CANTIDADES DE ACERO PARA VIGA 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)
Marco 2	1	ø1/2"	4	21	834.7	21	877	3508	34.9
	2	ø5/8"	1	26	169		195	195	3.0
	3	ø5/8"	1		154	26	180	180	2.8
	4	ø3/8"	55	9.5	84.2	9.5	103	5665	31.7
								Total+10%:	79.6
Marco 3	1	ø1/2"	2	23	142	23	188	376	3.7
	2	ø1/2"	2	21	142	21	184	368	3.7
	3	ø3/8"	8	9.5	84.2	9.5	103	824	4.6
								Total+10%:	13.2
								ø3/8":	39.9
								ø1/2":	46.5
								ø5/8":	6.4
								Total:	92.8

Elemento	Pos.	Diám.	No.	Pat. (cm)	Recta (cm)	Pat. (cm)	Long. (cm)	Total (cm)	Grado 60 (kg)
Marco 4	1	ø1/2"	2	23	142.5	23	188	376	3.7
	2	ø1/2"	2	21	142.5	21	184	368	3.7
	3	ø3/8"	8	9.5	84.2	9.5	103	824	4.6
								Total+10%:	13.2
								ø3/8":	5.1
								ø1/2":	8.1
								Total:	13.2

Elemento	Pos.	Diám.	No.	Pat. (cm)	Recta (cm)	Pat. (cm)	Long. (cm)	Total (cm)	Grado 60 (kg)
Marco 5	1	ø1/2"	2	23	714.3	23	760	1520	15.1
	2	ø1/2"	2	21	714.3	21	756	1512	15.0
	3	ø5/8"	1	26	169		195	195	3.0
	4	ø5/8"	1		169	26	195	195	3.0
	5	ø3/8"	47	9.5	84.2	9.5	103	4841	27.1
								Total+10%:	69.5
								ø3/8":	29.8
								ø1/2":	33.1
								ø5/8":	6.6
								Total:	69.5

CANTIDADES DE ACERO PARA VIGA 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)
Marco 2	1	ø1/2"	4	21	713.5	21	756	3024	30.1
	2	ø1/2"	1	25	170		195	195	1.9
	3	ø1/2"	1		170	35	205	205	2.0
	4	ø3/8"	47	9.5	84.2	9.5	103	4841	27.1
								Total+10%:	67.2
Marco 3	1	ø5/8"	2	35	142	35	212	424	6.6
	2	ø1/2"	2	21	142	21	184	368	3.7
	3	ø3/8"	8	9.5	84.2	9.5	103	824	4.6
								Total+10%:	16.4
								ø3/8":	34.9
								ø1/2":	41.4
								ø5/8":	7.3
								Total:	83.6

Elemento	Pos.	Diám.	No.	Pat. (cm)	Recta (cm)	Pat. (cm)	Long. (cm)	Total (cm)	Grado 60 (kg)
Marco 4	1	ø1/2"	4	21	262	21	304	1216	12.1
	2	ø3/8"	18	9.5	84.2	9.5	103	1854	10.4
								Total+10%:	24.8
Marco 5	1	ø1/2"	4	21	262	21	304	1216	12.1
	2	ø3/8"	18	9.5	84.2	9.5	103	1854	10.4
								Total+10%:	24.8
Marco 6	1	ø5/8"	2	26	142	26	194	388	6.1
	2	ø1/2"	2	21	142	21	184	368	3.7
	3	ø3/8"	8	9.5	84.2	9.5	103	824	4.6
								Total+10%:	15.8
								ø3/8":	28.0
								ø1/2":	30.7
								ø5/8":	6.7
								Total:	65.4

Elemento	Pos.	Diám.	No.	Pat. (cm)	Recta (cm)	Pat. (cm)	Long. (cm)	Total (cm)	Grado 60 (kg)
Marco 7	1	ø1/2"	2	23	713.5	23	760	1520	15.1
	2	ø1/2"	2	21	713.5	21	756	1512	15.0
	3	ø1/2"	1	21	169		190	190	1.9
	4	ø1/2"	1		169	21	190	190	1.9
	5	ø3/8"	47	9.5	84.2	9.5	103	4841	27.1
								Total+10%:	67.1
								ø3/8":	29.8
								ø1/2":	37.3
								Total:	67.1

