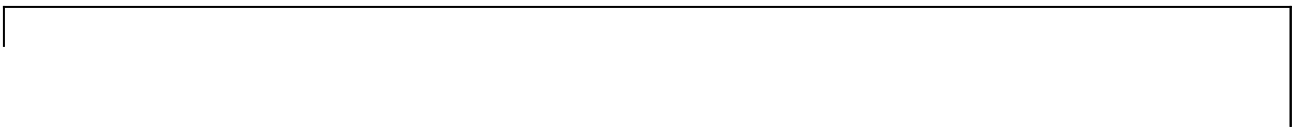
Number	Location	Shape	Diameter(Ø)	Length	No Of Bar	No Of Member
1	Footing Pad					
	F-1-		12	2.55	14	2
2	Short Columen					
	FC-1-		20	3.7	10	12
	STIR UP					
	FC-1-		8	1	6	12
3	Gread Beam					
	GB1		14	5.7	3	2
			14	5.7	3	2
			8	4.81	26	1
	GB2		14	5.5	3	1
			14	10	3	1
			14	5.5	3	1
			14	9	3	1
			14	12	3	1
			8	4.81	26	4
	GB3		14	10.3	3	1
			14	20.6	3	1
			14	5.5	3	1
			14	4	3	1
			14	8.1	3	1
			8	4.81	26	5
	GB4&GB5		14	7.8	3	2
			14	5	3	2
			14	8.1	3	2
			14	5	3	2
			8	11.52	58	2
	GB6		14	11.1	3	1
			14	11.1	3	1
			8	10.2	52	1
	GB7&GB8		14	12	3	2
			14	5	3	2
			14	7.5	3	2
			8	11.21	57	2
4	Grond Floor Slab					
	GFS-1-		8	4.3	18	1
	GFS-2-		8	3.8	16	1
	GFS-3-		8	4.7	19	1
	GFS-4-		8	6.6	27	1
	GFS-5-		8	5.4	22	1

Number	Location	Shape	Diameter(Ø)	Length	No Of Bar	No Of Member
1	Elevation Column In G+0					
	C-1-		20	4	10	12
	Elevation Column In G+1					
	C-1-		20	4	8	12
	STIR UP					
	C-1-		6	1	6	15
2	First Floor Beam					
	FFB-1-		14	5.75	2	1
			14	5.75	2	1
	FFB-2-		14	5.5	2	1
			14	10	2	1
			14	5.5	2	1
			14	1.2	2	1
			14	9	2	1
	FFB-3-		16	7.8	3	1
			16	5	2	1
			20	3.4	2	1
			20	3.65	2	1
			20	8.1	2	1
	FFB-4-		20	7.8	4	1
			20	5	2	1
			20	3.4	3	1
			20	3.65	3	1
			20	8.1	2	1
			20	5	2	1
	FFB-5-		20	6.6	3	1
			20	6.1	3	1
			20	6.2	2	1
			20	3.4	3	1
			20	12.3	2	1
	FFB-6-		20	6.6	3	1
			20	5.9	3	1
			20	3.4	3	1

			20	12	2	1
	FFB-7		14	6.6	2	1
			14	5.9	3	1
			16	3.4	3	1
			16	12	3	1
4	Roof Beam					
	RFB-1-		14	10.1	2	1
			14	20.2	2	1
			14	5.3	2	1
			14	4	2	1
			14	12	2	1
	RFB-2-		14	10.1	2	1
			14	22	2	1
			14	5.3	2	1
			14	2.2	2	1
			14	12	2	1
	RFB-3-		14	7.6	2	1
			14	5.7	2	1
			14	8.8	2	1
			14	4.8	2	1
	RFB-4-		14	1.9	2	1
			14	1.9	2	1
	RFB-5-		14	1.6	2	1
			14	1.6	2	1
	Stir up first floor					
	FFB-1-		8	4.81	25	1
	FFB-2-		8	4.81	25	4
	FFB-3-		10	11.52	64	1
	FFB-4		10	11.52	89	1
	FFB-5-		10	11.52	89	1
	FFB-6-		10	11.22	87	1
	FFB-7		10	11.22	63	1
	STIR UP for second floor					
	SFB-1-		8	4.81	25	5
	SFB-2-		10	12.52	63	1
	SFB-3-		10	12.52	97	1
	STIR UP for roof beam					
	RFB-1-		8	4.81	25	5
	RFB-2-		8	4.81	25	5
	RFB-3-		8	12.52	63	1
	RFB-4-		8	1.3	7	1
	RFB-5-		8	1	5	1



RAINFORCEMMENT FOR SUB STRUCTURE

		Length Of Rinforcement					
Quantity	Ø6	Ø8	Ø10	Ø12	Ø14	Ø16	Ø20
71.4							71.4
0							
444							444
0							
72		72					
0							
34.2					34.2		
34.2					34.2		
125.06		125.06					
16.5					16.5		
30					30		
16.5					16.5		
27					27		
36					36		
500.24		500.24					
30.9					30.9		
61.8					61.8		
16.5					16.5		
12					12		
24.3					24.3		
625.3		625.3					
46.8					46.8		
30					30		
48.6					48.6		
30					30		
1336.32		1336.32					
33.3					33.3		
33.3					33.3		
530.4		530.4					
72					72		
30					30		
45					45		
1277.94		1277.94					
0		0					
77.4		77.4					
60.8		60.8					
89.3		89.3					
178.2		178.2					
118.8		118.8					

Total		4991.76			708.9		515.4
Unit Weight (kg/m)	0.22	0.39	0.62	0.89	1.21	1.58	2.47
Total Weight in KG		1946.7864			857.769		1273.038
Grand Total (KG)							

RAINFORCEMENT FOR SUPER STRUCTURE

	Length Of Rinforcement						
Totl Lngth	Ø6	Ø8	Ø10	Ø12	Ø14	Ø16	Ø20
480							480
384							384
90	90						
11.5					11.5		
11.5					11.5		
11					11		
20					20		
11					11		
2.4					2.4		
18					18		
23.4						23.4	
10						10	
6.8							6.8
7.3							7.3
16.2							16.2
31.2							31.2
10							10
10.2							10.2
10.95							10.95
16.2							16.2
10							10
19.8							19.8
18.3							18.3
12.4							12.4
10.2							10.2
24.6							24.6
19.8							19.8
17.7							17.7
10.2							10.2

24							24
13.2					13.2		
17.7					17.7		
10.2						10.2	
36						36	
20.2					20.2		
40.4					40.4		
10.6					10.6		
8					8		
24					24		
20.2					20.2		
44					44		
10.6					10.6		
4.4					4.4		
24					24		
15.2					15.2		
11.4					11.4		
17.6					17.6		
9.6					9.6		
3.8					3.8		
3.8					3.8		
3.2					3.2		
3.2					3.2		
120.25		120.25					
481		481					
737.28			737.28				
1025.28			1025.28				
1025.28			1025.28				
976.14			976.14				
706.86			706.86				
601.25		601.25					
788.76			788.76				
1214.44			1214.44				
601.25		601.25					
601.25		601.25					
788.76		788.76					
9.1		9.1					
5		5					

total	90	3207.86	6474.04		390.5	79.6	1139.85
Unit Weight (kg/m)	0.22	0.39	0.62	0.89	1.21	1.58	2.47
Total Weight in KG	19.8	1251.0654	4013.9048	0	472.505	125.768	2815.4295
Grand Total (KG)							

Ø24	Remark

4077.5934	

Ø24	Remark

8698.4727	

MINISTRY OF EDUCATION ADMI
LOCATIONADIGRAT
PROJECT TYPE ADMINISTRATION BULIDING
LABOUR SCHEDULING

1.SUB STRUCTURE

TIMSING	DIMENTION	SQUARING	unit
1	22.625		
	15.4		
		348.425	m2
1	21.625		
	14.4		
	0.3		
		93.42	
21	1.65		
	1.65		
	1.5		
		85.75875	m3
21	1.65		
	1.65		
	1.5		
		85.75875	m3
		171.5175	
2	20.05		
	0.8		
	1		
		32.08	m3
1	18.75		
	0.8		
	1		
		15	
1	16.25		
	0.8		
	1		
		13	m3
4	8.25		
	0.8		
	1		
		26.4	

1	5.25		
	0.8		
	1		
		4.2	m3
2	4.75		
	0.8		
	1		
		7.6	
		98.28	m3
2	20.05		
	0.5		
	1		
		20.05	m3
1	18.75		
	0.5		
	1		
		9.375	m3
1	16.25		
	0.5		
	1		
		8.125	m3
4	8.25		
	0.5		
	1		
1	5.25	16.5	
	0.5		
	1		
		2.625	m3
2	4.75		
	0.5		
	1		
		4.75	m3
		61.425	
21	1.4		
	1.4		
		41.16	m2

		41.16	m2
21	1.4		
	1.4		
	0.4		
		16.464	m3
		16.464	m3
21	2.1		
	0.25		
	0.25		
		2.75625	m3
		2.75625	
2	20.05		
	0.5		
	0.3		
		6.015	m3
1	18.75		
	0.5		
	0.3		
		2.8125	m3
1	16.25		
	0.5		
	0.3		
		2.4375	m3
4	8.25		
	0.5		
	0.3		
1	5.25	4.95	
	0.5		
	0.3		
		0.7875	m3
2	4.75		
	0.5		
	0.3		
		1.425	m3
		18.4275	
		37.64775	
1	18.75		
	12.25		
	0.25		

		57.421875	
1	5.75		
	1.3		
	0.25		
		1.86875	
		59.290625	
1	4		
	2.25		
	0.25		
		2.25	
		18.4275	
		38.613125	m3
		711.6425	m3
		160.418375	m3
		551.224125	m3
84	1.425		
	0.4		
		47.88	
		1528.205625	m2
84	2.3		
	0.275		
		53.13	m2
		1629.215625	m2
1	37.975		
	0.3		
		11.3925	m2
2	17.875		
	0.3		
		10.725	m2
2	17.25		
	0.3		
		10.35	m2
2	14.95		
	0.3		
		8.97	m2
8	10.25		
	0.3		
		24.6	m2
2	10.5		

	0.3		
		6.3	m2
		72.3375	m2
		3229.75875	m2

NISTRAION TYPE

DESCRIPTION	TIMSING
	42
1.1 Earth work	
1.1.1 site clrance with a depth of 20cm	
m2	6
1.1.2 Bulk Excavation with adept Of 30cm	
	2
1.1.3 Pit Excavation for Footing F-1	
m3	8
Ditto Pit Excavation For Fooing F-1 up to 300cm depth	
m3	2
TotalPit	
1.1.4 Trench Excavation	
1.1.4.1 Trench Excavation For Axis -A AND B-	2
m3	
Ditto Trench Excavation Axis -C	2
m3	
Ditto Trench Excavation Axis -D	2
m3	
Ditto Trench Excavation Axis -1,2,3,4	
m3	2

Ditto Trench Excavation Axis -5		18
m3		4
Ditto Trench Excavation Axis -1',2'		
m3		
Total Trench Excavation		168
1.2 Massonary Work (Stone)		
1.1.4.1 For Axis -A AND B-		
		6
m3		
Ditto Axis -C		2
m3		8
Ditto Axis -D		
		2
m3		
Ditto Axis -1,2,3,4		
		2
m3		
Ditto Axis -5		2
		4
m3		
Ditto Axis -1',2'		
		4
m3		
1.4 Concrete Work		4
1.4.1 Lean Concrete For F-1- With ADepth Of 5cm		
M2		16

Total Lean Concrete	
1.4.2 C-25 Reinforced Concrete For Pad F-1-	
	4
M3	
TotalC-25 Reinforced Concrete For Pad	
1.4.3 C-25 Reinforced Concrete For Short Column C-1-	2
M3	
Total C-25 Reinforced Concrete For Short Column	
CONCRETE for grade beam	
Concrete of grade beam For Axis -A AND B-	1
	1
m3	
Ditto Concrete of grade beam For Axis -C	
	1
m3	
Ditto Concrete of grade beam ForAxis -D	1
m3	1
Ditto Concrete of grade beam For -1,2,3,4	
	1
m3	
Ditto Concrete of grade beam For Axis -5	
	3
m3	1
Ditto Concrete of grade beam For Axis -1',2'	
	1
m3 total concretefor grade beam	
TOTAL concrete work of sub structer	
Hard core at a depth of 25cm	

	1
	1
	1
	1
grade beam	
TOTAL hard core	
	1
BACK FILL	
cart away	
BACK FILL	1
Form work for foting pads 'F1'	
M2	
Total Form Work For Pad	1
1.5.2 Form Work For Short Column C-1-	
M2	1
Total Form Work For Short Column	
1.5.3 Form Work For Gread Beam For Axis -A-	1
M2	
Ditto But Axis -B	
	1
M2	
Ditto But Axis C	
	1
M2	
Ditto But Axis D	
M2	1
Ditto But Axis 1,2,3,4	
M2	1
Ditto But Axis For GB-2',5	

M2	
Form Work For Gread Beam	
TOTAL area of form work of sub structure	
	8
	8
	4
	2
	4
	1
	1
	3
	1
	1
	1

1
1
1
2
1
3
1
1
1

2 SUPPER STRUCTURE

DIMENTION	SQUARING	unit
0.25		
0.25		
2.6		
	6.825	m3
	6.825	m3
18.75		
0.25		
0.4		
	11.25	m3
16.25		
0.25		
0.4		
	3.25	m3
11.25		
0.25		
0.4		
	9	m3
5.5		
0.25		
0.4		
	1.1	m3
7.5		
0.25		
0.4		
	1.5	m3
	26.1	m3
18.75		
12.25		
0.15		
	68.90625	m3
	9.7875	
4		
2.25		
0.15	2.7	m3
	56.41875	m3
2.5		
1.2		
0.15	0.9	m3

1.2 0.3 0.15	0.972	m3
3 1.2 0.15	2.16	
	4.032	m3
	93.37575	m3
0.275 2.6	120.12	M2
		m2
17.25 0.3	31.05	M2
15.25 0.3	9.15	M2
11.25 0.3	27	M2
5.25 0.3	3.15	M2
7.75 0.3	4.65	M2
37.975 0.4	30.38	m2
17.875 0.4	28.6	m2
17.25 0.4	27.6	m2
14.95 0.4	23.92	m2
10.25		

0.4		
	65.6	m2
10.5		
0.4		
	16.8	m2
	192.9	
38.613125		
0.25		
	308.905	M2
	308.905	m2
	621.925	M2
4.76		
2.6		
	12.376	M2
7.21		
2.6		
	18.746	M2
6.8		
2.6		
	17.68	M2
9.67		
2.6		
	25.142	M2
6.92		
2.61		
	18.0612	M2
2.5		
2.6		
	6.5	
3.85		
2.6		
	30.03	M2
14.2		
2.6		
	36.92	M2
4.96		
2.6		
	12.896	M2
	178.3512	M2

9.79		
2.6		
	25.454	M2
8.81		
2.6		
	22.906	M2
3.85		
2.6		
	10.01	
1.98		M2
2.6		
	5.148	
		M2
9.07		
2.6		
	23.582	M2
6.22		
2.6		
	16.172	M2
6.52		
2.6		M2
	16.952	
7.85		
2.6		
	20.41	
8.2		
2.6		
	21.32	M2
4.35		
2.6		M2
	11.31	
7.7		
2.6		
	20.02	M2
3.85		
2.6		
	10.01	M2
7.65		
2.6		

	19.89	M2
	223.184	M2
	401.5352	
178.3512		
	1426.8096	M2
223.184		
	1785.472	
	3212.2816	m2
18.75		
12.25		
	918.75	M2
	4131.0316	M2
401.5352		
	803.0704	M2
18.75		
12.25		
	918.75	M2
	1721.8204	m2
8.75		
5.35		
	46.8125	M2
8		
3.85		
	30.8	M2
3.78		
3.85		
	43.659	M2
3.8		
3.76		
	14.288	M2
8.7		
2.25		
	19.575	M2
10.7		

3.75		
	40.125	M2
5.2		
1.65		
	8.58	M2
	51.12	M2
5.35		
3.85		
	20.5975	M2
3.4		
3.85		
	13.09	M2
3.95		
3.85		
	30.415	M2
3.8		
3.76		
	14.288	M2
3.8		
3.85		
	43.89	
8.7		
2.5		
	21.75	M2
10.7		
3.75		
	40.125	M2
5.2		
1.65		
	8.58	M2
	53.295	M2
	257.84	
	104.415	

DESCRIPTION
2.1 Concrete Work
2.1.1 C-25 Reinforced Concrete For Elevation Column C-1- in G+0,G+1
TotalConcreteWorkForElevationColumn
2.1.2 C-25 Reinforced Concrete For intermidet and top tie Beam For G+0&G+1 For Axis A,A'+B,C
Ditto Axis -D
Ditto Axis -1,2,3&4
Ditto Axis -2'.
Ditto Axis -5
TotalConcreteWorkFor Floor beam
2.1.4 Reinforced Concrete For both slab 1st floor & roof
beams filled concrete
free space in b/n axis 4&C
TotalConcreteWorkFor Slab
2.1.5 Reinforced Concrete For Stair Landing For G+0 & G+1 with 15cm raise depth

Ditto BUT For Step
ditto but for the inclined slab.
TotalConcreteWorkFor STAIR Landing AND STEP G+0 and G+1
Total concrete work for super structer
2.2 Form Work With 25mm Thickness
2.2.1 Form Work For Elevation Column For C-1 (G+0,G+1)
total fomwork for elevation column
2.2.2 Bottom Form Work FOR INTERMIDATE & TOP TIE BEAMS
For axis A,B+A' &C
Ditto BUT Axis D
Ditto BUT Axis 1,2,3&4
Ditto BUT FOR AXIS 2'
Ditto BUT for axis 5
1.5.3 Form Work For intermidate & top tie beams For Axis -A-
M2
Ditto But Axis -B
M2
Ditto But Axis C
M2
Ditto But Axis D
M2
Ditto But Axis 1,2,3,4

M2
Ditto But Axis For -2',5
M2
total form work for beams
2.2.7 Form Work For Slub of first floor & roof cover
total fomwork for slab
total form work for supper structure
2.3 Massonary Work
2.3.1 External and external HCB Wall With 20cm Thickness For G+0
axis A
Ditto axis B
Ditto BUT A'
ditto axis C
Ditto BUT D
ditto axis 1
ditto axis 2,b/n 3&4 and 4
Ditto BUT 2'
Ditto BUT axis 3
Total HCB Wall With 20 cm Thick of the ground.
HCB wall with a thicknes of 20 cm for 1st floor

axis A

Ditto axis A'

Ditto BUT B

ditto B/N axis B&C

Ditto BUT C

Ditto BUT D

Ditto BUT Axis 1

ditto but axis 2

ditto but axis 2'

ditto but axis 3

ditto but axis b/ 3&4

ditto but axis 4

ditto but axis 5

TOTAL HCB wall for 1st floor wall
TOTAL HCB wall for the entire buildin
2.4 Finishing Work
2.4.1 Plastering Of 1st,2nd & 3rd Coat
2.4.1.1 Plasterig For Extenal and internal Wall For G+0
Ditto BUT G+1
total external and internal plastering
2.4.1.2 Plastering For Sofit Slub For Ground and roof
Total Plastering
2.4.2 Painting for the intire wall in both sides
painting for the cellings of ground & roof 2 times
total external painting
2.4.3 Floor Finish G+0
2.4.3.1 Floor Finish For BEE BINARY LAB ceramic f.f
Ditto BUT EQUIPMENT STORE
Ditto BUT For HOD, BEE BOTARY &BEE MGT
Ditto BUT Toilet And Bath
Ditto BUT Corider terazo f.f

2.4.3 Floor Finish G+1
2.4.3.1 Floor Finish For room 1 ceramic f.f
Ditto BUT room 2
Ditto BUT For room3& 4
Ditto BUT Toilet And Bath
Ditto BUT For HOD, BEE BOTARY &BEE MGT
Ditto BUT Corider terazo f.f

total floor finish ceramic tile f.f

total floor finish terazo time for corider

SUPER STRUCTURE			unit
TIMSING	**DIMENTION**	**SQUARING**	
2	1.22 2.6		
		6.344	M2
10	0.9 2.6		
		23.4	M2
8	0.8 2.6		
		16.64	M2
4	0.6 2.6		
		6.24	M2
4	2.1 1.6		
		13.44	M2
2	2.25 1.6		
		7.2	M2
10	1.5 1.6		
		24	M2
1		8.78	
1		8.48	
1		7.58	
12		4.21	
3		8.18	
3		7.78	
16		6.5	
14		6.1	
11		11.87	
14		8.46	
16		9.06	
3		13.79	
6		4.25	

	Total door and Widow FW	105.04	
12	2.974 4.25		
		151.67	kg
34	2.854 3.49		
		338.66	kg
32	1.244 3.49		
		138.93	kg
36	1.36 8.88		
		434.76	kg
8	3 8.88		
		213.12	kg
4	2.91 1.51		
		103.36	kg
4	9.75 11.96		
		466.44	kg
		44	pcs
		4	pcs
		8	pcs
		8	pcs

		8	pcs
		88	pcs
		75.15	ml
		63.15	ml
		22.05	ml
		16.45	ml
		30	ml
		10.5	ml
		217.30	**ml**
		1.77	kg/ml unit we
		384.62	kg
		13.8	ml
		13.72	ml
		27.52	ml

		6.271	ml
		6.16	ml
		12.431	ml
		165.12	ml
		24.86	ml
		189.98	ml
		2.36	kg/ml unit we
		448.36	kg
72	8.37		
		602.64	ml
72	14.68		
		1056.89	ml
14	3.21		
		44.94	ml
14	8.21		
		114.93	ml
		1819.40	
		2.36	unit weight
		4293.779752	kg
		12	pcs
		6	pcs
		8	pcs
		104	pcs
			pcs
			pcs
		116.85	m
		123	m

		6	pcs
		15	pcs
		14	pcs
		3	pcs
		13	pcs
		123.91	pcs
		130.43	pcs
		22	pcs
		13	pcs
		35	pcs
		14	pcs
		7	pcs
		21	pcs
		12	pcs

