CANTIDADES DE ACERO PARA COLUMNAS

Elemento	Pos.	Diám.	No.	Pat. (cm)	Recta (cm)	Pat. (cm)	Long. (cm)	Total (cm)	Grado 60 (kg)
C1=C3	1	ø3/8"	14				101	1414	7.9
	2	ø5/8"	2				220	440	6.9
	3	ø5/8"	2				220	440	6.9
	4	ø1/2"	4				215	860	8.6
								Total+10%:	33.3
								(x2):	66.6
								ø3/8":	17.4
								ø1/2":	18.8
								ø5/8":	30.4
								Total:	66.6

Elemento	Pos.	Diám.	No.	Pat. (cm)	Recta (cm)	Pat. (cm)	Long. (cm)	Total (cm)	Grado 60 (kg)
C2	1	ø3/8"	14				101	1414	7.9
	2	ø5/8"	2				220	440	6.9
	3	ø5/8"	2				220	440	6.9
	4	ø1/2"	4				215	860	8.6
								Total+10%:	33.3
								ø3/8":	8.7
								ø1/2":	9.4
								ø5/8":	15.2
								Total:	33.3

Elemento	Pos.	Diám.	No.	Pat. (cm)	Recta (cm)	Pat. (cm)	Long. (cm)	Total (cm)	Grado 60 (kg)
C4=C5	1	ø3/8"	34				101	3434	19.2
	2	ø3/8"	68				41	2788	15.6
	3	ø5/8"	2				300	600	9.4
	4	ø5/8"	2				300	600	9.4
	5	ø1/2"	4				295	1180	11.7
								Total+10%:	71.8
								(x2):	143.6
C8	1	ø3/8"	8				101	808	4.5
	2	ø5/8"	2				155	310	4.8
	3	ø5/8"	2				155	310	4.8
	4	ø1/2"	2				150	300	3.0
	5	ø1/2"	2				145	290	2.9
								Total+10%:	22.0
								ø3/8":	81.6
								ø1/2":	32.1
								ø5/8":	51.9
								Total:	165.6

CANTIDADES DE ACERO PARA COLUMNAS

Elemento	Pos.	Diám.	No.	Pat. (cm)	Recta (cm)	Pat. (cm)	Long. (cm)	Total (cm)	Grado 60 (kg)
C6=C7	1	ø3/8"	22				101	2222	12.4
	2	ø5/8"	2				300	600	9.4
	3	ø5/8"	2				300	600	9.4
	4	ø1/2"	4				295	1180	11.7
								Total+10%:	47.2
								(x2):	94.4
								ø3/8":	27.2
								ø1/2":	25.8
								ø5/8":	41.4
								Total:	94.4

Elemento	Pos.	Diám.	No.	Pat. (cm)	Recta (cm)	Pat. (cm)	Long. (cm)	Total (cm)	Grado 60 (kg)
C9	1	ø3/8"	12				101	1212	6.8
	2	ø5/8"	2				265	530	8.3
	3	ø5/8"	2				265	530	8.3
	4	ø1/2"	4				260	1040	10.3
								Total+10%:	37.1
								ø3/8":	7.5
								ø1/2":	11.4
								ø5/8":	18.2
								Total:	37.1

Elemento	Pos.	Diám.	No.	Pat. (cm)	Recta (cm)	Pat. (cm)	Long. (cm)	Total (cm)	Grado 60 (kg)
C10	1	ø3/8"	21				101	2121	11.9
	2	ø5/8"	2				265	530	8.3
	3	ø5/8"	2				265	530	8.3
	4	ø1/2"	4				260	1040	10.3
								Total+10%:	42.7
								ø3/8":	13.1
								ø1/2":	11.3
								ø5/8":	18.3
								Total:	42.7

Elemento	Pos.	Diám.	No.	Pat. (cm)	Recta (cm)	Pat. (cm)	Long. (cm)	Total (cm)	Grado 60 (kg)
C11=C12=C13	1	ø3/8"	37				101	3737	20.9
	2	ø5/8"	2				265	530	8.3
	3	ø5/8"	2				265	530	8.3
	4	ø1/2"	4				260	1040	10.3
								Total+10%:	52.6
								(x3):	157.8
								ø3/8":	69.0
								ø1/2":	33.9
								ø5/8":	54.9
								Total:	157.8

CANTIDADES DE ACERO PARA LOSA DE N+0.00 A N+0.65

Elemento	Pos.	Diám.	No.	Pat. (cm)	Recta (cm)	Pat. (cm)	Long. (cm)	Total (cm)	Grado 60 (kg)
Armado longitudinal superior	1	ø3/8"	52	15	142	15	172	8944	50.1
	2	ø3/8"	5	15	315		330	1650	9.2
	3	ø3/8"	5	15	245		260	1300	7.3
								Total+10%:	73.3
								ø3/8":	73.3
								Total:	73.3