CANTIDADES DE ACERO PARA VIGA 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)
Marco 2	1	ø1/2"	4	21	713.1	21	755	3020	30.0
	2	ø5/8"	1	26	169		195	195	3.0
	3	ø5/8"	1		169	26	195	195	3.0
	4	ø3/8"	47	9.5	84.2	9.5	103	4841	27.1
								Total+10%:	69.4
Marco 3	1	ø5/8"	2	26	142	26	194	388	6.1
	2	ø1/2"	2	21	142	21	184	368	3.7
	3	ø3/8"	8	9.5	84.2	9.5	103	824	4.6
								Total+10%:	15.8
								ø3/8":	34.8
								ø1/2":	37.1
								ø5/8":	13.3
								Total:	85.2

Elemento	Pos.	Diám.	No.	Pat. (cm)	Recta (cm)	Pat. (cm)	Long. (cm)	Total (cm)	Grado 60 (kg)
Marco 4	1	ø1/2"	4	21	262	21	304	1216	12.1
	2	ø3/8"	18	9.5	84.2	9.5	103	1854	10.4
								Total+10%:	24.8
Marco 5	1	ø1/2"	4	21	262	21	304	1216	12.1
	2	ø3/8"	18	9.5	84.2	9.5	103	1854	10.4
								Total+10%:	24.8
								ø3/8":	23.0
								ø1/2":	26.6
								Total:	49.6

Elemento	Pos.	Diám.	No.	Pat. (cm)	Recta (cm)	Pat. (cm)	Long. (cm)	Total (cm)	Grado 60 (kg)
Marco 6	1	ø5/8"	2	26	769		795	1590	24.8
	2	ø5/8"	2		199	26	225	450	7.0
	3	ø1/2"	2	21	833.1	21	875	1750	17.4
	4	ø3/8"	55	9.5	84.2	9.5	103	5665	31.7
								Total+10%:	89.0
								ø3/8":	34.9
								ø1/2":	19.1
								ø5/8":	35.0
								Total:	89.0

CANTIDADES DE ACERO PARA VIGA EN N+1.48

Elemento	Pos.	Diám.	No.	Pat. (cm)	Recta (cm)	Pat. (cm)	Long. (cm)	Total (cm)	Grado 60 (kg)
Marco 1	1	ø5/8"	2	26	142	26	194	388	6.1
	2	ø1/2"	2	21	142	21	184	368	3.7
	3	ø3/8"	8	9.5	84.2	9.5	103	824	4.6
								Total+10%:	15.8
Marco 2	1	ø5/8"	2	26	142	26	194	388	6.1
	2	ø1/2"	2	21	142	21	184	368	3.7
	3	ø3/8"	8	9.5	84.2	9.5	103	824	4.6
								Total+10%:	15.8
Marco 3=Marco 4	1	ø1/2"	4	21	142	21	184	736	7.3
	2	ø3/8"	8	9.5	84.2	9.5	103	824	4.6
								Total+10%:	13.1
								(x2):	26.2
								ø3/8":	20.2
								ø1/2":	24.2
								ø5/8":	13.4
								Total:	57.8

CANTIDADES DE ACERO PARA ZAPATAS

Elemento	Pos.	Diám.	No.	Pat. (cm)	Recta (cm)	Pat. (cm)	Long. (cm)	Total (cm)	Grado 60 (kg)
C1-C2-C3-C4-C5-C7 -C6	1	ø1/2"	33	23	241	23	287	9471	94.2
	2	ø1/2"	15	31	475	31	537	8055	80.1
	3	ø1/2"	33	23	241	23	287	9471	94.2
	4	ø1/2"	15	31	475	31	537	8055	80.1
								Total+10%:	383.46
C10-C9-C11-C13-C12 -C8	26	ø1/2"	33	23	241	23	287	9471	94.2
	27	ø1/2"	15	30	476	30	536	8040	80.0
	28	ø1/2"	33	23	241	23	287	9471	94.2
	29	ø1/2"	15	30	476	30	536	8040	80.0
								Total+10%:	383.24
								Total:	766.7

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

ESCALAS
Las indicadas

PLANO
E12