DESCRIPTION
2.5 Door And Window Schedule
2.5.1 Gelazing
2.5.1.1 Door's
Door 1 (MD1)
Ditto But For Door 2(MD2)
Ditto But For D3
Ditto But For D4
2.5.1.2 Windows
W1 For G+0,G+1
Ditto But For W2 In G+0,G+1
Ditto But For W2' In G+0,G+1
2.5.2 Metal Works (Frame Work) For MD1 IN METER
Ditto But For MD2
Ditto But For MD3
Ditto But For MD4
Ditto But For D1
Ditto But For D1'
Ditto But For D2
Ditto But For D2'
2.5.2.1 For Metal Work For Window W1
Ditto But For W2
Ditto But For W2'
Ditto But For W3
Ditto But For TW1

2.5.3 stair case
2.5.3.1 Hand rail
50*50*3mm RHS hand rail
unit weight
2.5.3.2 Middle & bottom rail
40*40*3mm RHS middle & bottom rail
unit weight
2.5.3.3 Posts
40*40*3mm RHS post
unit weight
2.5.3.4 Threads
219*40*40*3mm plates
unit weight
2.5.3.5 Metal channel
219*40*40*3mm RHS plates
unit weight
2.5.3.6 Landing
2*150*60*3mm RHS, with having unit weight of 8.88 kg/ml
5.4.7 Pillar
130*130*3mm RHS pillar
unit weight
2.5.3.7 Metal plats
a. 219*40*44*3mm
b. 2*150*60*3mm
2.5.3.8 Bolts &nuts
a. dia 16 J- bolt length 300mm
b. dia 16 J- bolt length 400mm
c. dia 20 J- bolt length 250mm

2.5.3.9 Angle iron
250*250*4mm
2.5.4 STELL STRUCTURE
2.5.4.1 RHS lattice purlin having tichness of 25*25*2.5mm with unit weight of 1.77kg/ml
purlin 1
a. upper chord
5.01*15 = 75.15
b. lower chord
4.21*15= 63.15
purlin 2
a. upper chord
3.15*7 = 22.05
b. lower chord
2.35*7=16.45
verticals for purlin 1
0.25*120= 30
verticals for purlin 2
0.25*42= 10.5
total length of purlin
ight
Total
2.5.4.2 RHS truss
30*30*3mm RHS
2.5.4.2.1 TRUSS T-1
a. Top chord
L=7.870+5.930=13.800
b. Bottom chord
L= 1.9+5.91+4.31+1.6=13.72
6.2.2 TRUSS T-2
a. Top chord

L=6.271
b. Bottom chord
L= 1.15+4.27+0.74 =6.16
summary
T-1 =6*27.52 =165.12
T-2 =2*12.431=24.862
Total RHS 30*30*3mm
ight
Total
2.5.4.2 On T-1 having thickness 30*30*3mm RHS
a. verticals
b. diagonals
2.5.4.2 On T-2 having thickness 30*30*3mm RHS
a. verticals
b. diagonals
Total 30*30*3 mm RHS
Net total 30*30*3 mm RHS
2.5.5 Bolts &nuts
a. dia 16mm J-bolt with length 400mm

b. dia 12mm I-bolt with length 100mm
c. dia 16mm J-bolt with length 110mm
6.4 Angle iron
25*25*4mm
2.7 Electrical installation
2.7.1 Electrical installation for ground floor
1 conditt
2wire

3.florescent
double
4. socket
singel
5.switch
double switch
singel switch
6.lump
2.7.2 Electrical installation for first floor
1 conditt
2,wire
ml
3.florescent
double
single
total
4. socket
single
double
total
5.switch
double

RATE ANALY

PROJECT: **EXCAVATION AND EARTH WORK.**

WORKE ITEM (1.01) **Clearing of 200mm top soil**

TOTAL QANTITY OF WORK ITEM: **1m2**

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
					Gang chief
					D/L
Total (1:-01)					

A= Materials Unit Cost Birr/m^2 **B= Manpower Unit Cost**

Total of (1:02)

hour output

Direct Cost of Work Item = A+

Remark _____

UF: UTILIZATION FACTOR

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

ANALYSIS SHEET FOR DIRECT &

PROJECT: **EXCAVATION AND EARTH WORK.**

WORKE ITEM :(1.02) **bulk excavation to a depth of 30cm ordinary soil**

TOTAL QANTITY OF WORK ITEM: **1 m^3**

Material Cost (1:01)					**Labor Cost (1:02**
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
					DL
					Gang chief

Total (1:-01)					**Total (1:02)**

A= Materials Unit Cost 0 Birr/m^3 **B= Manpower Unit Cost**

Total of (1:02)

hour hr output:

Direct Cost of Work Item = A+

Remark _____ O

UF: UTILIZATION FACTOR

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RATE ANALY

EXCAVATION AND EARTH WORK.

WORKE ITEM :(1.03) **pit excavation to depth 1500mm thick o**

TOTAL QANTITY OF WORK ITEM: **1m3**

					I
Unit	Qty *	Rate	Cost per Unit	Labor by Grade	No.
				D/L	1
				Gang chife	2
					Tota

Birr/m^2 **B= Manpower Unit Cost**

Total of (1:02) 478.75

Hourly outp 1.7

Direct Cost of Work Item = A+B+C =

Over head cost :

Profit Cost:

Total

Total unit cost

ANALYSIS SHEET FOR DIRECT & INDIRECT COSTS

PROJECT: **EXCAVATION AND EARTH WORK.**

WORKE ITEM:(1.04) **Trench excavation tc to depth o 950mm**

TOTAL QANTITY OF WORK ITEM: **1 m^3**

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
					D/L
					Gang chief
Total (1:-01)					

A= Materials Unit Cost Birr/m^3 **B= Manpower Unit Cost**

Total of (1:02)

hour output

Direct Cost of Work Item = A+

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT COSTS

PROJECT: **EXCAVATION AND EARTH WORK.**

WORKE ITEM :(1.05) **Buck fill around ,g/beam , f/pad &under**

TOTAL QANTITY OF WORK ITEM: **1 m^3**

Material Cost (1:01)					**Labor Cost (1:02**
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
selcted material	m3	1	4.63	4.63	DL
water	m3	0.2	15	3	G.Chief
Total (1:-01)				7.63	**Total (1:02)**

A= Materials Unit Cost 7.63 Birr/m^3 **B= Manpower Unit Cost**

Total of (1:02)

hr output:

Direct Cost of Work Item = A+

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT COSTS

EXCAVATION AND EARTH WORK.

WORKE ITEM :(1.06) **Cart away surplus excavated material**

TOTAL QANTITY OF WORK ITEM: **1 m^3**

					I
Unit	Qty *	Rate	Cost per Unit	Labor by Grade	No.
				Forman	1
				truck driver	1
				Loder oper	1
				D/L	2
					Tota

0 Birr/m^2

B= Manpower Unit Cost

Total of (1:02) 880

Hourly outp 20

Direct Cost of Work Item = A+B+C =

Over head cost :

Profit Cost:

total

Remark _____

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2 CONCRETE WORK

ANALYSIS SHEET FOR DIRECT & INDIRECT COSTS

PROJECT: CONCRETE WORK

WORKE ITEM :(2.01a) **5cm c-5**

TOTAL QUANTITY OF WORK ITEM: 1m²

Material Cost (1:01)					**Labor (1:02)**
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
Cement	Qtl..	1.28	230.43	294.95	Forman
Sand	m3	0.546	343.48	187.54	Plasterers
Gravel (02)	m3	0.73	347.83	253.22	Carpenter
Water	m3	0.046	117.37	5.40	Bar Bender
					Building Labourer
					mixer operator
					vibrator operator
Total (1:-01)				746.51	**Total (1:02)**

A=Materials Unit Cost 37.33 Birr/m² **B=Manpower Unit Cost**

Total of (1:02)

hr Output

Direct Cost of work item = A+

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT C

PROJECT: CONCRETE WORK

WORKE ITEM :(2.01 B) **C-25 concrete**

TOTAL QUANTITY OF WORK ITEM: 1m³

`

Material Cost (1:01)					**Labor (1:02)**
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Grade

Cement	Qtl..	3.185	231.28	736.6268	Forman
Sand	m3	0.455	348.11	158.39005	Plasterers
Gravel (02)	m3	0.6825	352.46	240.55395	Carpenter
Water	m3	0.11375	122.02	13.879775	Bar Bender
					Building Labourer
					mixer operator
					vibrator operator
Total (1:-01)				1149.45	**Total (1:02)**

A= Materials Unit Cost 1149.45 Birr/m^3 **B=Manpower Unit Cost**

Total of (1:02)

hr Output

Direct Cost of work item = A+

Remark _____

UF: UTILIZATION FACTOR

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**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

ANALYSIS SHEET FOR DI

PROJECT: FORM WORKS

WORKE ITEM ;(2.02,A) zigba form worke for sub structere works

TOTAL QUANTITY OF WORK ITEM: 1 m^2

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
Eucalyptus wood 4cm diameter	m	4.85	1.00	4.85	Foreman
form work 2.5cm - local wood	m2	1.050	25.00	26.25	Carpenter I
nails of different size	Kg	0.20	23.00	4.60	DL
mould oil	lit	0.06	5.00	0.30	

Total (1:01)	36.00	

A= Materials Unit Cost 36.00 Birr/m^2 **B= Manpower Unit Cost**

Direct Cost of Work Item = A+
Overhead
Profit
Total

Remark _____
UF: UTILIZATION FACTOR

HEET FOR DIRECT & INDIRECT COSTS

PROJECT: FORM WORKS

WORKE ITEM ;(2.02,B) zigba form worke for super structure

TOTAL QUANTITY OF WORK ITEM: 1 m^2

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
Eucalyptus wood 4cm diameter	m	2.40	1.00	2.40	Foreman
form work 2.5cm - local wood	m2	1.050	25.00	26.25	Carpenter I
nails of different size	Kg	0.20	23.00	4.60	DL
mould oil	lit	0.06	5.00	0.30	
Total (1:01)				33.55	

A= Materials Unit Cost 33.55 Birr/m^2 **B= Manpower Unit Cost**

Direct Cost of Work Item = A+
Overhead
Profit

Total

Remark _____

UF: UTILIZATION FACTOR

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

ANALYSIS SHEET FOR DI

PROJECT: REINFORCEMENT BAR

WORKE ITEM ;(2.03,A) dia 6mm deformed bar

TOTAL QUANTITY OF WORK ITEM: kg

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
bar	kg	1.05	35.67	37.45	Forman
Black w ier	kg	0.02	22.50	0.45	Bar bend l
					DL
`					
Total (1:01)				37.90	

A= Materials Unit Cost 37.90 Birr/m^2 **B= Manpower Unit Cost**

Direct Cost of Work Item = A+

Overhead

Profit

Total

Remark _____

UF: UTILIZATION FACTOR

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

ANALYSIS SHEET FOR DI

PROJECT: REINFORCEMENT BAR

WORKE ITEM ;(2.03,B) dia 8mm deformed bar

TOTAL QUANTITY OF WORK ITEM: kg

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
bar	kg	1.05	30.23	31.74	Forman
Black w ier	kg	0.02	22.50	0.45	Bar bend l
					DL
`					
Total (1:01)				32.19	

A= Materials Unit Cost 32.19 Birr/m^2 **B= Manpower Unit Cost**

Direct Cost of Work Item = A+
Overhead
Profit
Total

Remark _____
UF: UTILIZATION FACTOR
*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

ANALYSIS SHEET FOR DI

PROJECT: REINFORCEMENT BAR
WORKE ITEM ;(2.03,C) 10mm dia deformed bar
TOTAL QUANTITY OF WORK ITEM: 1 kg

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
bar	kg	1.05	27.19	28.55	Forman
Black w ier	kg	0.02	22.50	0.45	Bar bend l
					DL

Total (1:01)				29.00	

A= Materials Unit Cost 29.00 Birr/m^2 **B= Manpower Unit Cost**

Total of (1:02)

Direct Cost of Work Item = A+

Remark _____

UF: UTILIZATION FACTOR

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HEET FOR DIRECT & INDIRECT COSTS

PROJECT: REINFORCEMENT BAR

WORKE ITEM ;(2.03,D) 14,16and 20mm dia deformed bar

TOTAL QUANTITY OF WORK ITEM: 1 kg

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
bar	kg	1.05	25.45	26.72	Forman
Black w ier	kg	0.02	22.50	0.45	Bar bend l
					Bar bender helper
Total (1:01)				27.17	

A= Materials Unit Cost 27.17 Birr/m^2 **B= Manpower Unit Cost**

Direct Cost of Work Item = A+

Over head cost :

Profit Cost:
Total

Remark _____ **Total unit cost:**

UF: UTILIZATION FACTOR

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

RATE ANALYSIS SHEET F

PROJECT: CONCRETE WORK

WORKE ITEM :(2.04) 10*100mm fixing Expansion joint

TOTAL QUANTITY OF WORK ITEM: 1ml

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
10x100mm Styrofoam chipwood	ml	1.05	30.00	31.50	Foreman
					Carpenter
					DL
Total (1:-01)				31.50	

A= Materials Unit Cost **31.50 Birr/ml** **B=Manpower Unit Cost**

Total of (1:02)

Total(2.05) **Labour Out put**

Work item **Direct Cost of work item = A**

Remark _____

UF: UTILIZATION FACTOR

***: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.**

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

3-MASSONARY WORK

HEET FOR DIRECT & INDIRECT COSTS

PROJECT: MASONRY WORKS

WORKE ITEM :(3.01) 50mm thick massonry foundation uneder ground
TOTAL QUANTITY OF WORK ITEM: 1 m3

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
Stone	m3	1.00	191.56	60.00	Forman
cement	Qtl	1.50	231.28	346.92	Mason
sand	m3	0.42	348.11	146.21	DL
Total (1:01)				553.13	

A= Materials Unit Cost 553.13 Birr/m^2 **B= Manpower Unit Cost**

Direct Cost of Work Item = A+
Over head cost :
Profit Cost:
Total

Total unit cost:

Remark _____
UF: UTILIZATION FACTOR
*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

4 BLOCK WORK

HEET FOR DIRECT & INDIRECT COSTS

PROJECT- Block work
WORK ITEM: 4.01 200 mm. thick HCB wall
TOTAL QANTITY OF WORK ITEM: 1 m^2

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
20 cm. Thick solid H.C.B with5%	Pcs.	13	18.39	239.07	Forman
Cement	Qt.	0.1	231.28	23.13	Mason l
Sand	m^3	0.028	348.11	9.75	DL

Water	m^3	0.02	122.02	2.44	
				0.00	
				0.00	
Total (1:-01)				274.39	

A=Materials Unit Cost B= Manpower Unit

274.39 Birr/m^2

Daily Output:

Direct Cost of Work Item = A+

overhead

profit

Total

UF: UTILIZATION FACTOR

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

7 metal work

UF: UTILIZATION FACTOR (total time/out put)

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

ANALYSIS SH

PROJECT **METAL WORK**

WORK ITEM:7.01 D1 and D1'

TOTAL QTY. OF WORK ITEM **1 PCS**

MATERIAL COST (1:01)				
TYPE OF MATERIAL	**UNIT**	***QTY**	**RATE**	**COST/UNIT**
L	LM	6.3	50.00	315.00
T	LM	0.95	50	47.50
Z	LM	3.26	52	169.52
LOCK	pcs	1	330	330.00
HING	pcs	3	7	21.00
SCREW	pcs	18	1	18.00
ELECTRODE	pcs	5	10	50.00
sheet metal	m2	1.785	500	892.50
TOTAL (1:01)				**1843.52**
A- Material unit cost			**Birr/m^2**	**1,843.52**

Direct cost of work item (**A+B+**

Overhead Cost :

Profit Cost :

Total

Total Unit Cost :

Remark _____

UF: UTILIZATION FACTOR (total time/out put)

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

ANALYSIS SH

PROJECT **METAL WORK**

WORK ITEM: 7.01B D2 and D2'

TOTAL QTY. OF WORK ITEM **1 PCS**

MATERIAL COST (1:01)				
TYPE OF MATERIAL	**UNIT**	***QTY**	**RATE**	**COST/UNIT**
L	LM	6.1	50.00	305.00
T	LM	5.05	50	252.50
Z	LM	0.64	52	23.00
LOCK	pcs	1	330	330.00
HING	pcs	2	7	14.00
SCREW	pcs	6	1	6.00
ELECTRODE	pcs	5	10	50.00
sheet metal	m2	1.344	500	672.00
TOTAL (1:01)				**1652.50**

A- Material unit cost **Birr/m²** **1,652.50**

Direct cost of work item (**A+B+**

Overhead Cost :

Profit Cost :

Total Unit Cost :

Remark _____

UF: UTILIZATION FACTOR (total time/out put)

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

ANALYSIS SH

PROJECT **METAL WORK**

WORK ITEM: 7.01C MD1 and MD2

TOTAL QTY. OF WORK ITEM **1 PCS**

MATERIAL COST (1:01)				
TYPE OF MATERIAL	**UNIT**	***QTY**	**RATE**	**COST/UNIT**
L	LM	7.6	50.00	380.00
T	LM	3.81	50	190.50
Z	LM	8.55	52	444.60
LOCK	pcs	1	330	330.00
HING	pcs	2	7	14.00
SCREW	pcs	6	1	6.00
ELECTRODE	pcs	5	10	50.00
sheet metal	m2	0.93	500	465.00
TOTAL (1:01)				**1880.10**
A- Material unit cost			**Birr/m²**	**1,880.10**

Direct cost of work item (**A+B+**
Overhead Cost :
Profit Cost :
Total
Total Unit Cost :

Remark _____

UF: UTILIZATION FACTOR (total time/out put)

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

ANALYSIS SH

PROJECT **METAL WORK**

WORK ITEM: 7.01D MD3 and MD4

TOTAL QTY. OF WORK ITEM **1 PCS**

MATERIAL COST (1:01)				
TYPE OF MATERIAL	**UNIT**	***QTY**	**RATE**	**COST/UNIT**
L	LM	7.55	50.00	377.50
T	LM	3.76	50	188.00
Z	LM	8.5	52	442.00
LOCK	pcs	1	330	330.00
HING	pcs	8	7	56.00
SCREW	pcs	18	1	18.00

ELECTRODE	pcs	5	10	50.00
sheet metal	m2	0.885	500	442.50
TOTAL (1:01)				**1904.00**

A- Material unit cost **Birr/m²** **1,904.00**

Direct cost of work item (**A+B+**
Overhead Cost :
Profit Cost :
Total
Total Unit Cost :

Remark _____

UF: UTILIZATION FACTOR (total time/out put)

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

ANALYSIS SH

PROJECT **METAL WORK**

WORK ITEM: 7.02A **W1,**

TOTAL QTY. OF WORK ITEM **1 PCS**

MATERIAL COST (1:01)				
TYPE OF MATERIAL	**UNIT**	***QTY**	**RATE**	**COST/UNIT**
L	LM	10.71	50.00	535.50
T	LM	10.92	50	546.00
Z	LM	9.45	52	491.40
LOCK	pcs	1	330	330.00
HING	pcs	6	7	42.00
SCREW	pcs	18	1	18.00
ELECTRODE	pcs	10	10	100.00
TOTAL (1:01)				**2062.90**

A- Material unit cost **Birr/m²** **2,062.90**

Direct cost of work item (**A+B+**
Overhead Cost :
Profit Cost :
Total
Total Unit Cost :

Remark _____

UF: UTILIZATION FACTOR (total time/out put)

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

ANALYSIS SH

PROJECT **METAL WORK**

WORK ITEM: 7.02B W2,W2' and W3

TOTAL QTY. OF WORK ITEM **1 PCS**

MATERIAL COST (1:01)				
TYPE OF MATERIAL	**UNIT**	***QTY**	**RATE**	**COST/UNIT**
L	LM	10.71	50.00	535.50
T	LM	10.92	50	546.00
Z	LM	9.45	52	491.40
LOCK	pcs	1	260.69	260.69
HING	pcs	6	19.58	117.48
SCREW	pcs	18	1.53	27.54
ELECTRODE	pcs	10	1.61	16.10
TOTAL (1:01)				**1994.71**

A- Material unit cost **Birr/m²** **1,994.71**

Direct cost of work item (**A+B+**

Overhead Cost :

Profit Cost :

Total

Total Unit Cost :

Remark _____

UF: UTILIZATION FACTOR (total time/out put)

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

ANALYSIS SH

PROJECT **METAL WORK**

WORK ITEM: 7.03A TW1

TOTAL QTY. OF WORK ITEM 1PCS

MATERIAL COST (1:01)				
TYPE OF MATERIAL	**UNIT**	***QTY**	**RATE**	**COST/UNIT**
L	LM	5.3	50.00	265.00

T	LM	6	50	300.00
Z	LM	2.52	52	131.04
hing	pcs	2	7	14.00
screw for hing	pcs	6	1	6.00
electrode	pcs	5	10	50.00
TOTAL (1:01)				**766.04**
A- Material unit cost			**Birr/m²**	**766.04**

Direct cost of work item (**A+B+**
Overhead Cost :
Profit Cost :
Total Unit Cost :

Remark _____

UF: UTILIZATION FACTOR (total time/out put)

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

8. STEEL STRUCTURE

ANALYSIS SHE

PROJECT: STEEL WORK

WORK ITEM : 8.01A **RHS truss** **a) 30*30*3mm**

TOTAL QANTITY OF WORK ITEM: **1 kg**

Material Cost (1:01)					Labor Cost (1:02)
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor byGrade
RHS steel	kg	1.01	22.00	22.22	Forman
electroid	kg	0.9	32.20	28.98	Welder
anti rest	kg	0.25	63.39	15.85	Carpenter
					D/L
Total (1:-01)				67.05	Total (1:02)

A= Material unit cost 67.0475 Birr/ml B=Manpower Unit Cost

Total of (1:02)

hr output:

Direct Cost of work item = A + B + C =

Overhead Cost :

Profit Cost:

Total :

Remark : _____

UF: UTILIZATION FACTOR Total Unit Cost :

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

ANALYSIS SHEE

PROJECT: STEEL WORK

WORK ITEM :8.02A **RHS lattus purlin** **a) 25*25*2.5mm**

TOTAL QANTITY OF WORK ITEM: **1 kg**

Material Cost (1:01)					Labor Cost (1:02)
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Grade
HRS	kg	1.01	22.00	22.22	Forman
electroid	pcs	0.90	1.61	1.45	welder
anti rest	lit	0.25	63.39	15.85	D.L
					Carpenter
Total (1:-01)				39.52	Total (1:02)

