat: RConcrete2

X, m:	0.25	1.01	1.76	2.52	3.28	4.04	4.79	5.55	6.31	7.06	7.82
Mu(-), ton-m:	-2.00	-0.95	-0.20	0.00	0.00	0.00	0.00	0.00	-0.20	-0.95	-2.00
Mu(+), ton-m:	0.00	0.00	0.08	0.48	0.85	0.98	0.85	0.48	0.08	0.00	0.00
As(-), cm2:	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
As(+), cm2:	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
Vu, ton:	1.40	1.25	0.93	0.62	0.31	0.00	0.31	0.62	0.93	1.25	1.40
Tu, ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	9.00	9.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	9.00	9.00

DESIGN

P-15 11 #3 @ 9 29 #3 @ 19 11 #3 @ 9 O-15

BEAM: D'(8'-16) FLOOR: 2

Length: L = 2.81 m a = 0.00 m Section: b = 20.0 cm Sec: VG-20X60
Lu = 2.66 m c = 0.15 m h = 60.0 cm Mat: RConcrete2

X, m:	0.00	0.27	0.53	0.80	1.06	1.33	1.60	1.86	2.13	2.39	2.66
Mu(-), ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.14
Mu(+), ton-m:	7.31	6.86	6.36	5.79	5.17	4.50	3.76	2.97	2.12	1.22	0.40
As(-), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
As(+), cm2:	3.69	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Vu, ton:	1.57	1.79	2.00	2.22	2.43	2.65	2.86	3.08	3.29	3.29	3.29
Tu, ton-m:	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

D'-8' 11 #3 @ 27.5 D'-16

BEAM: 7(O-D') FLOOR: 2

Length: L = 2.02 m a = 0.25 m Section: b = 30.0 cm Sec: VG-30X60
Lu = 1.77 m c = 0.00 m h = 60.0 cm Mat: RConcrete2

X, m:	0.25	0.43	0.60	0.78	0.96	1.14	1.31	1.49	1.67	1.84	2.02
Mu(-), ton-m:	-8.70	-7.67	-6.67	-5.72	-4.81	-3.93	-3.08	-2.27	-1.50	-0.76	-0.06
Mu(+), ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
As(-), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
As(+), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Vu, ton:	5.28	5.28	5.28	5.28	5.08	4.88	4.67	4.47	4.26	4.05	3.85
Tu, ton-m:	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

O-7 8 #3 @ 27.5 D'-7

BEAM: 1'(A'-P) FLOOR: 2

Length: L = 1.31 m a = 0.00 m Section: b = 20.0 cm Sec: VG-20X60
Lu = 1.16 m c = 0.15 m h = 60.0 cm Mat: RConcrete2

X, m:	0.00	0.12	0.23	0.35	0.46	0.58	0.70	0.81	0.93	1.04	1.16
Mu(-), ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.03	-0.09
Mu(+), ton-m:	0.05	0.09	0.11	0.12	0.12	0.11	0.09	0.07	0.03	0.00	0.00
As(-), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
As(+), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Vu, ton:	0.33	0.24	0.15	0.06	0.03	0.12	0.15	0.15	0.15	0.15	0.15
Tu, ton-m:	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

A'-1' 5 #3 @ 27.5 P-1'

BEAM: 1'(O-D') FLOOR: 2

	Length:	L = 2.02 m	a = 0.15 m	Section:	b = 20.0 cm	Sec:	VG-20X60			
		Lu = 1.87 m	c = 0.00 m		h = 60.0 cm	Mat:	RConcrete2			
X, m:	0.15	0.34	0.52	0.71	0.90	1.09	1.27	1.46	1.65	1.83	2.02
Mu(-), ton-m:	-0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mu(+), ton-m:	0.07	0.27	0.47	0.61	0.70	0.74	0.71	0.63	0.49	0.30	0.05
As(-), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
As(+), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Vu, ton:	0.66	0.66	0.66	0.63	0.32	0.04	0.29	0.60	0.90	1.21	1.52
Tu, ton-m:	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

O-1' 8 #3 @ 27.5 D'-1'

