

REINFORCEMENT BAR ESTIMATE

PROJECT: PROPOSED RESIDENTIAL FLAT DEVELOPMENT ON PLOT LR NO.,

PLOT: LR NO. YYYYYYYYY

NAIROBI COUNTY.

CLIENT: XXXXXXXXXXXX

P.O BOX,

_____, KENYA.

DATE: FEB 2025.

**PROPOSED RESIDENTIAL FLAT DEVELOPMENT ON PLOT LR NO. YYYYYYYYYY COUNTY FOR
XXXXXXXXXXXXXX**

JOB: D01:02:2025
FOR
JOHN NJUGUNA NGETHE &
MARY WAMBUI MWAI

SUMMARY

Bending Schedule

Date:

2/25/2025

Checked by

T.N

(B.S 8666:2005)

Done by:

D.Kamau

Bar Type	Number of Full Bars N.o	Weight of Full Bars required KG	E/r
T8	5550.4	26585.4	
T10	8403.9	62399.7	
T12	588.8	6280.7	
T16	1632.4	30955.8	
T20	1864.3	55239.7	
T25	74.3	3438.2	
B.R.C	9.4	274.4	
Binding Wire		2577.1	

STRUCTURAL MEMBER: BEAM

PROPOSED RESIDENTIAL FLAT DEVELOPMENT ON PLOT LR NO. YYYYYYYYYY COUNTY FOR XXXXXXXXXXXXXX									
JOB: D01:02:2025				1ST FLOOR BEAM REINFORCEMENT					
Bending Schedule				Date:	2/25/2025			Checked by	T.N
(B.S 8666:2005)				Done by:	D.Kamau				
Beam	Position	Type/ Size	Length	No. of Bars	Shape	Total Legth Required	No of Full Bars required	Weight of Full Bars required	E/r
			mm	No.	Code: Bs 8666:2005	mm	No.	KG	
Beam 01	Top Bars	D25	19600	6.0	11	117600	9.8	453.7	
	Overlap	D25	2600	6.0	01	15600	1.3	60.2	
	AntiCrack	D16	19600	4.0	11	78400	6.5	123.9	
	Overlap	D16	800	2.0	01	1600	0.1	2.5	
	Bottom Bars	D25	19600	8.0	11	156800	13.1	604.9	
	Overlap	D25	2600	8.0	01	20800	1.7	80.2	
	Shear Links (2L)	D10	2400	215.6	51	517440	43.1	319.4	
	Shear Links (1L)	D10	2100	215.6	32	452760	37.7	279.5	
Beam 02	Top Bars	D20	4800	4.0	11	19200	1.6	47.4	
	Bottom Bars	D20	4800	4.0	11	19200	1.6	47.4	
	Shear Links (2L)	D8	1600	35.2	51	56320	4.7	22.3	
	Shear Links (1L)	D8	750	35.2	32	26400	2.2	10.4	
Beam 03	Top Bars	D20	274200	4.0	11	1096800	91.4	2708.2	
	Bottom Bars	D20	274200	3.0	11	822600	68.6	2031.1	
	Overlap	D20	2000	20.0	01	40000	3.3	98.8	
	Shear Links (2L)	D8	1500	2010.8	51	3016200	251.4	1191.7	
	Shear Links (1L)	D8	700	2010.8	32	1407560	117.3	556.1	
Beam 04	Top Bars	D16	134200	4	11	536800	44.7	848.3	
	Bottom Bars	D16	134200	3	11	402600	33.6	636.2	
	Overlap	D16	1600	14	01	22400	1.9	35.4	
	Shear Links (2L)	D8	1400	984.1	51	1377787	114.8	544.3	
	Shear Links (1L)	D8	650	984.1	32	639687	53.3	252.7	
Beam 05	Top Bars	D16	59000	3	11	177000	14.8	279.7	
	Bottom Bars	D16	59000	3	11	177000	14.8	279.7	
	Overlap	D16	1600	5	01	8000	0.7	12.6	
	Shear Links (2L)	D8	1400	432.7	51	605733	50.5	239.3	
Beam 06	Top Bars	D16	21700	2	11	43400	3.6	68.6	
	Bottom Bars	D16	21700	2	11	43400	3.6	68.6	
	Overlap	D16	1600	30	01	48000	4.0	75.9	
	Shear Links (2L)	D8	1400	119.4	51	167090	13.9	66.0	
						1ST FLOOR BEAM REINFORCEMENT			
						Type/ Size	No of Full Bars required	Weight of Full Bars required	E/r
						T8	608.1	2882.8	
						T10	80.9	598.9	
						T16	128.2	2431.4	
						T20	166.5	4932.9	
						T25	25.9	1199.1	
						Total		12045	
Binding Wire		145							