A= Material unit cost= 39.52 Birr/ml B=Manpower Unit

Total of (1:02)

hr output:

Direct Cost of work item = A + B + C =

Overhead Cost :

Profit Cost:

Total :

Remark : _____

UF: UTILIZATION FACTOR Total Unit Cost :

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

8.2 Steel sta

ANALYSIS SHEE

PROJECT: STEEL WORK

WORK ITEM :8.2 A **a)40*40*3mm rhs post**

TOTAL QANTITY OF WORK ITEM: **1 Kg**

Material Cost (1:01)					Labor Cost (1:02)
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by grade
R.H.S steel	Kg	1.05	12.00	12.60	Forman
Electrode	No	3.00	1.61	4.83	welder
					DL
Total (1:-01)				17.43	Total (1:02)

A= Material unit cost= 17.43 Birr/kg B=Manpower Unit

Total of (1:02)

hr output:

Direct Cost of work item = A + B + C =

Overhead Cost :

Profit Cost:

Total :

Remark : _____

UF: UTILIZATION FACTOR Total Unit Cost :

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

ANALYSIS

PROJECT: STEEL WORK

WORK ITEM : 8.2,B traid a)219*40*40*3mm
TOTAL QANTITY OF WORK ITEM: 1 ml

Material Cost (1:01)					Labor Cost (1:02)
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor byGrade
metal plate	kg	1.05	45.00	47.25	Foreman
electroid	kg	0.9	32.20	28.98	welder
anti rest	kg	0.25	63.39	15.85	DL
Total (1:-01)				92.08	Total (1:02)

A= Material unit cost 92.0775 Birr/ml B=Manpower Unit Cost

Total of (1:02)

hr output:

Direct Cost of work item = A + B + C =

Overhead Cost :

Profit Cost:

Total :

Remark : _____

UF: UTILIZATION FACTOR Total Unit Cost :

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

ANALYSIS SHEE

PROJECT: STEEL WORK
WORK ITEM :8.2,C a) 50*50*3mm hand rail
TOTAL QANTITY OF WORK ITEM: 1 Kg

Material Cost (1:01)					Labor Cost (1:02)
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by grade
R.H.S steel	Kg	1.05	25.00	26.25	Forman
Electrode	No	3.00	1.61	4.83	welder

					DL
Total (1:-01)				31.08	Total (1:02)

A= Material unit cost= 31.08 Birr/kg

B=Manpower Unit

Total of (1:02)

hr output:

Direct Cost of work item = A + B + C =

Overhead Cost :

Profit Cost:

Total :

Remark : _____

UF: UTILIZATION FACTOR

Total Unit Cost :

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

ANALYSIS SHEE

PROJECT: STEEL WORK

WORK ITEM :8.2,D **b) 40*40*3mm middle &bottom rail**

TOTAL QANTITY OF WORK ITEM: 1 Kg

Material Cost (1:01)					Labor Cost (1:02)
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by grade
R.H.S steel	Kg	1.05	23.00	24.15	Forman
Electrode	No	3.00	1.61	4.83	welder
					DL

Total (1:-01)				28.98	Total (1:02)

A= Material unit cost= 28.98 Birr/kg

B=Manpower Unit

Total of (1:02)

hr output:

Direct Cost of work item = A + B + C =

Overhead Cost :

Profit Cost:

Total :

Remark : _____

UF: UTILIZATION FACTOR

Total Unit Cost :

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

ANALYSIS SHEET FOR I

PROJECT ; STEEL WORK

WORK ITEM : 8.2,E metal channel

TOTAL QANTITY OF WORK ITEM: 1 kg

Material Cost (1:01)					Labor Cost (1:02)
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor byGrade
metal plate	kg	1.05	45.00	47.25	Foreman
electroid	kg	0.9	32.20	28.98	welder
anti rest	kg	0.25	63.39	15.85	DL
Total (1:-01)				92.08	Total (1:02)

A= Material unit cost 92.0775 Birr/ml

B=Manpower Unit Cost

Total of (1:02)

hr output:

Direct Cost of work item = A + B + C =

Overhead Cost :

Profit Cost:
Total :

Remark : _____
UF: UTILIZATION FACTOR Total Unit Cost :
*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.
**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

ANALYSIS SHEE

PROJECT ; STEEL WORK
WORK ITEM : 8.2,F Landing **b) 2*150*60*3 mm**
TOTAL QANTITY OF WORK ITEM: 1kg

Material Cost (1:01)					Labor Cost (1:02)
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor byGrade
metal plate	kg	1.05	65.22	68.48	Foreman
electroid	kg	0.9	1.61	1.45	welder
anti rest	kg	0.25	63.39	15.85	DL
Total (1:-01)				85.78	Total (1:02)

A= Material unit cost 85.78 Birr/ml B=Manpower Unit Cost
Total of (1:02)
hr output:
Direct Cost of work item = A + B + C =
Overhead Cost :
Profit Cost:
Total :

Remark : _____
UF: UTILIZATION FACTOR Total Unit Cost :
*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.
**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

ANALYSIS SHEE

PROJECT: STEEL WORKS
WORK ITEM :8.2,G pillars
TOTAL QANTITY OF WORK ITEM: 1 Kg

Material Cost (1:01)					Labor Cost (1:02)
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by grade
R.H.S steel	Kg	1.05	20.00	21.00	Forman
Electrode	No	3.00	1.61	4.83	welder
					DL
Total (1:-01)				25.83	Total (1:02)

A= Material unit cost= 25.83 Birr/kg

B=Manpower Unit
Total of (1:02)
hr output:
Direct Cost of work item = A + B + C =
Overhead Cost :
Profit Cost:
Total :

Remark : _____

UF: UTILIZATION FACTOR

Total Unit Cost :

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

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ANALYSIS SHE

PROJECT: STEEL WORK
WORK ITEM: 8.3, A **Metal plate** **a) 219*40*40*3mm**
TOTAL QANTITY OF WORK ITEM: 1 m^2

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by trade

metal plate with allaccessories	m2	1.05	65.22	68.481	Forman
					welder
					D/L
	Total (1:01)			68.481	

A=Materials Unit Cost 68.481 Birr/m^2 **B= Manpower Unit Cos**

Direct Cost of Work Item = A+
overhead
profit
Total

Remark _____

UF: UTILIZATION FACTOR

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

ANALYSIS SHE

PROJECT: STEEL WORK

WORK ITEM: 8.3,B **Metal plate** **b) 2*150*60*3mm**

TOTAL QANTITY OF WORK ITEM: **1 m^2**

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by trade
metal plate with allaccessories	m2	1.05	44.02	46.221	Forman
					welder
					D/L
	Total (1:01)			46.221	

A=Materials Unit Cost 46.221 Birr/m^2 **B= Manpower Unit Cos**

Direct Cost of Work Item = A+
overhead
profit
Total

Remark _____

UF: UTILIZATION FACTOR
*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

ANALY

PROJECT: STEEL WORK
WORK ITEM:(8.4,A) Jbolt dia 16 400mml
TOTAL QANTITY OF WORK ITEM: 1pcs

Material Cost (1:01)					**Labor Cost (1:0**
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by trade
plate 250*250*6mm	pcs	1	122.28	122.28	Forman
channel section 40*40*4mm	pcs	1.00	200.00	200.00	welder
J-bolt dia.20mm	pcs	4	3.5	14	D/L
	Total (1:01)			336.28	**Total (1:02)**

A=Materials Unit Cost **B= Manpower Unit Cos**

336.28 Birr/m^2

Direct Cost of Work Item = A+
overhead
profit
Total

Remark _____

UF: UTILIZATION FACTOR
*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

ANALY

PROJECT: STEEL WORK
WORK ITEM:(8.4,B) Jbolt dia 12 100mml
TOTAL QANTITY OF WORK ITEM: 1pcs

Material Cost (1:01)					**Labor Cost (1:0**
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by trade
plate 250*250*6mm	pcs	1	122.28	122.28	Forman
channel section 40*40*4mm	pcs	1.00	200.00	200.00	welder
J-bolt dia.20mm	pcs	4	3.5	14	D/L

	Total (1:01)			336.28	**Total (1:02)**

A=Materials Unit Cost **B= Manpower Unit Cos**

336.28 Birr/m^2

Direct Cost of Work Item = A+
overhead
profit
Total

Remark _____

UF: UTILIZATION FACTOR

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

ANALYSIS SHEET FO

PROJECT: STEEL WORK
WORK ITEM:(8.4,C) Jbolt dia 16mm 110mml
TOTAL QANTITY OF WORK ITEM: 1pcs

Material Cost (1:01)					**Labor Cost (1:0**
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by trade
metal angle iron suport	pcs	8	2.20	17.6	Forman
plate(200*100*5)mm	pcs	1.00	34.48	34.48	welder
					D/L
	Total (1:01)			52.08	**Total (1:02)**

A=Materials Unit Cost **B= Manpower Unit Cos**

52.08 Birr/m^2

Direct Cost of Work Item = A+
overhead
profit
Total

Remark _____

UF: UTILIZATION FACTOR
*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

9. PLA

ANALYSIS SHEET FOR DI

PROJECT: FINISHING WORKS
WORK ITEM : 9.01 **First coat of cement plaster to vertical surfaces (1:**
TOTAL QUANTITY OF WORK ITEM: **1 m^2**

Material Cost (1:01)					Labor Cost (1:02
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Grade
Cement	qt.	0.790	231.28	182.71	Forman
Sand	m^3	0.170	348.11	59.18	Plasterer
Water	m^3	0.032	122.0	3.86	DL
Total (1:-01)				245.75	Total (1:02)

A=Material unit cost
245.75 Birr/m^2

B=Manpower Unit
Total of (1:02)
Daily Output
Direct Cost of work item = A + B + C =
Overhead Cost :
Profit Cost:
Total:

Remark : _____

UF: UTILIZATION FACTOR
*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.
**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

Total Unit Cost :

ANALYSIS SHEET FOR DIRECT & I

PROJECT: FINISHING WORKS
WORK ITEM : 9.02 **second coat of cement plasterin for the vertical sur**
TOTAL QUANTITY OF WORK ITEM: **1 m^2**

Material Cost (1:01)					Labor Cost (1:02
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Grade
Cement	qt.	0.790	231.28	182.71	Forman
Sand	m^3	0.170	348.11	59.18	Plasterer
Water	m^3	0.032	122.0	3.86	D/L
Total (1:-01)				245.75	Total (1:02)

A=Material unit cost

245.75 Birr/m^2

B=Manpower Unit

Total of (1:02)

hr Output

Direct Cost of work item = A +

Overhead Cost :

Profit Cost:

Total:

Remark : _____

UF: UTILIZATION FACTOR

Total Unit Cost :

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

ANALYSIS SHEET FOR DIREC

PROJECT: FINISHING WORKS

WORK ITEM : 9.03 **Final coat of cement plaster to vertical surface (1:3**

TOTAL QUANTITY OF WORK ITEM: **1 m^2**

Material Cost (1:01)					Labor Cost (1:02
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Grade
Cement	qt.	0.790	231.28	182.7	Forman
Sand	m^3	0.170	348.11	59.18	Plasterer
Water	m^3	0.032	122.0	3.86	D/L

Total (1:-01)				245.75	Total (1:02)

A= Material unit cost

245.75 Birr/m^3

B=Manpower Unit

Total of (1:02)

hr Output

Direct Cost of work item = A +

Overhead Cost :

Profit Cost:

Total:

Remark : _____

UF: UTILIZATION FACTOR

Total Unit Cost :

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

ANALYSIS SHEET FOR DI

PROJECT: FINISHING WORKS

WORK ITEM : 9.04 **First coat soffit slab (1:3)**

TOTAL QUANTITY OF WORK ITEM: **1 m^2**

Material Cost (1:01)					Labor Cost (1:02
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Grade
Cement	qt.	0.790	231.28	182.71	Forman
Sand	m^3	0.170	348.11	59.18	Plasterer
Water	m^3	0.032	122.0	3.86	DL
Total (1:-01)				245.75	Total (1:02)

A=Material unit cost B=Manpower Unit

245.75 Birr/m^2 Total of (1:02)

Daily Output

Direct Cost of work item = A + B + C =

Overhead Cost :

Profit Cost:

Total:

Remark : _____

UF: UTILIZATION FACTOR Total Unit Cost :

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

ANALYSIS SHEET FOR DIRECT & I

PROJECT: FINISHING WORKS

WORK ITEM : 9.05 second coat of cement plasterin for soffit slab (1:3

TOTAL QUANTITY OF WORK ITEM: 1 m^2

Material Cost (1:01)					Labor Cost (1:02
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Grade
Cement	qt.	0.790	231.28	182.71	Forman
Sand	m^3	0.170	348.11	59.18	Plasterer
Water	m^3	0.032	122.0	3.86	D/L
Total (1:-01)				245.75	Total (1:02)

A=Material unit cost B=Manpower Unit

245.75 Birr/m^2 Total of (1:02)

hr Output

Direct Cost of work item = A +

Overhead Cost :

Profit Cost:

Total:

Remark : _____

UF: UTILIZATION FACTOR Total Unit Cost :

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

ANALYSIS SHEET FOR DIRECT & I

PROJECT: FINISHING WORKS

WORK ITEM :9.06 **Final coat of cement plaster to v soffit slab (1:3)**

TOTAL QUANTITY OF WORK ITEM: **1 m^2**

Material Cost (1:01)					Labor Cost (1:02
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Grade
Cement	qt.	0.790	231.28	182.7	Forman
Sand	m^3	0.170	348.11	59.18	Plasterer
Water	m^3	0.032	122.0	3.86	D/L
Total (1:-01)				245.75	Total (1:02)

A= Material unit cost B=Manpower Unit

245.75 Birr/m^3 Total of (1:02)

hr Output

Direct Cost of work item = A +

Overhead Cost :

Profit Cost:

Total:

Remark : _____

UF: UTILIZATION FACTOR Total Unit Cost :

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

10. FINISHING

ANALYSIS SHE

PROJECT: FINISHING WORKS

WORK ITEM :(10.01) **Terrazzo tile**

TOTAL QUANTITY OF WORK ITEM: **1 ml**

Material Cost (1:01)					Labor Cost (1:02)
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
Tile	ml	1.02	**206.19**	210.3	Forman
Mortar	m3	0.0204		0.0	Tiller
Grouting	m3	0.001		0.0	D/L
Cement	qtl	0.085	231.28	19.7	
Sand	m3	0.015	348.11	5.2	
Total (1:-01)				235.19	Total (1:02)

A= Material unit cost 235.19 Birr/ml B=Manpower Unit

Total of (1:02)

hr Output

Direct Cost of work item = A + B + C =

Overhead Cost :

Profit Cost:

Total:

Remark : _____

UF: UTILIZATION FACTOR Total Unit Cost :

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

ANALYSIS SHE

PROJECT: FINISHING WORKS

WORK ITEM : 10.02 **skirting**

TOTAL QUANTITY OF WORK ITEM: **1 ml**

Material Cost (1:01)					Labor Cost (1:02)
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
terazo tile	ml	1.05	29.57	31.0	Forman
Cement	qlt	0.02	231.28	5.32	Tiller
Sand	m3	0.01	348.11	2.44	D/L

Total (1:-01)				38.80	Total (1:02)

A= Material unit cost 38.80 Birr/ml B=Manpower Unit

Total of (1:02)

hr Output

Direct Cost of work item = A + B + C =

Overhead Cost :

Profit Cost:

Total:

Remark : _____

UF: UTILIZATION FACTOR Total Unit Cost :

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

ANALYSIS SHE

PROJECT: FINISHING WORKS

WORK ITEM : 10.03 150x150x6omm ceramic wall Tile

TOTAL QUANTITY OF WORK ITEM: 1 m2

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
Tile	qt.	45.3	208.7	9454.1	Forman
Mortar	m^3	0.0102		0.0	Tiller
White cement grouting	m^3	0.001		0.0	D/L
Cement	qt.	0.036	231.28	8.3	
Sand	m^2	0.008	348.11	2.8	
Total (1:-01)				**9465.22**	

A= Material unit cost 9465.22 Birr/m2 **B=Manpower Uni**

Direct Cost of work item = A + B + C =
overhead
profit
Total

Remark : _____ **Total unit cost:**

UF: UTILIZATION FACTOR

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

ANALYSIS SHE

PROJECT: FLOOR FINISHISH WORKS
WORK ITEM : 10.04 30mm thick cement screeding
TOTAL QUANTITY OF WORK ITEM: 1 m2

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
cement	qt.	0.19	231.28	43.9	Forman
sand	m^3	0.06	348.11	20.9	plasterer
water	m^3	0.025	122.02	3.1	D/L
Total (1:-01)				**67.88**	

A= Material unit cost 67.88 Birr/m2 **B=Manpower Uni**

Direct Cost of work item = A + B + C =
overhead
profit
Total

Remark : _____ **Total unit cost:**

UF: UTILIZATION FACTOR

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

11. PA

ANALYSIS SHEET FOR DIRE

PROJECT: FINISHING WORKS

WORK ITEM :(11.01,A))first coat Painting enternal and external wall

TOTAL QUANTITY OF WORK ITEM: 1 m^2

Material Cost (1:01)					Labor Cost (1:02)
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Grade
Gympsum	kg	0.030	3.14	0.1	Forman
Stucco	lit	0.050	89.27	4.46	painter
Vinavil glue	kg	0.01	61.4	0.74	D/L
Total (1:-01)				5.29	Total (1:02)

A= Material unit cost 5.29 Birr/m^2 B=Manpower Unit

Total of (1:02)

Daily Output

Direct Cost of work item = A + B + C =

Overhead Cost :

Profit Cost:

Total:

Remark : _____

UF: UTILIZATION FACTOR Total Unit Cost :

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

ANALYSIS SHEET FOR DIRECT & INDIRECT COST

PROJECT: FINISHING WORKS

WORK ITEM :(11.01,B,C,D,E))second coat Painting enternal and external wall

TOTAL QUANTITY OF WORK ITEM: 1 m2

Material Cost (1:01)					Labor Cost (1:02)
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Grade

priming coat ant-rust	lit	0.500	80.0	40.0	Forman
tinner for ant-rust	lit	0.500	75.0	37.50	painter
				0.00	D/L
Total (1:-01)				77.50	Total (1:02)

A= Material unit cost 77.50 Birr/m2

B=Manpower Unit

Total of (1:02)

Daily Output

Direct Cost of work item = A + B + C =

Overhead Cost :

Profit Cost:

Total:

Remark : _____

UF: UTILIZATION FACTOR

Total Unit Cost :

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED T

ANALYSIS SHE

PROJECT: GLAZING

WORK ITEM: 12.1 **4 mm thick clear glass with putty**

TOTAL QANTITY OF WORK ITEM: **1 m2**

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by trade
4mm clear glass	m2	1.1	235.18	258.698	Forman
Putty	kg	0.40	15.23	6.09	Glazer
					D/L
	Total (1:01)			264.79	

A=Materials Unit Cost **B= Manpower Unit Cos**

264.79 Birr/m2

Direct Cost of Work Item = A+
overhead
profit
Total

Remark _____

UF: UTILIZATION FACTOR

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

14. ELEC

ANALYSIS SHE

PROJECT- ELECTRICAL INSTALATION

WORK ITEM: (14.01) **wire**

TOTAL QANTITY OF WORK ITEM: **1 ML**

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
cable or wire	no	1	20	20	elctrical forman
cap connectors	no	1	25	25	electrictioan
Dia.16mm conduit	m	4.5	5.00	22.5	DL
PVC insulated conductor	m	4.5	10	45	
Total (1:-01)				112.50	

A=Materials Unit Cost **B= Manpower Un**

112.50 Birr/ml

Direct Cost of Work Item = A+
overhead
profit
Total

UF: UTILIZATION FACTOR

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

ANALYSIS SHE

PROJECT- ELECTRICAL INSTALATION

WORK ITEM: (14.02) **conduit**

TOTAL QANTITY OF WORK ITEM: **1 ml**

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
Dia.16mm conduit	m	4.5	5.00	22.5	elctrical forman
					electrictioan
					DL
Total (1:-01)				22.50	

A=Materials Unit Cost **B= Manpower Un**

22.50 Birr/ml

Direct Cost of Work Item = A+
overhead
profit
Total

UF: UTILIZATION FACTOR

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

ANALYSIS SHE

PROJECT- ELECTRICAL INSTALATION

WORK ITEM: (14.03) **single switch out let points**

TOTAL QANTITY OF WORK ITEM: **1 NO**

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
Junction box	no	1	20	20	elctrical forman
cap connectors	no	1	10	10	electrictioan
Dia.16mm conduit	m	4.5	5.00	22.5	DL
PVC insulated conductor	m	4.5	10	45	
Total (1:-01)				97.50	

A=Materials Unit Cost **B= Manpower Un**

97.50 Birr/no

Direct Cost of Work Item = A+
overhead
profit
Total

UF: UTILIZATION FACTOR
*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

ANALYSIS SHE

PROJECT- ELECTRICAL INSTALATION
WORK ITEM: (14.04) **Double switch out let points**
TOTAL QANTITY OF WORK ITEM: **1 NO**

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
Janction point	no	1	20	20	elctrical forman
cap connectors	no	2	25	50	electrictioan
Dia.16mm conduit	m	4.5	5.00	22.5	DL
PVC insulated conductor	m	4.5	10	45	
Total (1:-01)				137.50	

A=Materials Unit Cost **B= Manpower Un**

137.50 Birr/no

Direct Cost of Work Item = A+
overhead
profit
Total

UF: UTILIZATION FACTOR
*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

ANALYSIS SHE

PROJECT- ELECTRICAL INSTALATION
WORK ITEM: (14.05) Intermediate switch out let points
TOTAL QANTITY OF WORK ITEM: 1 NO

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
Junction box	no	1	20	20	elctrical forman
cap connectors	no	1	10	10	electrictioan
Dia.16mm conduit	m	4.5	5.00	22.5	DL
PVC insulated conductor	m	4.5	10	45	
Total (1:-01)				97.50	

A=Materials Unit Cost **B= Manpower Un**

97.50 Birr/no

Direct Cost of Work Item = A+
overhead
profit
Total

UF: UTILIZATION FACTOR
*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

ANALYSIS SHE

PROJECT- ELECTRICAL INSTALATION
WORK ITEM: (14.06) Single socket out let points
TOTAL QANTITY OF WORK ITEM: 1 NO