BEAM: 2'(A'-P) FLOOR: 2

	Length:	L = 1.31 m	a = 0.00 m	Section:	b = 20.0 cm	Sec:	VG-20X60			
		Lu = 1.16 m	c = 0.15 m		h = 60.0 cm	Mat:	RConcrete2			
X, m:	0.00	0.12	0.23	0.35	0.46	0.58	0.70	0.81	0.93	1.04	1.16
Mu(-), ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.03
Mu(+), ton-m:	0.02	0.06	0.09	0.11	0.12	0.13	0.12	0.10	0.07	0.03	0.00
As(-), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
As(+), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Vu, ton:	0.42	0.33	0.24	0.15	0.06	0.03	0.06	0.06	0.06	0.06	0.06
Tu, ton-m:	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

A'-2' 5 #3 @ 27.5 P-2'

BEAM: 2'(O-D') FLOOR: 2

	Length:	L = 2.02 m	a = 0.15 m	Section:	b = 20.0 cm	Sec:	VG-20X60			
		Lu = 1.87 m	c = 0.00 m		h = 60.0 cm	Mat:	RConcrete2			
X, m:	0.15	0.34	0.52	0.71	0.90	1.09	1.27	1.46	1.65	1.83	2.02
Mu(-), ton-m:	-0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mu(+), ton-m:	0.07	0.27	0.47	0.61	0.69	0.72	0.69	0.60	0.46	0.26	0.00
As(-), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
As(+), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Vu, ton:	0.63	0.63	0.63	0.60	0.29	0.04	0.32	0.63	0.93	1.24	1.55
Tu, ton-m:	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

O-2' 8 #3 @ 27.5 D'-2'

BEAM: 11(A'-P) FLOOR: 2

	Length:	L = 1.31 m	a = 0.00 m	Section:	b = 30.0 cm	Sec:	VG-30X60			
		Lu = 1.06 m	c = 0.25 m		h = 60.0 cm	Mat:	RConcrete2			
X, m:	0.00	0.11	0.21	0.32	0.42	0.53	0.64	0.74	0.85	0.95	1.06
Mu(-), ton-m:	-0.01	-0.98	-1.97	-2.96	-3.96	-4.97	-6.00	-7.04	-8.08	-9.14	-10.20
Mu(+), ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
As(-), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
As(+), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Vu, ton:	9.11	9.21	9.31	9.41	9.51	9.61	9.61	9.61	9.61	9.61	9.61
Tu, ton-m:	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

A'-11 5 #3 @ 27.5 P-11

BEAM: 11(P-O) FLOOR: 2

Length: L = 8.07 m a = 0.25 m Section: b = 30.0 cm Sec: VG-30X60
Lu = 7.57 m c = 0.25 m h = 60.0 cm Mat: RConcrete2

X, m:	0.25	1.01	1.76	2.52	3.28	4.04	4.79	5.55	6.31	7.06	7.82
Mu(-), ton-m:	-12.02	-7.01	-3.87	-3.87	-3.87	-3.87	-3.87	-3.87	-7.31	-12.86	-19.36
Mu(+), ton-m:	4.01	3.87	4.10	4.84	4.71	4.45	3.87	3.87	3.87	3.87	6.45
As(-), cm2:	6.09	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	6.53	10.03
As(+), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Vu, ton:	7.74	7.39	6.16	4.94	3.72	4.36	5.58	6.80	8.03	9.25	9.60
Tu, ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	12.50	12.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	12.50	12.50

DESIGN

P-11 11 #3 @ 12.5 18 #3 @ 27.5 11 #3 @ 12.5 O-11

BEAM: 11(O-D') FLOOR: 2

Length: L = 2.02 m a = 0.25 m Section: b = 30.0 cm Sec: VG-30X60
Lu = 1.77 m c = 0.00 m h = 60.0 cm Mat: RConcrete2

X, m:	0.25	0.43	0.60	0.78	0.96	1.14	1.31	1.49	1.67	1.84	2.02
Mu(-), ton-m:	-22.79	-20.24	-17.76	-15.34	-12.98	-10.67	-8.42	-6.23	-4.08	-2.00	0.00
Mu(+), ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
As(-), cm2:	11.94	10.52	9.16	7.85	6.60	5.42	5.42	5.42	5.42	5.42	5.42
As(+), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Vu, ton:	13.51	13.51	13.51	13.51	13.21	12.89	12.57	12.24	11.92	11.60	11.28
Tu, ton-m:	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