Elemento	Pos.	Diám.	No.	Pat. (cm)	Recta (cm)	Pat. (cm)	Long. (cm)	Total (cm)	Grado 60 (kg)
Armado longitudinal inferior	1	ø3/8"	52	15	142	15	172	8944	50.1
	2	ø3/8"	5	15	835	15	865	4325	24.2
								Total+10%:	81.7
								ø3/8":	81.7
								Total:	81.7

CANTIDADES DE ACERO PARA LOSA DE N+0.65 A N+1.10

Elemento	Pos.	Diám.	No.	Pat. (cm)	Recta (cm)	Pat. (cm)	Long. (cm)	Total (cm)	Grado 60 (kg)
Armado longitudinal superior	1	ø3/8"	51	15	142	15	172	8772	49.1
	2	ø3/8"	9	15	175		190	1710	9.6
	3	ø3/8"	7	15	262	15	292	2044	11.4
	4	ø3/8"	7	15	215		230	1610	9.0
	5	ø3/8"	7		250		250	1750	9.8
								Total+10%:	97.8
								ø3/8":	97.8
								Total:	97.8

Elemento	Pos.	Diám.	No.	Pat. (cm)	Recta (cm)	Pat. (cm)	Long. (cm)	Total (cm)	Grado 60 (kg)
Armado longitudinal inferior	1	ø3/8"	15	15	125		140	2100	11.8
	2	ø3/8"	7	15	262	15	292	2044	11.4
	3	ø3/8"	44	15	142	15	172	7568	42.4
	4	ø3/8"	7	15	695		710	4970	27.8
								Total+10%:	102.7
								ø3/8":	102.7
								Total:	102.7

CANTIDADES DE ACERO PARA LOSA DE N+1.10 A N+1.48

Elemento	Pos.	Diám.	No.	Pat. (cm)	Recta (cm)	Pat. (cm)	Long. (cm)	Total (cm)	Grado 60 (kg)
Armado longitudinal superior	1	ø3/8"	51	15	142	15	172	8772	49.1
	2	ø3/8"	9	15	175		190	1710	9.6
	3	ø3/8"	7	15	262	15	292	2044	11.4
	4	ø3/8"	7		250		250	1750	9.8
	5	ø3/8"	7	15	215		230	1610	9.0
								Total+10%:	97.8
								ø3/8":	97.8
								Total:	97.8

Elemento	Pos.	Diám.	No.	Pat. (cm)	Recta (cm)	Pat. (cm)	Long. (cm)	Total (cm)	Grado 60 (kg)
Armado longitudinal inferior	1	ø3/8"	15	15	125		140	2100	11.8
	2	ø3/8"	7	15	262	15	292	2044	11.4
	3	ø3/8"	44	15	142	15	172	7568	42.4
	4	ø3/8"	7	15	695		710	4970	27.8
								Total+10%:	102.7
								ø3/8":	102.7
								Total:	102.7

CANTIDADES DE ACERO PARA LOSA EN N+1.48

Elemento	Pos.	Diám.	No.	Pat. (cm)	Recta (cm)	Pat. (cm)	Long. (cm)	Total (cm)	Grado 60 (kg)
Armado longitudinal superior	1	ø3/8"	10	15	142	15	172	1720	9.6
								Total+10%:	10.6
								ø3/8":	10.6
								Total:	10.6

Elemento	Pos.	Diám.	No.	Pat. (cm)	Recta (cm)	Pat. (cm)	Long. (cm)	Total (cm)	Grado 60 (kg)
Armado longitudinal inferior	1	ø3/8"	10	15	142	15	172	1720	9.6
								Total+10%:	10.6
								ø3/8":	10.6
								Total:	10.6

ALCALDÍA DE SANTA MARTA
Distrito Turítico, Cultural e Histórico

PROYECTO

RAMPA – EL CURVAL

DIRECCIÓN

Santa Marta, Magdalena

SUPERVISOR

Luis Felipe Gutierrez Castillo
Gerente de infraestructura
Aldaldía de Santa Marta
M.P. BL230-30375

DISEÑO ESTRUCTURAL

Gustavo Ariel Chang Nieto
M. P. Nº. 1320272728 BLV.
CEL. 300 800 43 34
E-mail. gchang@engineer.com

GEOTECNISTA

ERNESTO MOLINA MENDOZA
M.P.N° 08202-2306 ATL

INTERVENTORÍA

ING. JORGE ZUÑIGA CESPEDES
M.P.N° 08202-188686 ATL

OBSERVACIONES:

Cargas:
Carga viva: 100 kgf/m

Materiales:
Pasamanos ASTM A500 GrC.
Placa base A36

Marco Normativo:
NSR-10
ANSI/AISC 360-10 (LRFD)

Nota:
Está estructura debe cumplir con todos los requisitos exigidos en el TITULO I NSR-10. SUPERVISIÓN TÉCNICA.

CONTIENE
- Cantidades de obra

FECHA
27/01/2025

PLANO
E11

ESCALAS
Las indicadas