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
Janction point	no	1	20	20	electrical forman
cap connectors	no	1	25	25	electrictioan
Dia.16mm conduit	m	4.5	5.00	22.5	DL
PVC insulated conductor	m	4.5	10	45	
socket outlet	no	1	60	60	

Total (1:-01)	172.50	

A=Materials Unit Cost 172.50 Birr/no **B= Manpower Un**

Direct Cost of Work Item = A+
overhead
profit
Total

UF: UTILIZATION FACTOR
*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

ANALYSIS SHE

PROJECT- ELECTRICAL INSTALATION
WORK ITEM: (14.07) **Doublele socket out let points**
TOTAL QANTITY OF WORK ITEM: **1 NO**

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
Janction point	no	1	20	20	electrical forman
cap connectors	no	1	25	25	electrictioan
Dia.16mm conduit	m	4.5	5.00	22.5	DL
PVC insulated conductor	m	4.5	10	45	
socket outlet	no	1	60	60	
Total (1:-01)				172.50	

A=Materials Unit Cost 172.50 Birr/no **B= Manpower Un**

Direct Cost of Work Item = A+
overhead
profit
Total

UF: UTILIZATION FACTOR
*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

ANALYSIS SHE

PROJECT- ELECTRICAL INSTALATION

WORK ITEM: (14.08) single fluorecent light fittings

TOTAL QANTITY OF WORK ITEM: 1 NO

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
Fluorecent	no	1	120	120	electrical forman
					electrictioan
					DL
Total (1:-01)				120.00	

A=Materials Unit Cost **B= Manpower Un**

120.00 Birr/no

Direct Cost of Work Item = A+
overhead
profit
Total

UF: UTILIZATION FACTOR

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

ANALYSIS SHE

PROJECT- ELECTRICAL INSTALATION

WORK ITEM: (14.09) Double fluorecent light fittings

TOTAL QANTITY OF WORK ITEM: 1 NO

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
Fluorecent	no	2	120	240	electrical forman
					electrictioan
					DL

Total (1:-01)				240.00	

A=Materials Unit Cost **B= Manpower Un**

240.00 Birr/no

Direct Cost of Work Item = A+
overhead
profit
Total

UF: UTILIZATION FACTOR
*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

ANALYSIS SHE

PROJECT- ELECTRICAL INSTALATION
WORK ITEM: (14.10) **Light points**
TOTAL QANTITY OF WORK ITEM: **1 NO**

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
Janction point	no	1	20	20	electrical forman
cap connectors	no	1	25	25	electrictioan
Dia.16mm conduit	m	4.5	5.00	22.5	DL
PVC insulated conductor	m	4.5	10	45	
				0	
Total (1:-01)				112.50	

A=Materials Unit Cost **B= Manpower Un**

112.50 Birr/no

Direct Cost of Work Item = A+
overhead
profit
Total

UF: UTILIZATION FACTOR
*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

ANALYSIS SHE

PROJECT- ELECTRICAL INSTALATION
WORK ITEM: (14.11) socket out let points
TOTAL QANTITY OF WORK ITEM: 1 NO

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
Janction point	no	1	20	20	electrical forman
cap connectors	no	1	25	25	electrictioan
Dia.16mm conduit	m	4.5	5.00	22.5	DL
PVC insulated conductor	m	4.5	10	45	
socket outlet	no	1	60	60	
Total (1:-01)				172.50	

A=Materials Unit Cost 172.50 Birr/no **B= Manpower Un**

Direct Cost of Work Item = A+
overhead
profit
Total

UF: UTILIZATION FACTOR
*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

ANALYSIS SHEET FO

PROJECT- ELECTRICAL INSTALATION
WORK ITEM: (14.12) Destribution boards(MDB--TD1,TD2)
TOTAL QANTITY OF WORK ITEM: 1 NO

Material Cost (1:01)					**Labor Cost (1:02**
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
MDB with locable door and	no	1	2650	2650	electrical forman
including all accessories				0	electrictioan
Dia.16mm conduit	m	4.5	5.00	22.5	DL
PVC insulated conductor	m	4.5	10	45	

				0	
Total (1:-01)				2717.50	

A=Materials Unit Cost `

2717.50 Birr/no

Direct Cost of Work Item = A+
overhead
profit
Total

UF: UTILIZATION FACTOR
*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

ANALYSIS SHE

PROJECT- ELECTRICAL INSTALATION
WORK ITEM: (14.13a&b) **Telephon points**
TOTAL QANTITY OF WORK ITEM: **1**

Material Cost (1:01)					
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labor by Trade
Dia.16mm conduit	ml	4.5	20	90	electrical forman
Telephon wire cable	ml	6	25	150	electrictioan
Junction box	no	1	5.00	5.00	DL
Total (1:-01)				245.00	

A=Materials Unit Cost **B= Manpower Un**

245.00 Birr/no

Direct Cost of Work Item = A+
overhead
profit
Total

UF: UTILIZATION FACTOR

*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

I-EXCAVATION & EARTH WORK

SIS SHEET FOR DIRECT & INDIRECT COSTS

LABOUR HOURLY OUTPUT: 20

EQUIPMENT HOURLY OUT PUT 20

RESULT: **22.58** Birr/m^2

Labor Cost (1:02)				**Equipment**	
No.	UF	** Indexed daily cost	daily cost	Type of Equipment	No.
1	0.5	185	92.5	Tools	4
2	1	115	230		
			0		
Total (1:02)			322.5		**Total (1:03)**

16.125 Birr/m^2 **C= Equipment Unit Cost**

322.5 Total of (1:03) 12.00

20 hourlyoutput: 20

B+C =		16.73	Birr/m^2
Over head cost :	20%	3.35	Birr/m^2
Profit Cost:	15%	2.51	Birr/m^2
Total :		22.58	Birr/m^2

Total Unit Cost : **22.58** Birr/m^2

O TARGETED OUTPUT.

INDIRECT COSTS

LABOUR HOURLY OUTPUT:

EQUIPMENT HOURLY OUT PUT

RESULT: **248.36** Birr/m^3

)				**Equipment Cost (1:03)**	
No.	UF	** Indexed dayly cost	daily cost	Type of Equipment	No.
2	1	115	230	Tools	4
1	0.5	185	92.5		

			0		
			322.5	**Total (1:03)**	

179.17 Birr/m³ **C= Equipment Unit Cost**

322.5 Total of (1:03) 12

1.8 hr output:

B+C =		183.97	Birr/m³
Over head cost :	20%	36.79	"
Profit Cost:	15%	27.60	"
Total :		64.39	Birr/m³

Total Unit Cost : **248.36** Birr/m³

O TARGETED OUTPUT.

SIS SHEET FOR DIRECT & INDIRECT COSTS

	labour output	1.7	m3/day
rdinary soil	equipment output	1.7	m3/day
	RESULT:	**389.71**	Birr/m3

abor Cost (1:02)			**Equipment Cost (1:03)**		
UF	** Indexed daily Cost	daily Cost	Type of Equipment	No.	hourly Rental
0.25	115	28.75	tools	4	3.00
1	225	450			
l (1:02)		478.75			
			Total (1:03)		

281.617647059 Birr/m3 **Equipment Unit Cost**

7.06

Total of (1:03) 12.00

1.70

20%	288.68	Birr/m3
15%	57.74	Birr/m3
	43.30	Birr/m3
	389.71	Birr/m3
	389.71	Birr/m3

LABOUR HOURLY OUTPUT:

EQUIPMENT HOURLY OUT PUT

RESULT: **370.85** Birr/m^3

Labor Cost (1:02)					**Equipment**
No.	UF	** Indexed daily wage	daily wage	Type of Equipment	No.
2	1	115	230	Tools	4
1	1	225	225		
Total (1:02)			455		**Total (1:03)**

267.647058824 Birr/m^3 **C= Equipment Unit Cost**

455 Total of (1:03) 12.00

1.7 hourlyoutput: 1.7

B+C =		274.71	Birr/m^3
Over head cost :	20%	54.94	"
Profit Cost:	15%	41.21	"
Total :		370.85	Birr/m^3

Total Unit Cost : **370.85** Birr/m^3

O TARGETED OUTPUT.

LABOUR HOURLY OUTPUT: 3.00

: hard core EQUIPEMENTOUT PUT : 3.00

RESULT: **148.00** Birr/m^3

)				**Equipment Cost (1:03)**	
No.	UF	** Indexed daily wage	daily wage	Type of Equipment	No.
1	1	115	115	Tools	2
1	1	185	185		
			300	**Total (1:03)**	

100.00 Birr/m^3 **C= Equipment Unit Cost**

300			Total of (1:03)	6
3			hr output: 3	
B+C =			109.63	Birr/m^3
Over head cost :		20%	21.93	"
Profit Cost:		15%	16.44	"
Total :			148.00	Birr/m^3
.		.	.	
Total Unit Cost :			**148.00**	Birr/m^3

O TARGETED OUTPUT.

labour output	20	m3/day
equpiment output	60	m3/day
RESULT:	**108.92**	Birr/m3

Labor Cost (1:02)			**uipment Cost (1:03)**		
UF	** Indexed daily Cost	daily Cost	Type of Equipment	No.	hourly Rental
0.2	225	45	loader	1	1800.00
1	230	230	D/truk	1	400
1	375	375	tool	2	0.4
1	115	230			
l (1:02)		880	**Total (1:03)**		

44	Birr/m3	**C= Equipment Unit Cost**		36.68
		Total of (1:03)	2200.80	
			60.00	
			80.68	Birr/m3
		20%	16.14	"
		15%	12.10	"
			108.92	Birr/m3
Total Unit Cost :			108.92	

O TARGETED OUTPUT.

LABOR HOURLY OUTPUT 10

EQUIPMEN'HOURLY OUTPUT 10

RESULT: **403.43** Birr/m^3

				Equipment Cost (1:03)	
No.	UF	** Indexed daily Cost	daily Cost	Type of Equipment	No.
1	0.5	225	112.5	tools	4
2	1	300	600	Mixer 750 Liters	1
1	0.25	275	68.75	Vibrator	1
1	0.25	275	68.75		
13	1	115	1495		
1	1	175			
1	1	480			
			2345.00	**Total (1:03)**	

234.50 Br./m^2 **C=Equipment Unit Cost**

Total of (1:03)

hr output:

-B+C = 298.84 Birr/m^2

Overhead Cost: 20% 59.77 Birr/m^2

Profit Cost: 15% 44.83 Birr/m^2

Total : 403.43 Birr/m^2

Total unit cost: **403.43** Birr/m^2

O TARGETED OUTPUT.

)STS

LABOR HOURLY OUTPUT: 10.00

EQUIPMEN'HOURLY OUTPUT 10.00

RESULT: **1870.97** Birr/m^3

				Equipment Cost (1:03)	
No.	UF	** Indexed dailyCost	daily Cost	Type of Equipment	No.

1	1	225	225	mixer	1
6	0.25	115	172.5	tool	4
1	0.25	175	43.75	vibrator	1
1	1	225	225		
13	1	115	1495		
1	1	175			
1	1	480			
				Total (1:03)	
			2161.25		

C=Equipment Unit Cost

216.13 Br./m^3 Total of (1:03)

hr Output

1385.91 Birr/m^3

+B+C = 277.18 "

Overhead Cost: 20% 207.89 "

Profit Cost: 15% 1870.97 Birr/m^3

Total :

1870.97 Birr/m^3

Total unit cost:

O TARGETED OUTPUT.

RECT & INDIRECT COSTS

LABOUR HOURLY OUTPUT: 6.00

EQUIPMENT HOURLY OUTPU 6

RESULT: 155.08 Birr/m^2

Labor Cost (1:02)

No.	UF	** Indexed daily wage	daily wage
1	0.25	225.00	56.25
1	1	175.00	175.00
2	1	115.00	230.00

Equipment Cost (1:03)

Type of Equipment	No.
tools	4
Total (1:03)	

	461.25

76.88 Birr/m^2 **C=Equipment Unit Cost**

		114.88 Birr/m^2
B+C =		22.98
	20%	17.23
	15%	155.08
		155.08 Birr/m^3

Total unit cost:

–

EQUIPMENT HOURLY OUT PUT:

EQUIPMENT HOURLY OUT PUT:

RESULT: 266.40 Birr/m^2

Equipment Cost (1:03)

Type of Equipment	No.
tools	4
Total (1:03)	

Labor Cost (1:02)

No.	UF	** Indexed daily wage	Daily wage
1	0.25	225.00	56.25
1	1	275.00	275.00
2	1	115.00	230.00
			561.25

160.36 Birr/m^2 **C=Equipment Unit Cost**

		197.34 Birr/m^2
B+C =		39.47
	20%	29.60
	15%	266.40

266.40	Birr/m^3

Total unit cost:

RECT & INDIRECT COSTS

LABOR DAILY OUTPUT:	75
EQUIPMENT HOURLY OUT PUT:	75
RESULT:	68.85 Birr/kg

Labor Cost (1:02)

No.	UF	** Indexed daily wage	Daily wage
1.00	0.20	2,225.00	445.00
1.00	1.00	275.00	275.00
2.00	1.00	115.00	230.00
Total (1:02)			950.00

Equipment Cost (1:03)

Type of Equipment	No.
Tools	4.00
cut machine	1.00
Total (1:03)	

12.67 Birr/m^2 **C=Equipment Unit Cost**

		51.00 Birr/kg
B+C =		10.20
	20%	7.65
	15%	68.85
		68.85 Birr/m^3

Total unit cost:

RECT & INDIRECT COSTS

LABOR DAILY OUTPUT:	95
EQUIPMENT HOURLY OUT PUT:	95
RESULT:	51.73 Birr/kg

Labor Cost (1:02)				Equipment Cost (1:03)	
				Type of Equipment	No.
No.	UF	** Indexed daily wage	Daily wage	Tools	4.00
1.00	0.20	225.00	45.00	cut machine	1.00
1.00	1.00	275.00	275.00		
2.00	1.00	115.00	230.00		
				Total (1:03)	
Total (1:02)			550.00		

5.79 Birr/m^2 **C=Equipment Unit Cost**

		38.32	Birr/kg
B+C =		7.66	
	20%	5.75	
	15%	51.73	
		51.73	Birr/m^3

Total unit cost:

RECT & INDIRECT COSTS

LABOR DAILY OUTPUT:		95
EQUIPMENT HOURLY OUT PUT:		95
RESULT:	47.27	Birr/kg

Labor Cost (1:02)				Equipment Cost (1:03)	
				Type of Equipment	No.
No.	UF	** Indexed daily wage	Daily wage	Tools	3.00
1.00	0.20	225.00	45.00	cut machine	1.00
1.00	1.00	275.00	275.00		
2.00	1.00	115.00	230.00		

				Total (1:03)	
Total (1:02)			550.00		

5.79 Birr/m² **C=Equipmen** Total of (1:03)

		35.02	Birr/kg
B+C =		7.00	Birr/kg
Over head cost :	20%	5.25	Birr/kg
Profit Cost:	15%	47.27	
Total		**47.27**	Birr/kg

Total unit cost:

LABOR DAILY OUTPUT:	95
EQUIPMENT HOURLY OUT PUT:	95
RESULT:	37.49 Birr/kg

Labor Cost (1:02)

No.	UF	** Indexed daily wage	Daily wage
1.00	0.20	25.00	5.00
1.00	1.00	15.00	15.00
2.00	1.00	7.50	15.00
Total (1:02)			35.00

Equipment Cost (1:03)

Type of Equipment	No.
Tools	4.00
cut machine	1.00
Total (1:03)	

0.37 Birr/m² **C=Equipment Unit Cost**

			Birr/kg
B+C =		27.77	Birr/kg
	20%	5.55	Birr/kg

15%	4.17	
	37.49	
		Birr/kg
	37.49	

OR DIRECT & IN DIRECT UNIT COST

LABOR HOURLY OUTPUT: 20

EQUIPMENT HOURLY OUT PUT: 20

RESULT: 42.77 Birr/ml

Labor (1:02)				**ıipment Cost (1:03)**	
No.	UF	** Indexed hourly Cost	hourly Cost	Type of Equipment	No.
1	0.25	16.88	4.22	tools	4
1	1	15	15		
2	1	7.5	15		
Total (1:02)			34.22	**Total (1:03)**	

1.71 Birr/ml

C=Equipment Unit Cost

Total of (1:03)

Equipment Out put

ı+B+C =		**33.81**	**Birr/ml**
Overhead Cost:	**15%**	**5.07**	**"**
Profit Cost:	**10%**	**3.89**	**"**
Total :		**42.77**	**Birr/ml**
Total unit cost:		**42.77**	**Birr/ml**

O TARGETED OUTPUT.

LABOR DAILY OUTPUT: 1.25

EQUIPMENT HOURLY OUT PUT: 1.25

RESULT: 1640.31 Birr/m3

Labor Cost (1:02)				uipment Cost (1:03)	
No.	UF	** Indexed daily wage	Daily wage	Type of Equipment	No.
1.00	0.20	225.00	45.00	Tools	4.00
2.00	1.00	275.00	550.00		
2.00	1.00	115.00	230.00		
Total (1:02)			825.00	**Total (1:03)**	

660.00 Birr/m^2 **C=Equipment Unit Cost**

B+C = 1215.05 Birr/m^2

20%	243.01 Birr/kg	Birr/m^2
15%	182.26 Birr/kg	Birr/m2
	1640.31	Birr/m2

1640.31 Birr/kg

LABOR HOURLY OUTPUT:

EQUIPMENT HOURLY OUT PUT

RESULT: **512.06** Birr/m^2

Labor Cost (1:02)				uipment Cost (1:03)	
No.	UF	** Indexed daily wage	daily Wage	Type of Equipment	No.
1	0.5	225.00	112.50	tool	4
1	1	275.00	275.00		
2	1	115.00	230.00		

Total (1:02)			617.50	**Total (1:03)**	

t Cost 102.916667 Birr/m² C=Equipment Unit Cost

B+C =		379.302146667	Birr/m²
	20%	75.86	
	15%	56.90	
		512.06	
Total unit cost:		**512.06**	Birr/m²

O TARGETED OUTPUT.

HEET FOR DIRECT & INDIRECT UNIT COSTS

LABOUR HOURLY OUT PUT
EQUIPMENT HOURLY OUT PUT
RESULT

LABOUR BY COST (1:02)					**E**
LABOUR BY TRADE	**NO**	**UF**	**** INDEXED DAILY COST**	**DAILY COST**	**TYPE OF EQUIPMENT**
Foreman	1	0.25	225	56.25	tools
welder	1	1	275	275	
D/L	2	1	115	230	
TOTAL (1:02)				**561.25**	

B- Manpower unit cost = **TOTAL (1:02) / HOURLY OUT PUT** **C- Equipm**

= 280.63 Birr/m²

⊦**C**) :		**2,130.15**	**Birr/m²**
	15%	319.52	Birr/m²
	10%	213.01	Birr/m²
		2,662.68	
		2,662.68	**Birr/m²**

O TARGETED OUTPUT.

⊣EET FOR DIRECT & INDIRECT UNIT COSTS

LABOUR HOURLY OUT PUT
EQUIPMENT HOURLY OUT PUT
RESULT

LABOUR BY COST (1:02)					**E**
LABOUR BY TRADE	**NO**	**UF**	**** INDEXED DAILY COST**	**DAILY COST**	**TYPE OF EQUIPMENT**
Foreman	1	0.25	225	56.25	tools
welder	1	1	275	275	
D/L	2	1	115	230	
TOTAL (1:02)				**561.25**	

B- Manpower unit cost = **TOTAL (1:02)** / **HOURLY OUT PUT** **C- Equipm**

= 280.63 Birr/m²

⊦**C**) :		**1,939.13**	**Birr/m²**
	15%	290.87	Birr/m²
	10%	193.91	Birr/m²
		2,423.91	
		2,423.91	**Birr/m²**

O TARGETED OUTPUT.

⊣EET FOR DIRECT & INDIRECT UNIT COSTS

LABOUR HOURLY OUT PUT

EQUIPMENT HOURLY OUT PUT

RESULT

LABOUR BY COST (1:02)					E
LABOUR BY TRADE	**NO**	**UF**	**** INDEXED DALY COST**	**DALY COST**	**TYPE OF EQUIPMENT**
Foreman	1	0.25	225	56.25	tools
welder	1	1	275	275	
D/L	2	1	115	230	
TOTAL (1:02)				**561.25**	

B- Manpower unit cost = **TOTAL (1:02)** / **HOURLY OUT PUT** **C- Equipm**

= 280.63 Birr/m²

+C) : 2,166.73 Birr/m²

15% 325.01 Birr/m²

10% 216.67 Birr/m²

2,708.41

2,708.41 Birr/m²

O TARGETED OUTPUT.

HEET FOR DIRECT & INDIRECT UNIT COSTS

LABOUR HOURLY OUT PUT

EQUIPMENT HOURLY OUT PUT

RESULT

LABOUR BY COST (1:02)					E
LABOUR BY TRADE	**NO**	**UF**	**** INDEXED DALY COST**	**DAILY COST**	**TYPE OF EQUIPMENT**
Foreman	1	0.25	225	56.25	tools
carpentorI	1	1	275	275	
D/L	2	1	115	230	

TOTAL (1:02)				**561.25**	

B- Manpower unit cost = **TOTAL (1:02)** / **HOURLY OUT PUT** **C- Equipm**

= 280.63 Birr/m²

C) : 2,190.63 Birr/m²

15% 328.59 Birr/m²

10% 219.06 Birr/m²

2,738.28

2,738.28 Birr/m²

O TARGETED OUTPUT.

EET FOR DIRECT & INDIRECT UNIT COSTS

LABOUR HOURLY OUT PUT

EQUIPMENT HOURLY OUT PUT

RESULT

LABOUR BY COST (1:02)					**E**
LABOUR BY TRADE	**NO**	**UF**	**** INDEXED DAILY COST**	**DAILY COST**	**TYPE OF EQUIPMENT**
Foreman	1	0.25	225	56.25	tools
weder	1	1	275	275	welding machin
D/L	2	1	115	230	
TOTAL (1:02)				**561.25**	

B- Manpower unit cost = **TOTAL (1:02)** / **HOURLY OUT PUT** **C- Equipm**

= 187.08 Birr/m²

C) : 2,253.98 Birr/m²

15% 338.10 Birr/m²

10% 225.40 Birr/m²

2,817.48

2,817.48 Birr/m²

O TARGETED OUTPUT.