O-11 8 #3 @ 27.5 D'-11

BEAM: 3'(A'-P) FLOOR: 2

Length: L = 1.31 m a = 0.00 m Section: b = 20.0 cm Sec: VG-20X60
Lu = 1.16 m c = 0.15 m h = 60.0 cm Mat: RConcrete2

X, m:	0.00	0.12	0.23	0.35	0.46	0.58	0.70	0.81	0.93	1.04	1.16
Mu(-), ton-m:	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mu(+), ton-m:	0.00	0.04	0.08	0.11	0.13	0.14	0.15	0.14	0.12	0.09	0.04
As(-), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
As(+), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Vu, ton:	0.50	0.41	0.32	0.23	0.14	0.05	0.02	0.02	0.02	0.02	0.02
Tu, ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

A'-3' 5 #3 @ 27.5 P-3'

BEAM: 3'(O-D') FLOOR: 2

Length: L = 2.02 m a = 0.15 m Section: b = 20.0 cm Sec: VG-20X60
Lu = 1.87 m c = 0.00 m h = 60.0 cm Mat: RConcrete2

X, m:	0.15	0.34	0.52	0.71	0.90	1.09	1.27	1.46	1.65	1.83	2.02
Mu(-), ton-m:	-0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.03
Mu(+), ton-m:	0.13	0.34	0.52	0.65	0.72	0.74	0.70	0.60	0.45	0.24	0.00
As(-), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
As(+), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Vu, ton:	0.58	0.58	0.58	0.54	0.23	0.07	0.38	0.68	0.99	1.30	1.60
Tu, ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

O-3' 8 #3 @ 27.5 D'-3'

BEAM: 4'(A'-P) FLOOR: 2

Length: L = 1.31 m a = 0.00 m Section: b = 20.0 cm Sec: VG-20X60
Lu = 1.16 m c = 0.15 m h = 60.0 cm Mat: RConcrete2

X, m:	0.00	0.12	0.23	0.35	0.46	0.58	0.70	0.81	0.93	1.04	1.16
Mu(-), ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mu(+), ton-m:	0.00	0.05	0.09	0.11	0.13	0.14	0.14	0.13	0.10	0.07	0.03
As(-), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
As(+), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Vu, ton:	0.47	0.38	0.29	0.20	0.11	0.02	0.01	0.01	0.01	0.01	0.01
Tu, ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

A'-4' 5 #3 @ 27.5 P-4'

BEAM: 4'(O-D') FLOOR: 2

Length: L = 2.02 m a = 0.15 m Section: b = 20.0 cm Sec: VG-20X60
Lu = 1.87 m c = 0.00 m h = 60.0 cm Mat: RConcrete2

X, m:	0.15	0.34	0.52	0.71	0.90	1.09	1.27	1.46	1.65	1.83	2.02
Mu(-), ton-m:	-0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.02
Mu(+), ton-m:	0.13	0.34	0.53	0.66	0.73	0.75	0.71	0.61	0.46	0.25	0.00
As(-), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
As(+), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Vu, ton:	0.58	0.58	0.58	0.55	0.24	0.07	0.37	0.68	0.99	1.29	1.60
Tu, ton-m:	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

O-4' 8 #3 @ 27.5 D'-4'

BEAM: 14(A'-P) FLOOR: 2

Length: L = 1.31 m a = 0.00 m Section: b = 30.0 cm Sec: VG-30X60
Lu = 1.06 m c = 0.25 m h = 60.0 cm Mat: RConcrete2

X, m:	0.00	0.11	0.21	0.32	0.42	0.53	0.64	0.74	0.85	0.95	1.06
Mu(-), ton-m:	0.00	-0.82	-1.65	-2.48	-3.33	-4.19	-5.06	-5.94	-6.83	-7.74	-8.65
Mu(+), ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
As(-), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
As(+), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Vu, ton:	7.65	7.75	7.86	7.96	8.06	8.16	8.15	8.15	8.15	8.15	8.15
Tu, ton-m:	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

A'-14 5 #3 @ 27.5 P-14

BEAM: 14(P-O) FLOOR: 2

Length: L = 8.07 m a = 0.25 m Section: b = 30.0 cm Sec: VG-30X60
Lu = 7.57 m c = 0.25 m h = 60.0 cm Mat: RConcrete2