STRUCTURAL MEMBER: SUBSTRUCTURE

PROPOSED RESIDENTIAL FLAT DEVELOPMENT ON PLOT LR NO. YYYYYYYYYY COUNTY FOR XXXXXXXXXXXXXXX										
JOB: D01:02:2025					FOUNDATION TO GROUND (>1500mm) REINFORCEMENT					
Bending Schedule (B.S 8666:2005)					Date:	3/5/2025			Checked by	T.N
					Done by:	D.Kamau				
MEMBER	Position	No. of Members	Type/ Size	Length of Each Bar	No. of Bars	Shape	Total Legth Required	No of Full Bars required	Weight of Full Bars required	E/r
		No.		mm	No.	Code: Bs 8666:2005	mm	No.	KG	
COLUMNS	C1	2	D25	3000	12	11	72000	6.0	277.8	
			D8	4000	9	51	72000	6.0	44.4	
	C2	2	D25	3000	12	11	72000	6.0	277.8	
			D8	4000	9	51	72000	6.0	44.4	
	C3	6	D20	3000	8	11	144000	12.0	355.6	
			D8	3400	9	51	183600	15.3	72.5	
	C4	6	D20	3000	8	11	144000	12.0	355.6	
			D8	3400	9	51	183600	15.3	72.5	
	C5	6	D20	3000	8	11	144000	12.0	355.6	
			D8	3400	9	51	183600	15.3	72.5	
	C6	9	D20	3000	12	11	324000	27.0	800.0	
			D8	3700	9	51	299700	25.0	118.4	
	C7	3	D20	3000	12	11	108000	9.0	266.7	
			D8	3700	9	51	99900	8.3	39.5	
	C8	17	D20	3000	8	11	408000	34.0	1007.4	
			D8	1600	9	51	244800	20.4	96.7	
	C9	17	D20	3000	8	11	408000	34.0	1007.4	
			D8	1600	9	51	244800	20.4	96.7	
BASE B1	Bottom B1	4	D20	3500	15	21	210000	17.5	518.5	
	Bottom B2		D20	3500	15	21	210000	17.5	518.5	
BASE B2	Bottom B1	12	D16	3000	13	21	468000	39.00	739.56	
	Bottom B2		D16	3000	13	21	468000	39.00	739.56	
BASE B3	Bottom B1	8	D16	2800	12	21	268800	22.40	424.77	
	Bottom B2		D16	2800	12	21	268800	22.40	424.77	
BASE B4	Bottom B1	14	D16	2500	10	21	350000	29.17	553.09	
	Bottom B2		D16	2500	10	21	350000	29.17	553.09	
BASE B5	Bottom B1	17	D16	2400	8	21	326400	27.20	515.79	
	Bottom B2		D16	2400	8	21	326400	27.20	515.79	
BASE B6	Bottom B1	2	D20	5100	11	21	112200	9.4	277.0	
	Bottom B2		D20	2600	23	21	119600	10.0	295.3	
	Top T1		D20	5100	11	21	112200	9.4	277.0	
	Top T2		D20	2600	23	21	119600	10.0	295.3	
BASE B7	Bottom B1	2	D20	4200	13	21	109200	9.1	269.6	
	Bottom B2		D20	3100	19	21	117800	9.8	290.9	
	Top T1		D20	4200	13	21	109200	9.1	269.6	
	Top T2		D20	3100	19	21	117800	9.8	290.9	
BASE B8	Bottom B1	1	D20	4600	11	21	50600	4.2	124.9	
	Bottom B2		D20	2700	21	21	56700	4.7	140.0	
	Top T1		D20	4600	11	21	50600	4.2	124.9	
	Top T2		D20	2700	21	21	56700	4.7	140.0	
Strip footing	Bottom B1	1	D8	650	400	21	260000	21.7	102.7	
	Bottom B2		D8	135000	3	11	405000	33.8	160.0	