HEET FOR DIRECT & INDIRECT UNIT COSTS

LABOUR HOURLY OUT PUT

EQUIPMENT HOURLY OUT PUT

RESULT

LABOUR BY COST (1:02)					**E**
LABOUR BY TRADE	**NO**	**UF**	**** INDEXED DAILY COST**	**DAILY COST**	**TYPE OF EQUIPMENT**
Foreman	1	0.25	225	56.25	tools
weder	1	1	275	275	welding machin
D/L	2	1	115	230	
TOTAL (1:02)				**561.25**	

B- Manpower unit cost = **TOTAL (1:02)** / **HOURLY OUT PUT** **C- Equipm**

= 187.08 Birr/m²

+C) : 2,185.79 Birr/m²

15% 327.87 Birr/m²

10% 218.58 Birr/m²

2,732.24

2,732.24 Birr/m²

O TARGETED OUTPUT.

HEET FOR DIRECT & INDIRECT UNIT COSTS

LABOUR HOURLY OUT PUT

EQUIPMENT HOURLY OUT PUT

RESULT

LABOUR BY COST (1:02)					**E**
LABOUR BY TRADE	**NO**	**UF**	**** INDEXED DAILY COST**	**DAILY COST**	**TYPE OF EQUIPMENT**
Foreman	1	0.25	225	56.25	tools

welder	1	1	275	275	
D/L	2	1	115	230	
TOTAL (1:02)				**561.25**	

B- Manpower unit cost = **TOTAL (1:02)** / **HOURLY OUT PUT** **C- Equipm**

= 187.08 Birr/m²

+C) : 953.39 Birr/m²

15% 143.01 Birr/m²

10% 95.34 Birr/m²

1,191.74 Birr/m²

O TARGETED OUTPUT.

ET FOR DIRECT & INDIRECT COSTS

LABOUR HOURLY OUTPUT:

EQUIPEMEINT HOURLY OUTPUT

RESULT 102.55 Birr/kg

				Equipment Cost (1:03)	
No.	UF	** Indexed daily wage	daily wage	Type of Equipment	No.
1	1	225	225.00	tools	4
1	1	275	275.00	Welding machine	1
1	1	275	275.00		
2	1	115	230.00		
			1005.00	Total (1:03)	

7.18 Birr/ml C=Equipment Unit Cost

Total of (1:03)

hr output:

	74.31	Birr/ml
20%	14.86	"
15%	13.38	"
	102.55	"
	102.55	Birr/ml

O TARGETED OUTPUT.

I FOR DIRECT & INDIRECT COSTS

LABOUR HOURLY OUTPUT:		140
EQUIPEMEINT HOURLY OUTPUT		140
RESULT	62.37 Birr/kg	

				Equipment Cost (1:03)	
No.	UF	** Indexed daily wage	daily wage	Type of Equipment	No.
1	1	225	225.00	Tools	4
1	1	275	275.00	Welding machine	
2	1	115	230.00		
1	1	275	275.00		
			1005.00	Total (1:03)	

Cost 7.18 Birr/ml C=Equipment Unit Cost

Total of (1:03)

hr output:

	46.78	Birr/ml
20%	7.45	Birr/ml
15%	8.13	Birr/ml

62.37 Birr/ml

62.37 Birr/ml

O TARGETED OUTPUT.

ir case

T FOR DIRECT & INDIRECT COSTS

LABOUR HOURLY OUTPUT:

EQUIPEMEINT HOURLY OUT PUT

RESULT 41.65 Birr/kg

				Equipment Cost (1:03)	
No.	UF	** Indexed hourly wage	hourly wage	Type of Equipment	No.
1	1	225	225.00	Welding mac.	1
1	1	235	235.00	Grinder	1
2	1	175	350.00	Tools	4
			810.00	Total (1:03)	

Cost 5.79 Birr/kg C=Equipment Unit Cost

Total of (1:03)

hr output:

23.83 Birr/kg

20% 6.02 Birr/kg

15% 4.48 Birr/kg

34.33 Birr/kg

34.33 Birr/kg

O TARGETED OUTPUT.

S SHEET FOR DIRECT & INDIRECT COSTS

LABOUR HOURLY OUTPUT:

EQUIPEMEINT HOURLY OUTPUT

RESULT 132.23 Birr/ml

				Equipment Cost (1:03)	
No.	UF	** Indexed daily wage	daily wage	Type of Equipment	No.
1	0.25	225	56.25	tools	6
1	1	235	235.00		
2	1	115	230.00		
			521.25	Total (1:03)	

3.72 Birr/ml C=Equipment Unit Cost

Total of (1:03)

hr output:

95.82 Birr/ml

20% 19.16 "

15% 17.25 "

132.23 "

132.23 Birr/ml

O TARGETED OUTPUT.

Γ FOR DIRECT & INDIRECT COSTS

LABOUR HOURLY OUTPUT:

EQUIPEMEINT HOURLY OUT PUT

RESULT 49.04 Birr/kg

				Equipment Cost (1:03)	
No.	UF	** Indexed daily wage	daily wage	Type of Equipment	No.
1	1	225	225.00	Welding mac.	1
1	1	235	235.00	Grinder	1

2	1	115	230.00	Tools	4
			690.00	Total (1:03)	

Cost	4.93	Birr/kg	C=Equipment Unit Cost
			Total of (1:03)
			hr output:
		36.63	Birr/kg
	20%	6.02	Birr/kg
	15%	6.40	Birr/kg
		49.04	Birr/kg
		49.04	Birr/kg

O TARGETED OUTPUT.

Γ FOR DIRECT & INDIRECT COSTS

LABOUR HOURLY OUTPUT:

EQUIPEMEINT HOURLY OUT PUT

RESULT 46.63 Birr/kg

				Equipment Cost (1:03)	
No.	UF	** Indexed daily wage	daily wage	Type of Equipment	No.
1	1	225	225.00	Welding mac.	1
1	1	235	235.00	Grinder	1
2	1	115	230.00	Tools	4

			690.00	Total (1:03)	

Cost 4.93 Birr/kg C=Equipment Unit Cost

Total of (1:03)

hr output:

	34.53	Birr/kg
20%	6.02	Birr/kg
15%	6.08	Birr/kg
	46.63	Birr/kg
	46.63	Birr/kg

O TARGETED OUTPUT.

)IRECT & INDIRECT COSTS

LABOUR HOURLY OUTPUT: 140

EQUIPEMEINT HOURLY OUTPUT 140

RESULT 132.32 Birr/ml

				Equipment Cost (1:03)	
No.	UF	** Indexed daily wage	daily wage	Type of Equipment	No.
1	0.25	225	56.25	tools	4
1	1	235	235.00		
2	1	115	230.00		
			521.25	Total (1:03)	

3.72 Birr/ml C=Equipment Unit Cost

Total of (1:03)

hr output:

	95.89	Birr/ml
20%	19.18	"

15%	17.26	"	
	132.32	"	
	132.32	Birr/ml	

O TARGETED OUTPUT.

Γ FOR DIRECT & INDIRECT COSTS

LABOUR HOURLY OUT PUT		5
EQUIPEMEINT HOURLY OUTPUT		5
RESULT	264.72 Birr/kg	

				Equipment Cost (1:03)	
No.	UF	** Indexed daily wage	daily wage	Type of Equipment	No.
1	0.25	225	56.25	tools	3
1	1	235	235.00		
2	1	115	230.00		
			521.25	Total (1:03)	

104.25 Birr/ml

C=Equipment Unit Cost

Total of (1:03)

hr output:

	191.83	Birr/ml
20%	38.37	"
15%	34.53	"
	264.72	"
	264.72	Birr/ml

O TARGETED OUTPUT.

Γ FOR DIRECT & INDIRECT COSTS

LABOUR HOURLY OUTPUT: 30

EQUIPEMEINT HOURLY OUT PUT 30

RESULT 72.54

				Equipment Cost (1:03)	
No.	UF	** Indexed daily wage	daily wage	Type of Equipment	No.
1	1	225	225.00	Tools	4
1	1	335	335.00		
2	1	115	230.00		
			790.00	Total (1:03)	

Cost 26.33 Birr/kg C=Equipment Unit Cost

Total of (1:03)

hr output:

52.56 Birr/kg

20% 10.51 Birr/kg

15% 9.46 Birr/kg

72.54 Birr/kg

72.54 Birr/kg

O TARGETED OUTPUT.

ET FOR DIRECT & INDIRECT COSTS

LABOUR DAILY OUTPUT: 6

EQUIPEMENT DAILY OUT PUT: 6

RESULT: **207.20** Birr/m^2

Labor Cost (1:02)				**Equipment**	
No.	UF	** Indexed daily Cost	daily Cost	Type of Equipment	No.

1	0.2	225.00	45	Tools	3
1	1	235.00	235		
2	1	115.00	230		
Total (1:02)			510.00		**Total (1:03)**

t 85.00 Birr/m² **C=Equipment Unit Cost**

B+C =		153.48	Birr/m²
	20%	30.70	
	15%	23.02	
		207.20	

Total unit cost: **207.20** Birr/m²

ET FOR DIRECT & INDIRECT COSTS

LABOUR DAILY OUTPUT:		6
EQUIPEMENT DAILY OUT PUT:		6
RESULT:	**282.90**	Birr/m²

Labor Cost (1:02)				**Equipment**	
No.	UF	** Indexed daily Cost	daily Cost	Type of Equipment	No.
1	0.2	225.00	45	Tools	4
3	1	235.00	705		
2	1	115.00	230		
Total (1:02)			980.00		**Total (1:03)**

t 163.33 Birr/m² **C=Equipment Unit Cost**

B+C =		209.55	Birr/m²
	20%	41.91	
	15%	31.43	
		282.90	

Total unit cost: **282.90** Birr/m^2

'SIS SHEET FOR DIRECT & INDIRECT COSTS

LABOUR DAILY OUTPUT: 8
EQUIPEMENT DAILY OUT PUT: 8
RESULT: 534.87 Birr/pcs

)2)				**Equipment Cost (1:03)**	
No.	UF	** Indexed daily Cost	daily Cost	Type of Equipment	No.
1	0.25	225.00	56.25	tools	5
1	1	235.00	235		
2	1	115.00	230		
			521.25	**Total (1:03)**	

t 65.16 Birr/m^2 **C=Equipment Unit Cost**

B+C = 411.44 Birr/m^2
20% 82.29
10% 41.14
534.87

Total unit cost: 534.87 Birr/m^2

'SIS SHEET FOR DIRECT & INDIRECT COSTS

LABOUR DAILY OUTPUT: 8
EQUIPEMENT DAILY OUT PUT: 8
RESULT: 522.73 Birr/pcs

)2)				**Equipment Cost (1:03)**	
No.	UF	** Indexed daily Cost	daily Cost	Type of Equipment	No.
1	0.25	225.00	56.25	tools	4
1	1	235.00	235		
2	1	115.00	230		

			521.25	**Total (1:03)**	

t 65.16 Birr/m² **C=Equipment Unit Cost**

B+C =		402.10	Birr/m²
	20%	80.42	
	10%	40.21	
		522.73	

Total unit cost: 522.73 Birr/m²

R DIRECT & INDIRECT COSTS

LABOUR DAILY OUTPUT:		8
EQUIPEMENT DAILY OUT PUT:		8
RESULT:	151.45 Birr/pcs	

2)				**Equipment Cost (1:03)**	
No.	UF	** Indexed daily Cost	daily Cost	Type of Equipment	No.
1	0.2	225.00	45	tools	4
1	1	235.00	235		
2	1	115.00	230		
			510.00	**Total (1:03)**	

t 63.75 Birr/m² **C=Equipment Unit Cost**

B+C =		116.50	Birr/m²
	20%	23.30	
	10%	11.65	
		151.45	

Total unit cost: 151.45 Birr/m²

STERING

RECT & INDIRECT COSTS

LABOR HOURLY OUTPUT: 26.25

3) EQUIPMENT HOURLY OUTPUT 26.25

RESULT : 273.66 Birr/m²

)				Equipment Cost (1:03)	
No.	UF	** Indexed daily wage	dailywage	Type of Equipment	No.
1	0.25	225	56.25	Hand tools	2
1	1	300	300.00		
1	1	115	115.00		
			471.25	Total (1:03)	

Cost	17.95	Birr/m²	C=Equipment Unit Cost
			Total of (1:03)
			Daily output:
		263.93	Birr/m²
	20%	5.12	Birr/m²
	15%	4.61	Birr/m²
		273.66	Birr/m²
		273.66	Birr/m²

O TARGETED OUTPUT.

NDIRECT COSTS

LABOUR HOURLY OUTPUT: 12.5

face EQUIPMENT HOURLY OUTPUT 12.5

RESULT : 307.01 Birr/m²

)				Equipment Cost (1:03)	
No.	UF	** Indexed daily Wage	daily wage	Type of Equipment	No.
1	0.25	225	56.25	Hand tools	2
1	1	300	300.00		
1	1	115	115.00		
			471.25	Total (1:03)	

Cost	37.70	Birr/m^2	C=Equipment Unit Cost
			Total of (1:03)
			hr output:
+ B + C =		283.93	Birr/m^2
	20%	12.15	Birr/m^2
	15%	10.93	Birr/m^2
		307.01	Birr/m^2
		307.01	Birr/m^2

O TARGETED OUTPUT.

CT & INDIRECT COSTS

	LABOUR HOURLYOUTPUT:		14
(1:2)	EQUIPMENT HOURLY OUTPUT		14
	RESULT :	294.03	Birr/m^2

)				Equipment Cost (1:03)	
No.	UF	** Indexed daily Wage	daily wage	Type of Equipment	No.
1	0.25	225	56.25	Hand tools	2
1	1	300	300.00		
1	1	115	115.00		

			471.25	Total (1:03)	

Cost	33.66	Birr/m^3	C=Equipment Unit Cost
			Total of (1:03)
			hr output:
+ B + C =		279.84	Birr/m^2
	20%	7.47	Birr/m^2
	15%	6.72	Birr/m^2
		294.03	Birr/m^2
		294.03	Birr/m^2

O TARGETED OUTPUT.

RECT & INDIRECT COSTS

LABOR HOURLY OUTPUT:			26.25
EQUIPMENT HOURLY OUTPUT			26.25
RESULT :	273.66	Birr/m^2	

)				Equipment Cost (1:03)	
No.	UF	** Indexed daily Wage	daily wage	Type of Equipment	No.
1	0.25	225	56.25	Hand tools	2
1	1	300	300.00		
1	1	115	115.00		
			471.25	Total (1:03)	

Cost	17.95	Birr/m²	C=Equipment Unit Cost
			Total of (1:03)
			Daily output:
		263.93	Birr/m²
	20%	5.12	Birr/m²
	15%	4.61	Birr/m²
		273.66	Birr/m²
		273.66	Birr/m²

O TARGETED OUTPUT.

NDIRECT COSTS

	LABOUR HOURLY OUTPUT:		12.5
)	EQUIPMEN'T HOURLY OUTPUT		12.5
	RESULT :	307.25	Birr/m²

)				Equipment Cost (1:03)	
No.	UF	** Indexed daily Wage	daily wage	Type of Equipment	No.
1	0.25	225	56.25	Hand tools	3
1	1	300	300.00		
1	1	115	115.00		
			471.25	Total (1:03)	

Cost	37.70	Birr/m²	C=Equipment Unit Cost
			Total of (1:03)
			hr output:
⊦ B + C =		284.17	Birr/m²
	20%	12.15	Birr/m²
	15%	10.93	Birr/m²
		307.25	Birr/m²

307.25 Birr/m²

O TARGETED OUTPUT.

NDIRECT COSTS

LABOUR HOURLYOUTPUT: 14

1:2) EQUIPMENT HOURLY OUTPUT 14

RESULT : 294.03 Birr/m²

)				Equipment Cost (1:03)	
No.	UF	** Indexed daily Wage	daily wage	Type of Equipment	No.
1	0.25	225	56.25	Hand tools	2
1	1	300	300.00		
1	1	115	115.00		
			471.25	Total (1:03)	

Cost 33.66 Birr/m³ C=Equipment Unit Cost

Total of (1:03)

hr output:

+ B + C = 279.84 Birr/m²

20% 7.47 Birr/m²

15% 6.72 Birr/m²

294.03 Birr/m²

294.03 Birr/m²

O TARGETED OUTPUT.

ET FOR DIRECT & INDIRECT COSTS

LABOUR HOURLY OUTPUT: 5

EQUIPMENT HOURLY OUTPUT 5

RESULT : 293.11 Birr/ml

				Equipment Cost (1:03)	
No.	UF	** Indexed daily Wage	daily wage	Type of Equipment	No.
1	1	25	25.00	Tool	2
1	1	15	15.00		
2	1	7.5	15.00		
			55.00	Total (1:03)	

Cost 11.00 Birr/ml C=Equipment Unit Cost

Total of (1:03)

hr output:

247.39 Birr/ml

20% 24.06 Birr/ml

15% 21.66 Birr/ml

293.11 Birr/ml

293.11 Birr/ml

O TARGETED OUTPUT.

ET FOR DIRECT & INDIRECT COSTS

LABOUR HOURLY OUTPUT: 10

EQUIPMENT HOURLY OUTPUT 10

RESULT : 90.62 Birr/ml

				Equipment Cost (1:03)	
No.	UF	** Indexed daily Wage	daily wage	Type of Equipment	No.
1	1	25	25.00	Tool	2
1	1	15	15.00		
2	1	7.5	15.00		

			55.00	Total (1:03)	

Cost 5.50 Birr/ml C=Equipment Unit Cost

Total of (1:03)

hr output:

44.90 Birr/ml

20% 24.06 Birr/ml

15% 21.66 Birr/ml

90.62 Birr/ml

90.62 Birr/ml

O TARGETED OUTPUT.

ET FOR DIRECT & INDIRECT COSTS

LABOUR HOURLY OUTPUT: 3

EQUIPEMENT HOURLY OUT PUT: 3.00

RESULT : **309.85** Birr/m2

Labor Cost (1:02)				**Equipment**	
No.	UF	** Indexed daily Wage	daily wage	Type of Equipment	No.
1	0.25	225.00	56.25	Tool	2
1	1	265.00	265.00		
2	1	115.00	230.00		
Total (1:02)			**551.25**		**Total (1:03)**

t Cost 183.75 Birr/m2 **C=Equipment Unit Cost**

	229.52	Birr/ml
20%	45.90	
15%	34.43	
	309.85	
	309.85	Birr/m2

ET FOR DIRECT & INDIRECT COSTS

LABOUR HOURLY OUTPUT:		12
EQIPMENT HOURLY OUTPUT		12
RESULT :	**179.19**	Birr/m2

Labor Cost (1:02)				**Equipment**	
No.	UF	** Indexed daily Wage	daily wage	Type of Equipment	No.
1	0.25	225.00	56.25	Tool	2
2	1	300.00	600.00		
1	1	115.00	115.00		
Total (1:02)			**771.25**		**Total (1:03)**

t Cost 64.27 Birr/m2 **C=Equipment Unit Cost**

	132.73	Birr/m2
20%	26.55	
15%	19.91	
	179.19	
	179.19	Birr/m2

INTING

CT & INDIRECT COSTS

LABOUR HOURLY OUTPUT: 30
EQUIPMENT HOURLY OUTPUT 30
RESULT : 53.16 Birr/m^2

				Equipment Cost (1:03)	
No.	UF	** Indexed daily Wage	daily wage	Type of Equipment	No.
1	0.25	225	56.25	Hand tools	2
2	1	300	600.00		
2	1	115	230.00		
			886.25	Total (1:03)	

Cost 29.54 Birr/m^2 C=Equipment Unit Cost

Total of (1:03)

Daily output:

35.04 Birr/m^2

20% 9.54 Birr/m^2

15% 8.58 Birr/m^2

53.16 Birr/m^2

53.16 Birr/m^2

O TARGETED OUTPUT.

TS

LABOUR HOURLY OUTPUT: 30
EQUIPMENT HOURLY OUTPUT 30
RESULT : 125.46 Birr/m2

				Equipment Cost (1:03)	
No.	UF	** Indexed daily Wage	daily wage	Type of Equipment	No.

1	0.25	225	56.25	Hand tools	3
2	1	300	600.00		
2	1	115	230.00		
			886.25	Total (1:03)	

Cost	29.54	Birr/m2	C=Equipment Unit Cost
			Total of (1:03)
			Daily output:
		107.34	Birr/m2
	20%	9.54	Birr/m2
	15%	8.58	Birr/m2
		125.46	Birr/m2
		125.46	Birr/m2

O TARGETED OUTPUT.