X, m:	0.25	1.01	1.76	2.52	3.28	4.04	4.79	5.55	6.31	7.06	7.82
Mu(-), ton-m:	-11.24	-6.32	-3.62	-3.62	-3.62	-3.62	-3.62	-3.62	-6.39	-11.78	-18.11
Mu(+), ton-m:	3.75	3.62	4.03	4.96	5.16	4.98	3.62	3.62	3.62	3.62	6.04
As(-), cm2:	5.68	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.96	9.35
As(+), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Vu, ton:	7.57	7.22	6.00	4.78	3.56	4.08	5.30	6.52	7.74	8.97	9.32
Tu, ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	12.50	12.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	12.50	12.50

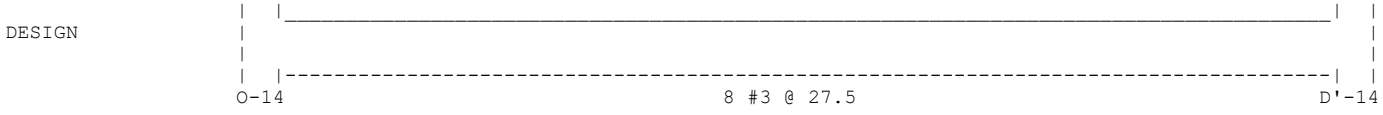
DESIGN

P-14 11 #3 @ 12.5 18 #3 @ 27.5 11 #3 @ 12.5 O-14

BEAM: 14(O-D') FLOOR: 2

Length: L = 2.02 m a = 0.25 m Section: b = 30.0 cm Sec: VG-30X60
Lu = 1.77 m c = 0.00 m h = 60.0 cm Mat: RConcrete2

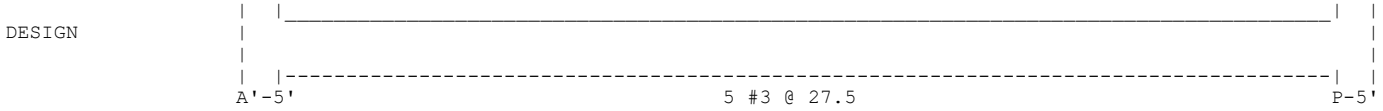
X, m:	0.25	0.43	0.60	0.78	0.96	1.14	1.31	1.49	1.67	1.84	2.02
Mu(-), ton-m:	-19.79	-17.54	-15.36	-13.24	-11.18	-9.18	-7.22	-5.33	-3.49	-1.70	0.00
Mu(+), ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
As(-), cm2:	10.27	9.04	7.86	6.73	5.65	5.42	5.42	5.42	5.42	5.42	5.42
As(+), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Vu, ton:	11.81	11.81	11.81	11.81	11.51	11.19	10.87	10.55	10.23	9.91	9.59
Tu, ton-m:	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50



BEAM: 5'(A'-P) FLOOR: 2

Length: L = 1.31 m a = 0.00 m Section: b = 20.0 cm Sec: VG-20X60
Lu = 1.16 m c = 0.15 m h = 60.0 cm Mat: RConcrete2

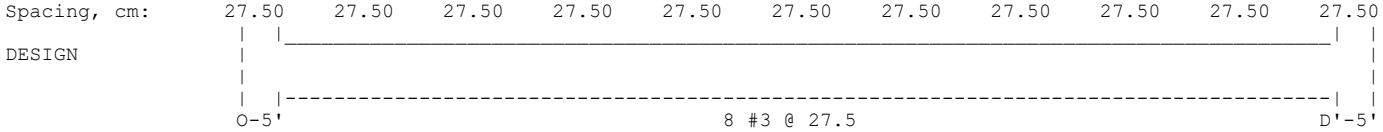
X, m:	0.00	0.12	0.23	0.35	0.46	0.58	0.70	0.81	0.93	1.04	1.16
Mu(-), ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mu(+), ton-m:	0.00	0.05	0.09	0.11	0.13	0.14	0.14	0.13	0.10	0.07	0.03
As(-), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
As(+), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Vu, ton:	0.47	0.38	0.29	0.20	0.11	0.02	0.01	0.01	0.01	0.01	0.01
Tu, ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50



BEAM: 5'(O-D') FLOOR: 2

Length: L = 2.02 m a = 0.15 m Section: b = 20.0 cm Sec: VG-20X60
Lu = 1.87 m c = 0.00 m h = 60.0 cm Mat: RConcrete2

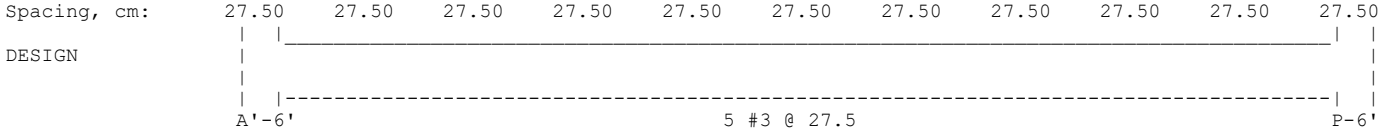
X, m:	0.15	0.34	0.52	0.71	0.90	1.09	1.27	1.46	1.65	1.83	2.02
Mu(-), ton-m:	-0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.02
Mu(+), ton-m:	0.13	0.34	0.53	0.66	0.73	0.75	0.71	0.61	0.46	0.25	0.00
As(-), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
As(+), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Vu, ton:	0.58	0.58	0.58	0.55	0.24	0.07	0.37	0.68	0.99	1.29	1.60
Tu, ton-m:	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50



BEAM: 6'(A'-P) FLOOR: 2

Length: L = 1.31 m a = 0.00 m Section: b = 20.0 cm Sec: VG-20X60
Lu = 1.16 m c = 0.15 m h = 60.0 cm Mat: RConcrete2

X, m:	0.00	0.12	0.23	0.35	0.46	0.58	0.70	0.81	0.93	1.04	1.16
Mu(-), ton-m:	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mu(+), ton-m:	0.00	0.04	0.08	0.11	0.13	0.14	0.15	0.14	0.12	0.09	0.04
As(-), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
As(+), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Vu, ton:	0.50	0.41	0.32	0.23	0.14	0.05	0.02	0.02	0.02	0.02	0.02
Tu, ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50



BEAM: 6'(O-D') FLOOR: 2

Length: L = 2.02 m a = 0.15 m Section: b = 20.0 cm Sec: VG-20X60
Lu = 1.87 m c = 0.00 m h = 60.0 cm Mat: RConcrete2

X, m:	0.15	0.34	0.52	0.71	0.90	1.09	1.27	1.46	1.65	1.83	2.02
Mu(-), ton-m:	-0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.03
Mu(+), ton-m:	0.13	0.34	0.52	0.65	0.72	0.74	0.70	0.60	0.45	0.24	0.00
As(-), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
As(+), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Vu, ton:	0.58	0.58	0.58	0.54	0.23	0.07	0.38	0.68	0.99	1.30	1.60
Tu, ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

O-6' 8 #3 @ 27.5 D'-6'

BEAM: 15(A'-P) FLOOR: 2

Length: L = 1.31 m a = 0.00 m Section: b = 30.0 cm Sec: VG-30X60
Lu = 1.06 m c = 0.25 m h = 60.0 cm Mat: RConcrete2

X, m:	0.00	0.11	0.21	0.32	0.42	0.53	0.64	0.74	0.85	0.95	1.06
Mu(-), ton-m:	-0.01	-0.98	-1.97	-2.96	-3.96	-4.97	-6.00	-7.04	-8.08	-9.14	-10.20
Mu(+), ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
As(-), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
As(+), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Vu, ton:	9.11	9.21	9.31	9.41	9.51	9.61	9.61	9.61	9.61	9.61	9.61
Tu, ton-m:	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

A'-15 5 #3 @ 27.5 P-15

BEAM: 15(P-O) FLOOR: 2

Length: L = 8.07 m a = 0.25 m Section: b = 30.0 cm Sec: VG-30X60
Lu = 7.57 m c = 0.25 m h = 60.0 cm Mat: RConcrete2

X, m:	0.25	1.01	1.76	2.52	3.28	4.04	4.79	5.55	6.31	7.06	7.82
Mu(-), ton-m:	-12.02	-7.01	-3.87	-3.87	-3.87	-3.87	-3.87	-3.87	-7.31	-12.86	-19.36
Mu(+), ton-m:	4.01	3.87	4.10	4.84	4.71	4.45	3.87	3.87	3.87	3.87	6.45
As(-), cm2:	6.09	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	6.53	10.03
As(+), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Vu, ton:	7.74	7.39	6.16	4.94	3.72	4.36	5.58	6.80	8.03	9.25	9.60
Tu, ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	12.50	12.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	12.50	12.50