12. GLAZZING WORK

ET FOR DIRECT & INDIRECT COSTS

LABOUR DAILY OUTPUT:		6
EQUIPEMENT DAILY OUT PUT:		6
RESULT:	**435.32** Birr/m2	

Labor Cost (1:02)				**Equipment**	
No.	UF	** Indexed daily Wage	daily Cost	Type of Equipment	No.
1	0	225	0	tool	2
1	1	225	225		
1	1	115	115		
Total (1:02)			340.00		**Total (1:03)**

t	56.67 Birr/m2	**C=Equipment Unit Cost**	
B+C =		322.46	Birr/m2
	20%	64.49	
	15%	48.37	
		435.32	
Total unit cost:		**435.32**	Birr/m2

TRICALE INSTALATION

ET FOR DIRECT & INDIRECT COSTS

LABOUR H(HOURLY OUTPUT:		8
EQUPMENT HOURLY OUTPUT		8
RESULT:	**226.13**	Birr/no

Labor Cost (1:02)				**Equipment**	
No.	UF	** Indexed daily Wage	daily Wage	Type of Equipment	No.
1	0.2	205.00	41	Tools	3
1	1	275.00	275		
1	1	115.00	115		
Total (1:02)			431.00		**Total (1:03)**

it Cost	53.88 Birr/no	C=Equipment Unit Cost	
B+C =		167.50	Birr/no
	20%	33.50	
	15%	25.13	
		226.13	
Total unit cost:		**226.13**	Birr/no

ET FOR DIRECT & INDIRECT COSTS

LABOUR H(HOURLY OUTPUT:		8

EQUPMENT HOURLY OUTPUT 8

RESULT: **104.63** Birr/no

Labor Cost (1:02)				Equipment	
No.	UF	** Indexed daily Wage	daily Wage	Type of Equipment	No.
1	0.2	205.00	41	Tools	3
1	1	275.00	275		
1	1	115.00	115		
Total (1:02)			431.00		**Total (1:03)**

it Cost 53.88 Birr/no C=Equipment Unit Cost

B+C = 77.50 Birr/no

20% 15.50

15% 11.63

104.63

Total unit cost: **104.63** Birr/no

ET FOR DIRECT & INDIRECT COSTS

LABOUR H(HOURLY OUTPUT: 8

EQUPMENT HOURLY OUTPUT 8

RESULT: **205.37** Birr/no

Labor Cost (1:02)				Equipment	
No.	UF	** Indexed daily Wage	daily Wage	Type of Equipment	No.
1	0.2	205.00	41	Tools	2
1	1	275.00	275		
1	1	115.00	115		
Total (1:02)			431.00		**Total (1:03)**

it Cost	53.88 Birr/no	C=Equipment Unit Cost	
B+C =		152.13	Birr/no
	20%	30.43	
	15%	22.82	
		205.37	
Total unit cost:		**205.37**	Birr/no

ET FOR DIRECT & INDIRECT COSTS

LABOUR H(HOURLY OUTPUT:		8
EQUPMENT HOURLY OUTPUT		8
RESULT:	**250.97** Birr/no	

Labor Cost (1:02)				**Equipment**	
No.	UF	** Indexed daily Wage	daily Wage	Type of Equipment	No.
1	0.2	205.00	41	Tools	2
1	1	275.00	275		
1	1	115.00	115		
			0		
Total (1:02)			431.00		**Total (1:03)**

it Cost	53.88 Birr/no	C=Equipment Unit Cost	
B+C =		192.13	Birr/no
	20%	33.63	
	15%	25.22	
		250.97	
Total unit cost:		**250.97**	Birr/no

ET FOR DIRECT & INDIRECT COSTS

LABOUR H(HOURLY OUTPUT: 8

EQUPMENT HOURLY OUTPUT 8

RESULT: **205.37** Birr/no

Labor Cost (1:02)				**Equipment**	
No.	UF	** Indexed daily Wage	daily Wage	Type of Equipment	No.
1	0.2	205.00	41	Tools	2
1	1	275.00	275		
1	1	115.00	115		
			0		
Total (1:02)			431.00	**Total (1:03)**	

it Cost 53.88 Birr/no C=Equipment Unit Cost

B+C = 152.13 Birr/no

20% 30.43

15% 22.82

205.37

Total unit cost: **205.37** Birr/no

ET FOR DIRECT & INDIRECT COSTS

LABOUR H(HOURLY OUTPUT: 8

EQUPMENT HOURLY OUTPUT 8

RESULT: **326.03** Birr/no

Labor Cost (1:02)				**Equipment**	
No.	UF	** Indexed daily Wage	daily Wage	Type of Equipment	No.
1	0.2	205.00	41	Tools	2
1	1	275.00	275		
2	1	115.00	230		

Total (1:02)	546.00	**Total (1:03)**

it Cost 68.25 Birr/no C=Equipment Unit Cost

B+C =		241.50	Birr/no
	20%	48.30	
	15%	36.23	
		326.03	
Total unit cost:		**326.03**	Birr/no

ET FOR DIRECT & INDIRECT COSTS

LABOUR H(HOURLY OUTPUT:		8
EQUPMENT HOURLY OUTPUT		8
RESULT:	**272.55**	Birr/no

Labor Cost (1:02)					**Equipment**
No.	UF	** Indexed daily Wage	daily Wage	Type of Equipment	No.
1	0.2	205.00	41	Tools	2
1	1	275.00	275		
1	1	115.00	115		
			0		
			0		
			0		
Total (1:02)			431.00		**Total (1:03)**

it Cost 53.88 Birr/no C=Equipment Unit Cost

B+C =		227.13	Birr/no
	20%	45.43	
	15%		
		272.55	
Total unit cost:		**272.55**	Birr/no

ET FOR DIRECT & INDIRECT COSTS

LABOUR H(HOURLY OUTPUT: 8

EQUPMENT HOURLY OUTPUT 8

RESULT: **235.74** Birr/no

Labor Cost (1:02)				Equipment	
No.	UF	** Indexed daily Wage	daily Wage	Type of Equipment	No.
1	0.2	205.00	41	Tools	2
1	1	275.00	275		
1	1	115.00	115		
			0		
			0		
			0		
Total (1:02)			431.00		**Total (1:03)**

it Cost 53.88 Birr/no C=Equipment Unit Cost

B+C = 174.63 Birr/no

20% 34.93

15% 26.19

235.74

Total unit cost: **235.74** Birr/no

ET FOR DIRECT & INDIRECT COSTS

LABOUR H(HOURLY OUTPUT: 8

EQUPMENT HOURLY OUTPUT 8

RESULT: **397.74** Birr/no

Labor Cost (1:02)				Equipment	
No.	UF	** Indexed daily Wage	daily Wage	Type of Equipment	No.
1	0.2	205.00	41	Tools	2
1	1	275.00	275		
1	1	115.00	115		
			0		
			0		

			0		
Total (1:02)			431.00		**Total (1:03)**

it Cost 53.88 Birr/no C=Equipment Unit Cost

B+C =		294.63	Birr/no
	20%	58.93	
	15%	44.19	
		397.74	
Total unit cost:		**397.74**	Birr/no

ET FOR DIRECT & INDIRECT COSTS

LABOUR H(	HOURLY OUTPUT:		8
EQUPMENT	HOURLY OUTPUT		8
RESULT:		**213.64**	Birr/no

Labor Cost (1:02)				**Equipment**	
No.	UF	** Indexed daily Wage	daily Wage	Type of Equipment	No.
1	0.2	205.00	41	Tools	2
1	1	275.00	275		
1	1	115.00	115		
			0		
			0		
Total (1:02)			431.00		**Total (1:03)**

it Cost 53.88 Birr/no C=Equipment Unit Cost

B+C =		167.13	Birr/no
	20%	26.58	
	15%	19.94	
		213.64	
Total unit cost:		**213.64**	Birr/no

ET FOR DIRECT & INDIRECT COSTS

LABOUR H(HOURLY OUTPUT: 8

EQUPMENT HOURLY OUTPUT 8

RESULT: **306.62** Birr/no

Labor Cost (1:02)				**Equipment**	
No.	UF	** Indexed daily Wage	daily Wage	Type of Equipment	No.
1	0.2	205.00	41	Tools	2
1	1	275.00	275		
1	1	115.00	115		
			0		
			0		
			0		
Total (1:02)			431.00	**Total (1:03)**	

it Cost 53.88 Birr/no C=Equipment Unit Cost

B+C =		227.13	Birr/no
	20%	45.43	
	15%	34.07	
		306.62	
Total unit cost:		**306.62**	Birr/no

R DIRECT & INDIRECT COSTS

LABOUR H(HOURLY OUTPUT: 8

EQUPMENT HOURLY OUTPUT 8

RESULT: **3851.49** Birr/no

)				**Equipment Cost (1:03)**	
No.	UF	** Indexed daily Wage	daily Wage	Type of Equipment	No.
1	0.2	205.00	41	Tools	2
1	1	275.00	275		
1	1	115.00	115		
			0		

			0		
			0		
Total (1:02)			431.00		**Total (1:03)**

53.88 Birr/no C=Equipment Unit Cost

B+C =		2772.13	Birr/no
	20%	616.78	
	15%	462.59	
		3851.49	
Total unit cost:		**3851.49**	Birr/no

ET FOR DIRECT & INDIRECT COSTS

LABOUR H(HOURLY OUTPUT: 8

EQUPMENT HOURLY OUTPUT 8

NO RESULT: **450.90** Birr/no

Labor Cost (1:02)					**Equipment**
No.	UF	** Indexed daily Wage	daily Wage	Type of Equipment	No.
1	0.2	205.00	41	Tools	2
2	1	275.00	550		
1	1	115.00	115		
			0		
			0		
Total (1:02)			706.00		**Total (1:03)**

it Cost 88.25 Birr/no C=Equipment Unit Cost

B+C =		334.00	Birr/no
	20%	66.80	
	15%	50.10	
		450.90	
Total unit cost:		**450.90**	Birr/no

m^2/day

m^2/day

Cost (1:03)	
Hourly Rental	HourlyCost
3.00	12
	0
	12.00

0.60 Birr/m^2

1.80 m^3/day

1.8 m^3/day

hr Rental	Hr cost
3.00	12
	0

	0
	12

4.80 Birr/m3

hourly Cost
12
12.00

Birr/m3

1.70 m^3/day

1.7 m^3/day

Cost (1:03)	
Hourly Rental	HourlyCost
3.00	12
	12.00

7.06 Birr/m^3

m^3/day

m^3/day

hr Rental	hr Cost
3.00	6
	0
	0
	6

2.00 Birr/m^3

hourly Cost
1800
400
0.8
2200.80

birr/m3

m^2 /day

m^2/ day

hr Rental	hr cost
3.00	12
191.30	191.3
66.84	66.84
	0
	0
	0
	0
	0
	270.14

27.014

m^3 / day

m^3 /day

hr Rental	hr Cost

191.30	191.3
3	12
66.1	
	203.3

20.33 Br./m^3

m^2/day.

m^2/day

Daily Rental	hourly cost
3.00	12.00
	12.00

2.00 Birr/m^2

3.50 m^2/day

3.5 m^2/day

Daily Rental	Daily Cost
3.00	12.00
	12.00

3.43 Birr/m^2

kg/day
kg/day

Daily Rental	Daily Cost
3.00	12
20.00	20
	32

0.43 Birr/m^2

kg/day
kg/day

Daily Rental	Daily Cost
3.00	12
20.00	20
	32

0.34 Birr/m^2

kg/day
kg/day

Daily Rental	Daily Cost
0.40	1.6
20.00	20

	21.6

0.23 Birr/m^2

kg/day
kg/day

Daily Rental	Daily Cost
3.00	1.6
20.00	20
	21.6

0.23 Birr/m^2

ml /day
ml /day

hourly Rental	hourly Cost
3.00	12
	0
	0
	0
	0
	0
	0
	0
	12

0.6 Birr/ml

m3/day

m3/day

Daily Rental	Daily Cost
3.00	12.00
	2.4

1.92 Birr/m^2

6.00 m^2/day

6 m2/day

Daily Rental	Hourly Cost
3.00	12.00

	12.00

2 Birr/m²

2 pcs/day

2 **pcs/day**

2,662.7 Birr/m²

EQUIPMENT COST (1:03)

NO	HOURLY RENTAL	HOURLY COST
4.0	3.00	12
TOTAL (1:03)		**12**

. unit cost = **TOTAL (1:03)**

HOURLY OUT PUT

= 6 **Birr/m²**

2 pcs/day

2 **pcs/day**

2,423.9 Birr/m²

EQUIPMENT COST (1:03)		
NO	**HOURLY RENTAL**	**HOURLY COST**
4	3	12
TOTAL (1:03)		**12**

. unit cost = **TOTAL (1:03)**

HOURLY OUT PUT

= 6 **Birr/m²**

2 **pcs/day**

2 **pcs/day**

2,708.4 Birr/m²

EQUIPMENT COST (1:03)		
NO	**HOURLY RENTAL**	**HOURLY COST**
4	3	12
TOTAL (1:03)		**12**

. unit cost = **TOTAL (1:03)**

HOURLY OUT PUT

= 6 **Birr/m²**

2 **pcs/day**

2 **pcs/day**

2,738.3 Birr/m²

EQUIPMENT COST (1:03)		
NO	**HOURLY RENTAL**	**HOURLY COST**
4	3	12

TOTAL (1:03)		**12**

. unit cost = **TOTAL (1:03)**
HOURLY OUT PUT
= 6 **Birr/m²**

3.00 **pcs/day**
3.00 **pcs/day**
2,817.5 **Birr/m²**

EQUIPMENT COST (1:03)

NO	HOURLY RENTAL	HOURLY COST
4	3.00	12
1		
TOTAL (1:03)		**12**

. unit cost = **TOTAL (1:03)**
HOURLY OUT PUT
= 4 **Birr/m²**

3.00 **pcs/day**

3.00 **pcs/day**

2,732.2 Birr/m²

EQUIPMENT COST (1:03)		
NO	**HOURLY RENTAL**	**HOURLY COST**
4	3.00	12
1		
TOTAL (1:03)		**12**

. unit cost = **TOTAL (1:03)**

HOURLY OUT PUT

= 4 **Birr/m²**

3 pcs/day

3 **pcs/day**

1,191.7 Birr/m²

EQUIPMENT COST (1:03)		
NO	**HOURLY RENTAL**	**HOURLY COST**
2	0.4	0.8

TOTAL (1:03)		**0.8**

. unit cost = **TOTAL (1:03)**
HOURLY OUT PUT
= 0.26666666667 **Birr/m²**

140 kg/day
140 kg/day

hr Rental	hr Cost
3.00	12.00
	12.00

0.09 Birr/ml

kg/day
kg/day

hr Rental	hr Cost
3.00	12.00
	0.00
	0.00
	12.00

0.09 Birr/ml

140 kg/day
140 kg/day

hourly Rental	hourly Cost
60.00	60.00
25.00	25.00
0.40	1.60
	86.60

0.62 Birr/kg

140 kg/day

140 kg/day

hr Rental	hr Cost
0.40	2.40
	2.40

0.017 Birr/ml

140 kg/day

140 kg/day

hourly Rental	hourly Cost
60.00	60.00
25.00	25.00

0.40	1.60
	86.60

0.62 Birr/kg

140 kg/day
140 kg/day

hourly Rental	hourly Cost
60.00	60.00
25.00	25.00
0.40	1.60

	86.60

0.62 Birr/kg

kg/day
kg/day

hr Rental	hr Cost
3.00	12.00
	12.00

0.09 Birr/ml

kg/day
kg/day

hr Rental	hr Cost
3.00	9.00
	9.00

1.80 Birr/ml

kg/day
kg/day

hourly Rental	hourly Cost
3.00	12.00

	12.00

0.40 Birr/kg

m2/day
m2/day

Cost (1:03)	
Hourly Rental	Hourly Cost

0.4	1.20

0.00 Birr/m^2

m2/day
m2/day

Cost (1:03)	
Hourly Rental	Hourly Cost
3	12.00

0.00 Birr/m^2

pcs/day
pcs/day

Hourly Rental	Hourly Cost
0.16	0.80
	0.80

10 Birr/m^2

pcs/day
pcs/day

Hourly Rental	Hourly Cost
3	12.00

	12.00

0.66666666667 Birr/m^2

pcs/day
pcs/day

Hourly Rental	Hourly Cost
3	12.00
	12.00

0.66666666667 Birr/m^2

m2/day
m2/day

hr Rental	hr Cost
3	6
	0
	0
	0
	0
	0
	0
	0
	0

0.23 Birr/m^2

m2/day
m2/day

hr Rental	hr Cost
3	6
	0
	0
	0
	0
	0
	0
	0
	0
	6

0.48 Birr/m^2

m2/day
m2/day

hr Rental	hr Cost
3	6
	0
	0

	0
	0
	0
	0
	0
	0
	6

0.43 Birr/m^3

m2/day
m2/day

hr Rental	hr Cost
3	6
	0
	0
	0
	0
	0
	0
	0
	0
	6

0.23 Birr/m^2

m2/day
m2/day

hr Rental	hr Cost
3	9
	0
	0
	0
	0
	0
	0
	0
	0
	9

0.72 Birr/m^2

m2/day
m2/day

hr Rental	hr Cost
3	6
	0
	0
	0
	0
	0
	0
	0
	0
	6

0.43 Birr/m^3

ml/day

ml/day

hr Rental	hr Cost
3	6
	0
	0
	0
	0
	0
	0
	0
	6

1.20 Birr/ml

ml/day
ml/day

hr Rental	hr Cost
3	6
	0
	0
	0

	0
	0
	0
	0
	6

0.60 Birr/ml

m2/day
m2/day

Cost (1:03)	
Hourly Rental	Hourly Cost
3	0.80
	0.80

0.27 Birr/m2

m2/day
m2/day

Cost (1:03)	
Hourly Rental	Hourly Cost
3	6.00
	7

0.58 Birr/m2

m2/day
m2/day

hr Rental	hr Cost
3	6
	0
	0
	0
	0
	0
	0
	0
	0
	6

0.20 Birr/m^2

m2/day
m2/day

hr Rental	hr Cost

3	9
	0
	0
	0
	0
	0
	0
	0
	0
	9

0.30 Birr/m2

m2/day
m2/day

Cost (1:03)	
Hourly Rental	Hourly Cost
3	6.00
	6.00

1.00 Birr/m2

no/day
no/day

Cost (1:03)	
Hourly Rental	Hourly Cost
3.00	9.00
	9.00

1.13

no/day

no/day

Cost (1:03)	
Hourly Rental	Hourly Cost
3.00	9.00
	9.00

1.13

no/day
no/day

Cost (1:03)	
Hourly Rental	Hourly Cost
3.00	6.00
	6.00

0.75

no/day
no/day

Cost (1:03)	
Hourly Rental	Hourly Cost
0.40	0.80
	-
	-
	-
	-
	6.00

0.75

no/day
no/day

Cost (1:03)	
Hourly Rental	Hourly Cost
3.00	6.00
	6.00

0.75

no/day
no/day

Cost (1:03)	
Hourly Rental	Hourly Cost
3.00	6.00

	6.00

0.75

no/day
no/day

Cost (1:03)	
Hourly Rental	Hourly Cost
3.00	6.00
	6.00

0.75

no/day
no/day

Cost (1:03)	
Hourly Rental	Hourly Cost
3.00	6.00
	6.00

0.75

no/day
no/day

Cost (1:03)	
Hourly Rental	Hourly Cost
3.00	6.00

	6.00

0.75

no/day
no/day

Cost (1:03)	
Hourly Rental	Hourly Cost
3.00	6.00
	-
	-
	-
	-
	6.00

0.75

no/day
no/day

Cost (1:03)	
Hourly Rental	Hourly Cost
3.00	6.00
	6.00

0.75

no/day
no/day

Hourly Rental	Hourly Cost
3.00	6.00
	-
	-

	6.00

0.75

no/day
no/day

Cost (1:03)	
Hourly Rental	Hourly Cost
3.00	6.00
	6.00

0.75

Item No	Description
	A. SUB-STRUCTURE
	1.EXCAVATION & EARTH WORKS
1.01	Clear and remove top soil to an average depth of 200mm.
1.02	Bulk excavation in ordinary soil to reduce level to the specified depth on the drawing.(300mm depth)
1.03	Pit Excavate in ordinary soil to a depth not exceeding 1500mm from ground level.
1.04	Trench Excavate in ordinary soil to a depth of 950mm from reduced ground level.
1.05	Back Fill around foundation wall ,footing pad ,and footing columns and bulk excavation
1.06	Load and Cart away surplus excavated material to an appropriate tip.
	TOTAL CARRIED TO SUMMARY .....
	2.CONCRETE WORKS
2.01	**50mm thick lean concrete quality C-5 with minimum cement content of 150kg/m^3 of concrete :**
	a) Under footing
	b) Under masonry wall foundation
	C) under grade beam
2.02	**Reinforced concrete quality C-25, 360 kg of cement /m^3**
	a) In footing pad, In foundation column& In grade beam
2.03	**Form work**
	a) To footings pad, To footing columns& To grade beams
2.04	**Reinforcement bars**
	dia. 8mm deformed bar
	dia. 10mm deformed bar
	dia. 14mm deformed bar
	dia.20mm deforme bar
	TOTAL CARRIED TO SUMMARY .....
	3. MASONRY WORKS
3.01	Foundation wall

3.02	Hard core
	TOTAL CARRIED TO SUMMARY.....
	TOTAL CARRIED TO SUMMARY FOR SUBSTRUCTURE.....
	B. SUPER-STRUCTURE
	1. CONCRETE WORKS
1.01	Reinforced concrete quality C-25, 360 kg of cement /m^3 filled in to formworks and vibrated around rod reinforcement
	a) In elevation columns, In floor beam, InTop tie beams, in 150mm thick floor slab& trade & landing of stair
1.05	Provide, cut & fix in position sawn structural wood or steel formwork which eve is appropriate;
	a) To elevation columns, To floor beam, To Top tie beams& To floor slab
1.06	Mild steel Reinforcement according to structural drawing. Price includes cutting, bending, placing in position and tying wires and concrete spacers and reinforcement bar chairs.
	a) dia. 6mm plain bar
	c) dia. 10mm deformed bar
	e) dia. 14mm deformed bar
	f) dia. 16mm deformed bar
	TOTAL CARRIED TO SUMMARY.....
	2. BLOCK WORK
2.01	Class C 200mm thick HCB wall which can satisfy the designed strength, bedded in cement mortar (1:3). Price shall include mortar bed
	TOTAL CARRIED TO SUMMARY.....
	5.METAL WORKS
5.01	**Metal windows and doors**
	Doors
	D1: size 118cm x 210cm
	TOTAL CARRIED TO SUMMARY.....
	6- STEEL STRUCTURE
	Supply, fabricate and mount steel truss & stair case according to the structural drawing.

6.01	**RHS truss**
	a) 30*30*3mm
6.02	**Lattice purlins**
	a) 25*25*2.5mm
6.03	**Bolts with nuts**
	a) dia 16mm J-bolt with length 400mm
	b) dia 12mm I-bolt with length 100mm
	c) dia 16mm J-bolt with length 110mm
6.04	**verticals &horizontals**
	a) 25*25*4mm size=30mm
6.20	**RHS post**
	a)40*40*3mm rhs post
6.22	**Treads**
	a)219*40*40*3mm
6.23	**Rails**
	a) 50*50*3mm hand rail
	b) 40*40*3mm middle &bottom rail
6.24	**Metal channels**
	a) 219*40*40*3mm HRS plats
6.25	**Landing**
	a) 2*150*60*3 mm
6.26	**Pillar**
	a) 130*130*3mm
6.27	**Metal plates**
	a) 219*40*40*3mm
	b) 2*150*60*3mm
6.28	**Bolts with nuts**
	a) dia.16mm j-bolt length.=300mm
	b) dia.16mm j-bolt length.=400mm
	c) dia. 20 mmJ- bolt length =250mm
	TOTAL CARRIED TO SUMMARY.....
	7-Plastering
7.01	1st, 2nd and 3rd coat of cement plaster for vertical surface and sofit (1:3)
	TOTAL CARRIED TO SUMMARY.....