DESIGN

P-15 11 #3 @ 12.5 18 #3 @ 27.5 11 #3 @ 12.5 O-15

BEAM: 15(O-D') FLOOR: 2

Length: L = 2.02 m a = 0.25 m Section: b = 30.0 cm Sec: VG-30X60
Lu = 1.77 m c = 0.00 m h = 60.0 cm Mat: RConcrete2

X, m:	0.25	0.43	0.60	0.78	0.96	1.14	1.31	1.49	1.67	1.84	2.02
Mu(-), ton-m:	-22.79	-20.24	-17.76	-15.34	-12.98	-10.67	-8.42	-6.23	-4.08	-2.00	0.00
Mu(+), ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
As(-), cm2:	11.94	10.52	9.16	7.85	6.60	5.42	5.42	5.42	5.42	5.42	5.42
As(+), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Vu, ton:	13.51	13.51	13.51	13.51	13.21	12.89	12.57	12.24	11.92	11.60	11.28
Tu, ton-m:	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

O-15 8 #3 @ 27.5 D'-15

BEAM: 7'(A'-P) FLOOR: 2

Length: L = 1.31 m a = 0.00 m Section: b = 20.0 cm Sec: VG-20X60
Lu = 1.16 m c = 0.15 m h = 60.0 cm Mat: RConcrete2

X, m:	0.00	0.12	0.23	0.35	0.46	0.58	0.70	0.81	0.93	1.04	1.16
Mu(-), ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.03
Mu(+), ton-m:	0.02	0.06	0.09	0.11	0.12	0.13	0.12	0.10	0.07	0.03	0.00
As(-), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
As(+), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Vu, ton:	0.42	0.33	0.24	0.15	0.06	0.03	0.06	0.06	0.06	0.06	0.06
Tu, ton-m:	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

A'-7' 5 #3 @ 27.5 P-7'

BEAM: 7'(O-D') FLOOR: 2

Length: L = 2.02 m a = 0.15 m Section: b = 20.0 cm Sec: VG-20X60
Lu = 1.87 m c = 0.00 m h = 60.0 cm Mat: RConcrete2

X, m:	0.15	0.34	0.52	0.71	0.90	1.09	1.27	1.46	1.65	1.83	2.02
Mu(-), ton-m:	-0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mu(+), ton-m:	0.07	0.27	0.47	0.61	0.69	0.72	0.69	0.60	0.46	0.26	0.00
As(-), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
As(+), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Vu, ton:	0.63	0.63	0.63	0.60	0.29	0.04	0.32	0.63	0.93	1.24	1.55
Tu, ton-m:	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

O-7' 8 #3 @ 27.5 D'-7'

BEAM: 8'(A'-P) FLOOR: 2

Length: L = 1.31 m a = 0.00 m Section: b = 20.0 cm Sec: VG-20X60
Lu = 1.16 m c = 0.15 m h = 60.0 cm Mat: RConcrete2

X, m:	0.00	0.12	0.23	0.35	0.46	0.58	0.70	0.81	0.93	1.04	1.16
Mu(-), ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.03	-0.09
Mu(+), ton-m:	0.05	0.09	0.11	0.12	0.12	0.11	0.09	0.07	0.03	0.00	0.00
As(-), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
As(+), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Vu, ton:	0.33	0.24	0.15	0.06	0.03	0.12	0.15	0.15	0.15	0.15	0.15
Tu, ton-m:	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

DESIGN

A'-8' 5 #3 @ 27.5 P-8'

BEAM: 8'(O-D') FLOOR: 2

Length: L = 2.02 m a = 0.15 m Section: b = 20.0 cm Sec: VG-20X60
Lu = 1.87 m c = 0.00 m h = 60.0 cm Mat: RConcrete2

X, m:	0.15	0.34	0.52	0.71	0.90	1.09	1.27	1.46	1.65	1.83	2.02
Mu(-), ton-m:	-0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mu(+), ton-m:	0.07	0.27	0.47	0.61	0.70	0.74	0.71	0.63	0.49	0.30	0.05
As(-), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
As(+), cm2:	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Vu, ton:	0.66	0.66	0.66	0.63	0.32	0.04	0.29	0.60	0.90	1.21	1.52
Tu, ton-m:	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50

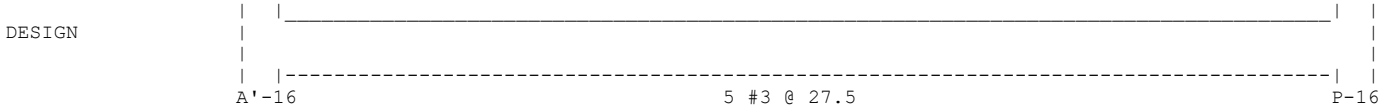
DESIGN

O-8' 8 #3 @ 27.5 D'-8'

BEAM: 16(A'-P) FLOOR: 2

Length: L = 1.31 m a = 0.00 m Section: b = 30.0 cm Sec: VG-30X60
Lu = 1.06 m c = 0.25 m h = 60.0 cm Mat: RConcrete2

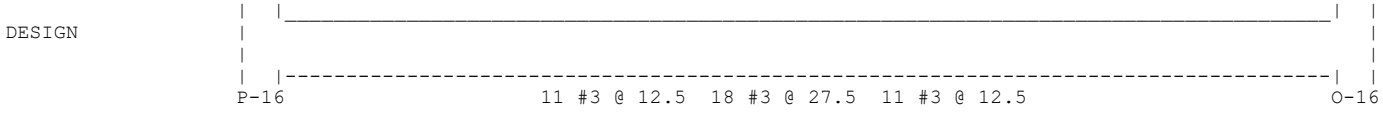
X, m:	0.00	0.11	0.21	0.32	0.42	0.53	0.64	0.74	0.85	0.95	1.06
Mu(-), ton-m:	-0.05	-0.38	-0.72	-1.07	-1.42	-1.78	-2.15	-2.53	-2.92	-3.32	-3.72
Mu(+), ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
As(-), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
As(+), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Vu, ton:	3.07	3.15	3.23	3.31	3.39	3.46	3.46	3.46	3.46	3.46	3.46
Tu, ton-m:	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50



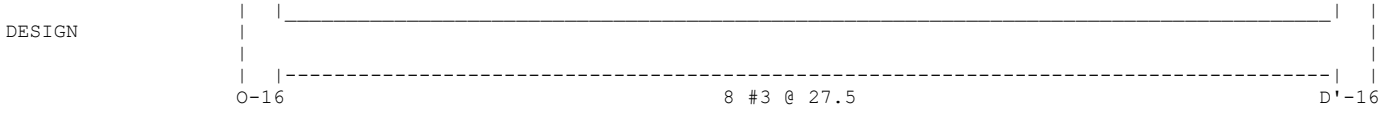
BEAM: 16(P-O) FLOOR: 2

Length: L = 8.07 m a = 0.25 m Section: b = 30.0 cm Sec: VG-30X60
Lu = 7.57 m c = 0.25 m h = 60.0 cm Mat: RConcrete2

X, m:	0.25	1.01	1.76	2.52	3.28	4.04	4.79	5.55	6.31	7.06	7.82
Mu(-), ton-m:	-9.63	-5.92	-3.02	-2.87	-2.87	-2.87	-2.87	-2.87	-5.54	-9.64	-14.35
Mu(+), ton-m:	4.10	4.68	5.03	4.96	4.28	3.57	3.33	3.07	2.87	2.87	4.78
As(-), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	7.32
As(+), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Vu, ton:	5.52	5.29	4.49	3.70	2.90	3.31	4.10	4.90	5.69	6.49	6.72
Tu, ton-m:	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	12.50	12.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	12.50	12.50



BEAM: 16(O-D') FLOOR: 2

Length: L = 2.02 m a = 0.25 m Section: b = 30.0 cm Sec: VG-30X60
Lu = 1.77 m c = 0.00 m h = 60.0 cm Mat: RConcrete2

X, m:	0.25	0.43	0.60	0.78	0.96	1.14	1.31	1.49	1.67	1.84	2.02
Mu(-), ton-m:	-8.70	-7.67	-6.67	-5.72	-4.81	-3.93	-3.08	-2.27	-1.50	-0.76	-0.06
Mu(+), ton-m:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
As(-), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
As(+), cm2:	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Vu, ton:	5.28	5.28	5.28	5.28	5.08	4.88	4.67	4.47	4.26	4.05	3.85
Tu, ton-m:	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Stirrup:	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3	#3
Spacing, cm:	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50	27.50