	8.FINISHING
8.03	150*150* 6mm thick white ceramic on toilets & waiting class
8.04	terazo floor finish
	TOTAL CARRIED TO SUMMARY.....
	9. painting
9.01	**Apply coats of painting**
	a. First coat painting for internal and external wall
	TOTAL CARRIED TO SUMMARY.....
	12. Electrical installation
12.01	Wire
12.02	Conduit
12.03	Single switch
12.04	Double switch
12.05	Intermediate switch
12.06	Single socket
12.07	Double socket
12.08	Single florescent
12.09	Double florescent
12.10	**Light points**
	Flash mounted light points fed through PVC insulated conductores of 3*2.5mm^2 inside PVC condutes at 16mm diameter including juncation boxes with covers
12.11	**sockt out let points**
	Flash mounted light points fed through PVC insulated conductores of 3*2.5mm2 inside PVC condutes at 16mm diameter including juncation boxes with covers
12.12	**Distribution board**
12.13	**Telecome points/ outlets**
	a) Telephone point fed through 2*(twested pair catacory 6 utp cable) inside PVC condutof 25mm diameter
	b) Tele data out let 30cm AFFL
	TOTAL CARRIED TO SUMMARY.....
	summary for super structure
	NET SUMMARY

Unit		-	
	QUANTITY	unit price	total price
m^2	348.43	22.58	7,867.44
m^3	93.42	248.36	23,201.79
m^3	171.52	**236.88**	40,629.07
m^3	98.28	**370.85**	36,447.14
m^3	551.22	43.95	24,226.30
m^3	160.42	108.92	17,472.77
			149,844.50
			-
			-
m^2	41.16	368.88	15,183.10
m^2	21.45	368.88	7,912.48
m2	21.45	368.88	
			-
m^3	37.65	1,870.97	70,437.81
			-
m^2	3229.76	1,391.31	4,493,595.65
			-
kg	987.87	51.73	51,102.52
kg	4.36	47.27	206.10
kg	534.43	37.49	20,035.78
kg	1132.50	37.49	42,457.43
			4,700,930.85
			-
m^3	61.43	1640.31	100,756.04

m^3	**38.61**	166.07	6,412.56
			107,168.60
			4,957,943.95
			-
			-
			-
m^3	**93.38**	1,391.31	129,914.61
			-
m^2	**621.93**	266.40	165,680.82
			-
kg	**17.10**	68.87	1,177.68
kg	**4013.91**	47.27	189,737.53
kg	**599.31**	37.49	22,468.13
kg	**2169.81**	37.49	81,346.18
			590,324.95
			-
m^2	**401.54**	512.06	205,610.11
			205,610.11
			-
			-
			-
Pcs	**3.00**	2662.7	7,988.10
			7,988.10
			-
			-

			-
kg	**4,293.78**	102.55	440,327.11
			-
kg	**384.62**	62.37	23,988.81
			-
pcs	**8.00**	534.87	4,278.96
pcs	**8.00**	522.73	4,181.84
pcs	**8.00**	151.45	1,211.60
			-
pcs	**104.00**	62.37	6,486.48
			-
kg	**138.93**	41.65	5,786.43
			-
kg	**434.76**	132.23	57,488.31
			-
kg	**151.67**	49.04	7,437.90
kg	**338.66**	46.63	15,791.72
			-
kg	**213.12**	132.23	28,180.86
			-
kg	**103.36**	264.72	27,361.46
			-
kg	**466.44**	72.54	33,835.56
			-
pcs	**44.00**	207.20	9,116.80
pcs	**4.00**	282.90	1,131.60
			-
pcs	**8.00**	534.87	4,278.96
pcs	**8.00**	534.87	4,278.96
Pcs	**8.00**	534.87	4,278.96
			679,442.32
			-
m^2	**4,131.03**	112.00	462,675.54
			462,675.54

			-
m^2	**257.84**	309.85	79,891.08
m^2	**104.42**	179.19	18,710.12
			98,601.20
			-
			-
m^2	**1,721.82**	39.32	67,701.98
			67,701.98
			-
ml	**372.98**	226.13	84,342.65
ml	**354.33**	104.63	37,073.55
pcs	**9.00**	205.37	1,848.33
pcs	**32.00**	250.97	8,031.04
pcs	**2.00**	205.37	410.74
pcs	**34.00**	326.03	11,085.02
pcs	**16.00**	282.34	4,517.42
pcs	**46.00**	235.74	10,844.04
pcs	**89.00**	397.74	35,398.86
			-
no	**137.00**	213.64	29,268.68
			-
no	**58.00**	306.62	17,783.96
no	**3.00**	3,851.49	11,554.47
			-
no	**17.00**	450.59	7,660.03
no	**17.00**	450.59	7,660.03
			200,888.62
			2,313,232.82
			7,271,176.78

SUMMARY SHEET

Item No	Description	Unit	Amount
	A. SUB-STRUCTURE		
	1.Excavation & Earth works	Birr	152395.55
	2.Concrete works	Birr	401033.45
	3. Masonry works	Birr	142176.62
	TOTAL AMOUNT FOR SUB STRUCTURE	Birr	695605.62
	B. SUPER-STRUCTURE		
	1. Concrete works	Birr	2889879.91
	2. Block works	Birr	459655.3
	3. Roofings	Birr	118,717.30
	4. Carpentary& joinery	Birr	140,848.62
	5.Metal works	Birr	7,988.10
	6- Steel structure	Birr	679,442.32
	7-Plastering	Birr	737,129.84
	8.Finishing	Birr	171,129.84
	9. Painting	Birr	161,557.18
	10. Glazing	Birr	51,919.15
	11. Sanitary Installation	Birr	72,693.78
	12. Electrical installation	Birr	200,888.62
	TOTAL AMOUNT FOR SUPER STRUCTUR	Birr	5691849.96
	NET AMOUNT	Birr	6387455.58

GRAND SUMMARY SHEET

Item Nc	Description	Unit	Amount
	A. SUB-STRUCTURE		
	TOTAL AMOUNT FOR SUB	BIRR	695,605.63
	B. SUPER-STRUCTURE		
	TOTAL AMOUNT FOR SUPI	BIRR	5,691,987.83
	NET AMOUNT	BIRR	6387593.46

N0	DESCRIPTI	UNIT	Qty	COST		AVERAGE
				MAX	MIN	
1	DAILY LAB	p/day	1	130	100	115
2	CARPENTEI	p/day	1	300	250	275
3	ELECTRICIA	p/day	1	300	250	275
4	FORMAN	p/day	1	240	210	225
5	MASON	p/day	1	300	250	275
6	PLUMBER	p/day	1	240	205	222.5
7	ASS.PLUME	p/day	1	95	85	90
8	PLASTERER	p/day	1	350	250	300
9	BARBENDE	p/day	1	300	250	275
10	ASS.MASOI	p/day	1	130	100	115
11	OPERATOR	p/day	1	200	150	175
12	ASS.CARPE	p/day	1	130	100	115
13	DRESSER	p/day	1	250	200	225
14	PAVER	p/day	1	250	210	230
15	ASS.ELECTI	p/day	1	120	100	110
16	ELEC.FORM	p/day	1	210	200	205
17	CHISLER	p/day	1	300	250	275
18	GLASER	p/day	1	250	200	225
19	Tiler	p/day	1	300	230	265
20	painter	p/day	1	250	200	225
21	WELDER	p/day	1	250	220	235

No	AL MATEREALS ESCRIPTIO	UNIT	MAX	Min	w/ out vat	AVER.with Transport	coast matetials with trans in MEKEL	 direct cos in MEKEL
1	sand	M3	410.00	380.00	343.48	348.11	348.11	343.48
2	WATER	M3	140.00	130.00	117.39	122.02	122.02	117.39
3	Gravel	M3	410.00	390.00	347.83	352.46	352.46	347.83
4	basalt stor	M3	240.00	200.00	191.30	195.93	195.93	191.30
5	stone	M3	240.00	190.00	186.96	191.59	191.59	186.96
6	cement sa	m3			-			-
7	(cement)	Quintal	165.00	165.00	143.48	144.33	144.33	143.48
8	(cement)	Quintal	190.00	190.00	165.22	166.07	166.07	165.22
9	(cement) C	Quintal	265.00	265.00	230.43	231.28	231.28	117.00
10	cement pa	m3			-	1.50	1.50	-
11	FOR Ribbe	No	-	-	-	-	-	-
12	HCB WAL	No	17.00	16.00	14.35	18.35	18.35	14.35
13	HCB WAL	No	12.00	11.00	10.00	14.00	14.00	10.00
14	HCB WAL	No	10.50	10.00	8.91	12.91	12.91	8.91
15	HCB WAL	No	13.50	13.00	11.52	13.52	13.52	11.52
16	HCB WAL	No	9.50	9.00	8.04	10.04	10.04	8.04
17	HCB WAL	No	8.50	8.00	7.17	9.17	9.17	7.17
18	HCB WAL	No	15.50	15.00	13.26	15.76	15.76	13.26
19	HCB WAL	No	11.00	10.00	9.13	11.63	11.63	9.13
20	HCB WAL	No	9.50	9.00	8.04	10.54	10.54	8.04
21	BRICK	No	5.30	5.30	4.61	6.11	6.11	4.61
22	SELECTED	M3	150.00	80.00	100.00	104.63	104.63	100.00
23	SELECTED	M3	-			4.63	4.63	-
	TRUSS EUCLA					-		-
25	Dia 10-12	Ml	30.00	30.00	26.09	26.09	26.09	26.09
26	Dia 8-10	Ml	20.00	20.00	17.39	17.39	17.39	17.39
27	Dia 6-8	Ml	17.50	17.50	15.22	15.22	15.22	15.22
28	25*400*2.5cm timber for form work ,facia bord,& hand rail	M2	325.00	310.00	276.09	276.10	276.10	276.09
	FLOOR finising				-	-		-
29	2 cm thick	M2	130.00	95.31	97.96	97.97	97.97	97.96
30	2.5 cm thic	M2	240.00	234.23	206.19	206.65	206.65	206.19

31	2.5 cm thic	M2	190.00	173.22	157.92	158.38	158.38	157.92
32	2.5 cm thic	M2	170.00	160.20	143.57	144.03	144.03	143.57
33	2 cm thick	M2	173.33	170.00	149.27	149.74	149.74	149.27
34	2.5 cm thic	Ml	35.00	33.00	29.57	29.80	29.80	29.57
35	2.5 cm thic	Ml	28.00	25.00	23.04	23.27	23.27	23.04
36	2.5 cm thic	Ml	25.00	23.00	20.87	21.10	21.10	20.87
37	2 mm thick	M2	220.00	220.00	191.30	191.32	191.32	191.30
38	2 mm thick	Ml	25.00	25.00	21.74	21.75	21.75	21.74
39	3 cm thick	M2	1,728.45	1,613.45	1,453.00	1,453.46	1,453.46	1,453.00
40	3cm thick	M2	1,559.40	723.35	992.50	992.96	992.96	992.50
41	2cm thick	M2	1,382.30	616.40	869.00	869.46	869.46	869.00
42	3cm thick	M2	616.40	512.90	491.00	491.46	491.46	491.00
43	2 cm thick	Ml	98.55	98.55	85.70	85.93	85.93	85.70
44	2 cm thick	Ml	21.00	20.00	17.83	17.84	17.84	17.83
45	8 mm thick	M2	300.00	270.00	247.83	248.06	248.06	247.83
46	6 mm thick	M2	270.00	210.00	208.70	208.93	208.93	208.70
47	5 mm thick	M2	180.00	165.00	150.00	150.23	150.23	150.00
48	5 mm tick	Ml	32.00	25.00	24.78	24.90	24.90	24.78
49	2.5 cm thick terazzo tile TREAD,Riser &window Sill class 'B'	M2	541.61	535.00	468.09	468.17	468.17	468.09
50	3cm thick	M2	1,405.30	1,302.95	1,177.50	1,177.58	1,177.58	1,177.50
51	2cm thick	M2	1,198.30	963.70	940.00	940.08	940.08	940.00
52	marble chi	M3	-	-	-	0.23	0.23	-
53	board FOR	Ml	-	-	-	0.02	0.02	-
54	powder FC	kg	-	-	-	0.02	0.02	-
55	gravelFOR	kg	-	-	-	0.02	0.02	-
56	abbrasive	No	-	-	-	0.02	0.02	-

transprt cost/kg	k/g	total co/ku fromMEKI	total k/m fromMEKI	transport coast/km
			5.00	
4.63	1.00	4.63	1.00	4.63
4.63	1.00	4.63	1.00	4.63
4.63	1.00	4.63	1.00	4.63
4.63	1.00	4.63	1.00	4.63
4.63	1.00	4.63	1.00	4.63
			5.00	0.37
0.85	1.00	0.85	5.00	0.17
0.85	1.00	0.85	5.00	0.17
0.85	1.00	0.85	5.00	0.17
1.50	1.00	1.50	5.00	0.30
0.04	100.00	4.00	1.00	4.00
0.04	100.00	4.00	1.00	4.00
0.04	100.00	4.00	1.00	4.00
0.04	100.00	4.00	1.00	4.00
0.02	100.00	2.00	1.00	2.00
0.02	100.00	2.00	1.00	2.00
0.02	100.00	2.00	1.00	2.00
0.03	100.00	2.50	1.00	2.50
0.03	100.00	2.50	1.00	2.50
0.03	100.00	2.50	1.00	2.50
0.02	100.00	1.50	1.00	1.50
0.05	100.00	4.63	1.00	4.63
4.63	1.00	4.63	1.00	4.63
0.00	100.00	0.25	1.00	0.25
0.00	100.00	0.24	1.00	0.24
0.00	100.00	0.23	1.00	0.23
0.01	100.00	1.35	5.00	0.27
0.01	100.00	1.35	5.00	0.27
0.46	100.00	46.25	5.00	9.25

0.46	100.00	46.25	5.00	9.25
0.46	100.00	46.25	5.00	9.25
0.46	100.00	46.25	5.00	9.25
0.23	100.00	23.15	5.00	4.63
0.23	100.00	23.15	5.00	4.63
0.23	100.00	23.15	5.00	4.63
0.02	100.00	1.85	5.00	0.37
0.01	100.00	0.95	5.00	0.19
0.46	100.00	46.25	5.00	9.25
0.46	100.00	46.25	5.00	9.25
0.46	100.00	46.25	5.00	9.25
0.46	100.00	46.25	5.00	9.25
0.23	100.00	23.15	5.00	4.63
0.01	100.00	0.95	5.00	0.19
0.23	100.00	23.15	5.00	4.63
0.23	100.00	23.15	5.00	4.63
0.23	100.00	23.15	5.00	4.63
0.12	100.00	11.55	5.00	2.31
0.08	100.00	7.50	5.00	1.50
0.08	100.00	7.55	5.00	1.51
0.08	100.00	7.55	5.00	1.51
0.23	100.00	22.60	5.00	4.52
0.02	100.00	1.85	5.00	0.37
0.02	100.00	1.85	5.00	0.37
0.02	100.00	1.85	5.00	0.37
0.02	100.00	1.85	5.00	0.37

ITEM	description	No	Rental /H	Rental /H	average
1	hand drill	1	**25.00**	24.00	24.50
2	multimeter	1	**22.00**	20.00	21.00
3	tools	1	**3.00**	3.00	3.00
4	mixer	1	**191.30**	191.30	191.30
5	vibrator	1	**66.84**	66.84	66.84
7	grinder	1	**20.00**	18.00	19.00
8	Marble polish	1	**-**	-	-
9	hand compact	1	**23.00**	22.00	22.50
10	**dam truck**	1	**856.60**	856.60	856.60

No	DESCRIPTION	UNIT	MAX	MIN	AVER. W/out vat
	TRIAL MATERIALS				
	reinforcement bar				
1	Diam. 6mm plain bar.	kg	42.00	40.00	35.65
2	Diam. 8mm	kg	34.75	34.75	30.22
3	Diam. 10mm	kg	31.25	31.25	27.17
4	Diam. 12mm 14mm 16mm 20mm	kg	29.25	29.25	25.43
5	Diam. 14mm	kg	29.25	29.25	25.43
6	Diam. 16mm	kg	29.25	29.25	25.43
7	Diam. 18mm	kg	-	-	0.00
8	Diam. 20 mm	kg	29.25	29.25	25.43
9	Diam. 22mm	kg	-	-	0.00
10	Diam. 24mm	kg	29.75	29.75	25.87
11	Diam. 30mm	kg	34.25	34.25	29.78
12	Diam. 32mm	kg	33.25	33.25	28.91
	CIS& other material				
12	**G-28 CIS (di**	M2	250.00	243.06	214.37
13	**G-30 CIS (di**	M2	204.86	204.86	178.14
14	**G-32 CIS (di**	M2	173.60	170.14	149.45
15	**G-35 CIS (di**	M2	111.11	104.17	93.60
16	**G-28 sheet metal roofing ridge cover, gutter,down pipe & copping**	M2	220.00	200.00	182.61
17	**G-30 sheet metal roofing ridge cover, gutter,down pipe & copping**	M2	-	-	0.00
18	**Ega-300(4mm**	M2	228.48	228.75	198.80
19	**Ega-400(4mm**	M2	228.48	228.75	198.80
20	**Ega-500(4mm**	M2	228.48	228.75	198.80

21	decore shekla roof with all accsesary	M2	480.00	450.00	404.35
22	EVE TO DECRA	ml	175.00	174.00	151.74
23	RIGE TO DECRA	ml	312.50	310.00	270.65
24	BLACK wire	kg	45.00	40.00	36.96
25	BONDA	kg	45.00	40.00	36.96
26	ribed sheet	M2	130.00	120.00	108.70
	NAIL & other	materials			
27	dome (roofir	kg	60.00	50.00	47.83
28	6-12cm nail	kg	45.00	42.00	37.83
29	3&4cm nail	kg	60.00	55.00	50.00
30	J-bolt For roof	NO	3.50	3.00	2.83
31	Wesher	NO	1.50	1.00	1.09
32	80*80*3 m	kg	47.15	47.15	41.00
33	60*60*3 m	kg	44.96	44.96	39.10
34	30*30*2.5	kg	55.83	55.83	48.55
35	25*25*2.5	kg	58.94	58.94	51.25
36	40*40*1.5	kg	47.08	47.08	40.94
37	20*20*1.5	kg	56.22	56.22	48.89
37	50*50*3 m	kg	47.06	47.06	40.92
37	30*30*3 m	kg	55.08	55.08	47.90
37	25*25*1.5	kg	50.31	50.31	43.75
38	120*80*3.5	kg	42.95	42.63	37.21
39	80*40*3 m	kg	33.72	33.72	29.32
40	40*20*2 m	kg	49.60	49.60	43.13
41	30*20*1.5	kg	50.31	50.31	43.75
42	diamte 50	kg	30.60	28.25	25.59
43	diamte 76	kg	38.81	36.53	32.76
44	diamte 102	kg	42.26	40.57	36.01
45	size 60*60*4	NO	26.00	26.00	22.61
46	ELECTROD	NO	2.20	1.50	1.61
47	CUTTING DIS	NO	45.00	25.00	30.43
48	M = 12 mm nu	NO	8.00	7.20	6.61

49	U chnal 6 cm shape metal Top and bottom rail For slaiding door	ML	375.00	375.00	326.09
50	11/4(1.25) mn	M2	325.00	315.00	278.26
51	38 mm T- sha	ML	83.33	83.33	72.46
52	T- shape met	ML	30.00	28.00	25.22
53	kochneta For	NO	85.00	75.00	69.57
54	30*3 mm flat	ML	60.00	60.00	52.17
55	50*3 mm flat	ML	100.00	100.00	86.96
56	pulley Ø 50 m	NO	60.00	58.00	51.30
57	bolts 1/2	NO	20.00	19.20	17.04
	PAINTING				
58	putty	kg	20.00	15.00	15.22
59	GYPSUM	kg	4.00	3.20	3.13
60	GLUE or cola	kg	80.00	61.24	61.41
61	VARNISH	LT	80.00	70.54	65.45
62	AQUARAGE	LT	25.00	25.00	21.74
63	anti-rust	LT	80.00	65.79	63.39
64	SYNTHETIC	LT	88.50	87.50	76.52
65	PLASTIC pai	LT	48.87	42.86	39.88
66	Qartize paint	kg	33.12	31.15	27.94
67	Lime	kg	6.00	5.00	4.78
68	Fiber (Qacha	kg	50.00	45.00	41.30
69	suttco	lit	110.00	90.00	86.96
	Wood & other material				0.00
70	Aromstrong (	M2	450.00	420.00	378.26
71	8mm thick c	M2	86.80	79.86	72.46
72	2*4 cm timbe	ML	25.00	21.25	20.11
73	4*5 cm timbe	ML	26.20	25.00	22.26
74	5*7 cm wood	ML	47.50	45.00	40.22

75	*Supply & fix flush type* ***wooden door*** *of 40mm thick semi - solid both sides covered with 3mm kerarro play wood or Equivalent ply wood, price includes frame, hinges cylinderical lock , handle & other accessories with approved quality.*	M2	1,230.16	1,150.79	1035.20
	diferent materials				
78	Diamend sha	M2	140.00	125.00	115.22
79	40x40*2.5 mn	ML	66.66	58.33	54.34
80	Bare bad wir	ML	4.50	4.20	3.78
	made different size Gabyon				
81	3x1x1	M3	1,310.00	1,310.00	1139.13
82	2x1x1m	M3	952.00	952.00	827.83
83	2x1x0.5m	M3	720.00	720.00	626.09
84	1x1x1m	M3	540.00	540.00	469.57
85	gabion fence	M2	55.00	51.00	46.09
	water proofing				0.00
86	BITUMEN AS	kg	-	-	0.00
87	HEATING GA	kg	-	-	0.00
88	asphalt pape	ML	-	-	0.00
	door and window				

	*supply and fix **metal doors** shall be fabricated from locally manufactured 3.8 *1.25 mm thicknes LTZ tubular steel profile,cover 1.25 mm thick flat iron sheet metal including price hinges, cylindrical locks ,one coats of antrust & two coats oil paint.,with all its accessories(material quality approved by the engineer)*				
89		**M2**	**833.33**	**793.65**	**707.38**

90	*supply and fix **metal doors** shall be fabricated from locally manufactured 3.8 *1.25 mm thicknes LTZ tubular steel profile,cover 1 mm thick flat iron sheet.metal including price hinges, cylindrical locks ,one coats of antrust & two coats oil paint.,with all its accessories(material quality approved by the engineer)*	M2	793.65	753.96	672.87

91	*supply and fix **metal doors** shall be fabricated from locally manufactured 3.8 *1.25 mm thicknes LTZ tubular steel profile,left for glazing .including price c/c 15 cm vertical raws 20*20*1 mm SHS tube grill , 20*10*1 mm RHS tube for glazing frame, hinges, cylindrical locks ,one coats of antrust & two coats oil paint.,with all its accessories(material quality approved by the engineer)*	M2	730.00	715.00	628.26

92	*supply and fix* ***metal doors*** *shall be fabricated from locally manufactured 3.8 *1.25 mm thicknes LTZ tubular steel profile,partaly cover 1 mm thick flat iron sheet metal and partaly left for glazing .including price c/c 15 cm vertical raws 20*20*1 mm SHS tube grill hinges, 20*10*1mm RHS tube for glazing frame, cylindrical locks ,one coats of antrust & two coats oil paint.,with all its accessories(m aterial quality approved by the engineer)*	M2	750.00	725.00	641.30

93	*supply and fix metal doors shall be fabricated from locally manufactured 1.25 mm thick sheet metal profile,(ዕፃፍ ላማ፬ሪ.) left for glazing .including price c/c 15 cm vertical rows 20*20*1 mm SHS tube grill , 20*10*1mm RHS tube for glazing frame ,hinges, cylindrical locks ,one coats of antrust & two coats oil paint.,with all its accessories(material quality approved by the engineer)*	M2	1,100.00	1,000.00	913.04

94	*supply and fix* ***metal doors*** *shall be fabricated from locally manufactured 1.25 mm thick sheet metal profile(ዕፃፍ ላሜራ),left for glazing .including price ,20*10*1 mm RHS tube for glazing frame, cylindrical locks ,one coats of antrust & two coats oil paint.,with all its accessories(material quality approved by the engineer)*	M2	1,000.00	900.00	826.09

95	*supply and fix **metal doors** shall be fabricated from locally manufactured daimetr 50*2mm thickness CHS tube profile,cover 1.25 mm thick flat iron sheet.metal including price hinges, locks ,one coats of antrust & two coats oil paint.,with all its accessories(material quality approved by the engineer)*	M2	1,200.00	1,100.00	1000.00

96	*supply and fix* ***metal window*** *shall be fabricated from locally manufactured 3.8 *1.25 mm thicknes LTZ tubular steel profile,left for glazing .including price c/c 15 cm vertical rows 20*20*1 mm SHS tube grill ,20*10*1 mm RHS tube for glazing frame ,hinges, handle ,one coats of antrust & two coats oil paint.,with all its accessories(material quality approved by the engineer)*	M2	710.00	690.00	608.70

97	*supply and fix **metal window** shall be fabricated from locally manufactured 3.8 *1.25 mm thicknes LTZ tubular steel profile,left for glazing .including price , 20*10*1 mm RHS tube for glazing frame, hinges, handle ,one coats of antrust & two coats oil paint.,with all its accessories(material quality approved by the engineer)*	M2	700.00	680.00	600.00

98	*supply and fix* ***metal window*** *shall be fabricated from locally manufactured 1.25 mm thick sheet metal profile(ዕፃፍ ላሜራ),left for glazing .including price c/c 15 cm vertical rows 20*20*1 mm SHS tube grill , 20*10*1 mm RHS tube for glazig frame ,hinges, handle ,one coats of antrust & two coats oil paint.,with all its accessories(material quality approved by the engineer)*	M2	1,050.00	1,000.00	891.30

	supply and fix ***metal window*** *shall be fabricated from locally manufactured 1.25 mm thick sheet metal profile(ዕፃፍ ላሜራ),left for glazing .including price , 20*10*1 mm RHS tube for glazig frame ,hinges, locks ,one coats of antrust & two coats oil paint.,with all its accessories(material quality approved by the engineer)*				
99		M2	950.00	900.00	804.35

100	*supply and fix **metal window** shall be fabricated from locally manufactured 3.8 *1.25 mm thicknes LTZ tubular steel profile,cover 1 mm thick flat or ribbed iron sheet.including price hinges, handel ,one coats of antrust & two coats oil paint.,with all its accessories(material quality approved by the engineer)*	M2	530.00	520.00	456.52
101	*supply and fix **Aluminium doors** thicknes **1.6** mm profile,left for glazing .including , hinges, cylindrical locks with all its accessories*	M2	2,300.00	2,000.00	1869.57

102	*supply and fix **Aluminium window** thicknes **1.6** mm profile,left for glazing .includ ing , hinges, handle with all its accessories*	M2	2,150.00	1,900.00	1760.87
	GLASS				
103	**3mm thick Cl**	M2	240.00	240.00	208.70
104	**4mm thick Cl**	M2	270.00	270.00	234.78
105	**5mm thick c**	M2	380.00	380.00	330.43
106	**4mm thick fo**	M2	330.00	330.00	286.96
107	**5mm thick so**	M2	400.00	340.00	321.74
108	*8cm at the top with a total height of 6.5m and connection door at 40cm above NGL price Inculdig 40*40*80 cm pit excavation .C-20 concerte ,diam eter 14 mm deforemd bar both side c/c 15 and 2 coats of oil paintigs, that consists of 1 PCS of flag holder 4 pcs uo to 60 cm length diamter bar "J"bolt with nuts 2 PCS 35cm*35cm *8mmthick base metal plates anchoring rodes ome piecies(80cm) of branch arms the thickness of the pole in 3 mm sheet and it is circularl shape with all its neccessories accessories . (material quality approved by the engineer*	NO	10,121.00	8,600.00	8139.57

	Achorade bolts & other material				
109	*supply & fix up to 120 mm long Angle iron 60*60*4mm purlin to trust connection price inculding 3 coats oil paint*	NO	7.80	7.60	6.70
110	*supply & fix Diameter 10 mm bolts with nuts truss connection length 100 mm .*	NO	10.00	10.00	8.70
111	*supply & fix Diameter 16 mm Anchorage bolts with nuts length up to 500 mm .*	NO	36.35	36.35	31.61
112	*supply & fix Diameter 10 mm bolts with nuts .purline to angl iron conction length up to 120 mm*	NO	14.25	14.25	12.39
113	*supply & fix Use angle iron size 40*40*2.5 mm length up to 120mm*	NO	5.20	4.50	4.22
114	*supply & fix Diameter 20 mm Anchorage bolts with nuts length up to 600mm .*	NO	90.50	90.50	78.70

115	*supply & fix Diameter 12 mm Anchorage bolts with nuts length up to 100mm .*	NO	22.20	22.20	19.30
	metal plate & other material				
116	250x150x5mm	NO	75.00	75.00	65.22
117	250x250x8mm	NO	203.12	203.12	176.63
118	200x100x5mm	NO	40.00	40.00	34.78
119	200x300x5mm	NO	120.00	120.00	104.35
120	300*300*8	NO	292.50	292.50	254.35
121	160x80x6m	NO	28.80	28.80	25.04
122	250*250*6	NO	140.62	140.62	122.28
123	200*200*6	NO	90.00	90.00	78.26
124	150*150*6	NO	50.62	50.62	44.02
125	glaSS fiber	M2	-	-	0.00
126	asphalt bitun	M2	-	-	0.00
127	1 mm thick m	M2	400.00	400.00	347.83
128	membrance w	m2	320.00	300.00	269.57
129	prime for me	LT	-	-	0.00
130	clinderical lo	NO	350.00	250.00	260.87
131	hings	NO	25.00	20.00	19.57

	coast matetials				
AVER.with tra	with transport	direct cost	transprt	k/g	total co/kuntal
sport	in MEKELE	in MEKELE	cost/kg		fromMEKELE
35.67	35.67	35.65	0.01	100.00	1.30
30.23	30.23	30.22	0.01	100.00	1.30
27.19	27.19	27.17	0.01	100.00	1.30
25.45	25.45	25.43	0.01	100.00	1.30
25.45	25.45	25.43	0.01	100.00	1.30
25.45	25.45	25.43	0.01	100.00	1.30
0.01	0.01	0.00	0.01	100.00	1.30
25.45	25.45	25.43	0.01	100.00	1.30
0.01	0.01	0.00	0.01	100.00	1.30
25.88	25.88	25.87	0.01	100.00	1.30
29.80	29.80	29.78	0.01	100.00	1.30
28.93	28.93	28.91	0.01	100.00	1.30
		0.00			
214.47	214.47	214.37	0.10	100.00	9.55
178.22	178.22	178.14	0.08	100.00	8.10
149.52	149.52	149.45	0.07	100.00	6.60
93.65	93.65	93.60	0.05	100.00	5.15
182.63	182.63	182.61	0.02	100.00	1.85
0.02	0.02	0.00	0.02	100.00	1.85
198.89	198.89	198.80	0.10	100.00	9.55
198.89	198.89	198.80	0.10	100.00	9.55
198.89	198.89	198.80	0.10	100.00	9.55

404.35	404.35	**404.35**	0.00	100.00	0.03
151.74	151.74	**151.74**	0.00	100.00	0.03
270.65	270.65	**270.65**	0.00	100.00	0.03
36.97	36.97	**36.96**	0.01	100.00	1.30
36.97	36.97	**36.96**	0.01	100.00	1.30
108.71	108.71	**108.70**	0.02	100.00	1.85
47.84	47.84	**47.83**	0.01	100.00	1.30
37.84	37.84	**37.83**	0.01	100.00	1.30
50.01	50.01	**50.00**	0.01	100.00	1.30
2.83	2.83	**2.83**	0.00	100.00	0.03
1.09	1.09	**1.09**	0.00	100.00	0.03
41.01	41.01	**41.00**	0.01	100.00	1.30
39.11	39.11	**39.10**	0.01	100.00	1.30
48.56	48.56	**48.55**	0.01	100.00	1.30
51.27	51.27	**51.25**	0.01	100.00	1.30
40.95	40.95	**40.94**	0.01	100.00	1.30
48.90	48.90	**48.89**	0.01	100.00	1.30
40.93	40.93	**40.92**	0.01	100.00	1.30
47.91	47.91	**47.90**	0.01	100.00	1.30
43.76	43.76	**43.75**	0.01	100.00	1.30
37.22	37.22	**37.21**	0.01	100.00	1.30
29.33	29.33	**29.32**	0.01	100.00	1.30
43.14	43.14	**43.13**	0.01	100.00	1.30
43.76	43.76	**43.75**	0.01	100.00	1.30
25.60	25.60	**25.59**	0.01	100.00	1.30
32.77	32.77	**32.76**	0.01	100.00	1.30
36.03	36.03	**36.01**	0.01	100.00	1.30
22.61	22.61	**22.61**	0.00	100.00	0.03
1.61	1.61	**1.61**	0.00	100.00	0.03
30.44	30.44	**30.43**	0.00	100.00	0.03
6.61	6.61	**6.61**	0.00	100.00	0.03

326.09	326.09	326.09	0.00	100.00	0.03
278.26	278.26	278.26	0.00	100.00	0.03
72.46	72.46	72.46	0.00	100.00	0.03
25.22	25.22	25.22	0.00	100.00	0.03
69.57	69.57	69.57	0.00	100.00	0.03
52.17	52.17	52.17	0.00	100.00	0.03
86.96	86.96	86.96	0.00	100.00	0.03
51.30	51.30	51.30	0.00	100.00	0.03
17.04	17.04	17.04	0.00	100.00	0.03
15.23	15.23	15.22	0.01	100.00	1.30
3.14	3.14	3.13	0.01	100.00	1.30
61.42	61.42	61.41	0.01	100.00	1.30
65.47	65.47	65.45	0.01	100.00	1.30
21.75	21.75	21.74	0.01	100.00	1.30
63.39	63.39	63.39	0.00	100.00	0.03
76.53	76.53	76.52	0.01	100.00	1.30
39.90	39.90	39.88	0.01	100.00	1.30
27.94	27.94	27.94	0.00	100.00	0.03
6.08	6.08	4.78	1.30	1.00	1.30
42.60	42.60	41.30	1.30	100.00	1.30
86.97	86.97	86.96	0.01	100.00	1.30
		0.00			
378.32	378.32	378.26	0.06	100.00	5.55
72.52	72.52	72.46	0.06	100.00	5.55
20.12	20.12	20.11	0.01	100.00	1.30
22.27	22.27	22.26	0.01	100.00	1.30
40.23	40.23	40.22	0.02	100.00	1.50

1035.40	1035.40	**1035.20**	0.20	100.00	20.00
115.29	115.29	**115.22**	0.08	100.00	7.50
54.40	54.40	**54.34**	0.06	100.00	5.55
3.80	3.80	**3.78**	0.02	100.00	1.85
1139.32	1139.32	**1139.13**	0.19	100.00	18.50
827.99	827.99	**827.83**	0.16	100.00	16.00
626.23	626.23	**626.09**	0.14	100.00	14.00
469.69	469.69	**469.57**	0.13	100.00	12.50
46.16	46.16	**46.09**	0.08	100.00	7.50
		0.00			
0.02	0.02	**0.00**	0.02	100.00	1.85
0.02	0.02	**0.00**	0.02	100.00	1.85
0.00	0.00	**0.00**	0.00	100.00	0.03

707.50	707.50	**707.38**	0.12	100.00	11.50

672.99	672.99	**672.87**	0.12	100.00	11.50

628.37	628.37	**628.26**	0.11	100.00	10.50

641.40	641.40	**641.30**	0.10	100.00	10.00

913.17	913.17	**913.04**	0.13	100.00	12.50

826.20	826.20	**826.09**	0.11	100.00	11.25

1000.15	1000.15	**1000.00**	0.15	100.00	15.00

608.80	608.80	**608.70**	0.10	100.00	10.00

600.10	600.10	**600.00**	0.10	100.00	10.00

891.40	891.40	**891.30**	0.10	100.00	10.00

804.45	804.45	**804.35**	0.10	100.00	10.00

456.62	456.62	**456.52**	0.10	100.00	10.00
1869.75	1869.75	**1869.57**	0.19	100.00	18.50

1761.05	1761.05	**1760.87**	0.19	100.00	18.50
209.00	209.00	**208.70**	0.30	100.00	30.00
235.18	235.18	**234.78**	0.40	100.00	40.00
330.88	330.88	**330.43**	0.45	100.00	45.00
287.36	287.36	**286.96**	0.40	100.00	40.00
322.24	322.24	**321.74**	0.50	100.00	50.00
8144.57	8144.57	**8139.57**	5.00	100.00	500.00

6.70	6.70	**6.70**	0.00	100.00	0.03
8.70	8.70	**8.70**	0.00	100.00	0.03
31.61	31.61	**31.61**	0.00	100.00	0.02
12.39	12.39	**12.39**	0.00	100.00	0.02
4.22	4.22	**4.22**	0.00	100.00	0.03
78.70	78.70	**78.70**	0.00	100.00	0.03

19.30	19.30	**19.30**	0.00	100.00	0.03
65.22	65.22	**65.22**	0.00	100.00	0.03
176.63	176.63	**176.63**	0.00	100.00	0.03
34.78	34.78	**34.78**	0.00	100.00	0.03
104.35	104.35	**104.35**	0.00	100.00	0.03
254.35	254.35	**254.35**	0.00	100.00	0.03
25.04	25.04	**25.04**	0.00	100.00	0.03
122.28	122.28	**122.28**	0.00	100.00	0.03
78.26	78.26	**78.26**	0.00	100.00	0.03
44.02	44.02	**44.02**	0.00	100.00	0.03
0.00	0.00	**0.00**	0.00	100.00	0.03
0.01	0.01	**0.00**	0.01	100.00	0.60
347.83	347.83	**347.83**	0.00	100.00	0.40
269.57	269.57	**269.57**	0.00	100.00	0.36
0.00	0.00	**0.00**	0.00	100.00	0.36
260.89	260.89	**260.87**	0.02	100.00	1.85
19.58	19.58	**19.57**	0.02	100.00	1.85

total k/m fromMEKELE	transport coast/km
5.00	0.26
5.00	0.26
5.00	0.26
5.00	0.26
5.00	0.26
5.00	0.26
5.00	0.26
5.00	0.26
5.00	0.26
5.00	0.26
5.00	0.26
5.00	0.26
5.00	1.91
5.00	1.62
5.00	1.32
5.00	1.03
5.00	0.37
5.00	0.37
5.00	1.91
5.00	1.91
5.00	1.91

5.00	0.01
5.00	0.01
5.00	0.01
5.00	0.26
5.00	0.26
5.00	0.37
5.00	0.26
5.00	0.26
5.00	0.26
5.00	0.01
5.00	0.01
5.00	0.26
5.00	0.26
5.00	0.26
5.00	0.26
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5.00	0.01
5.00	0.01
5.00	0.01
5.00	0.26
5.00	0.26
5.00	0.26
5.00	0.26
5.00	0.26
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5.00	0.26
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5.00	1.11
5.00	0.26
5.00	0.26
5.00	0.30

5.00	4.00
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5.00	1.11
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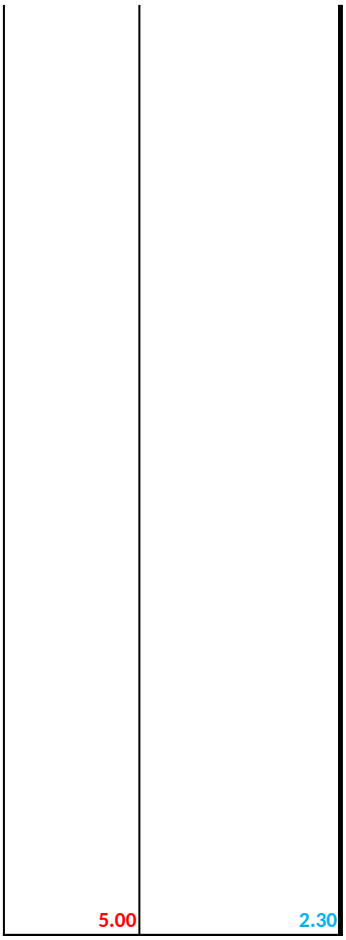
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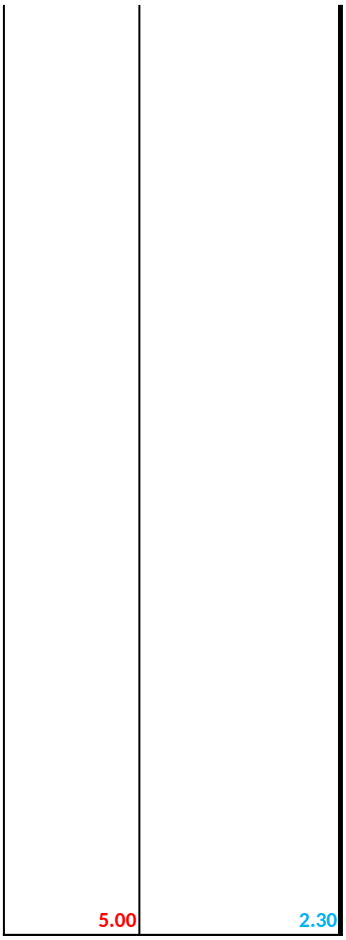
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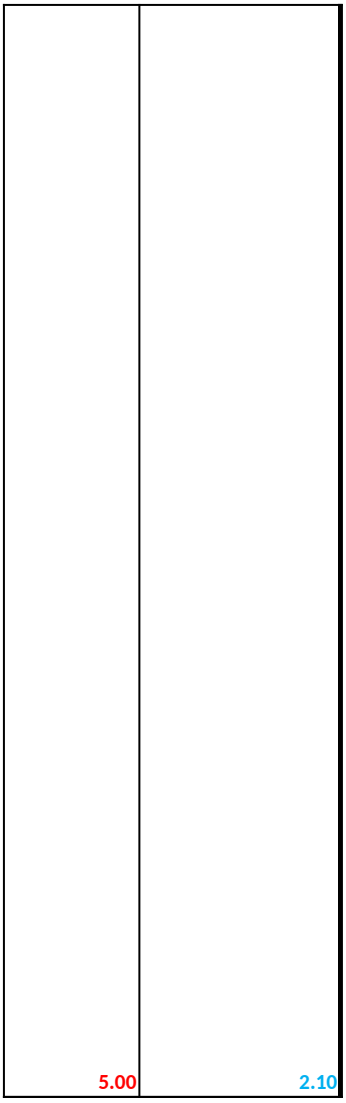
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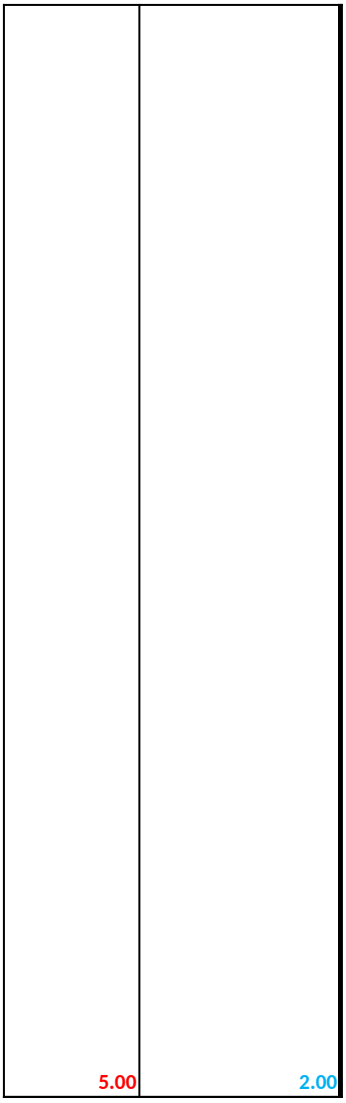
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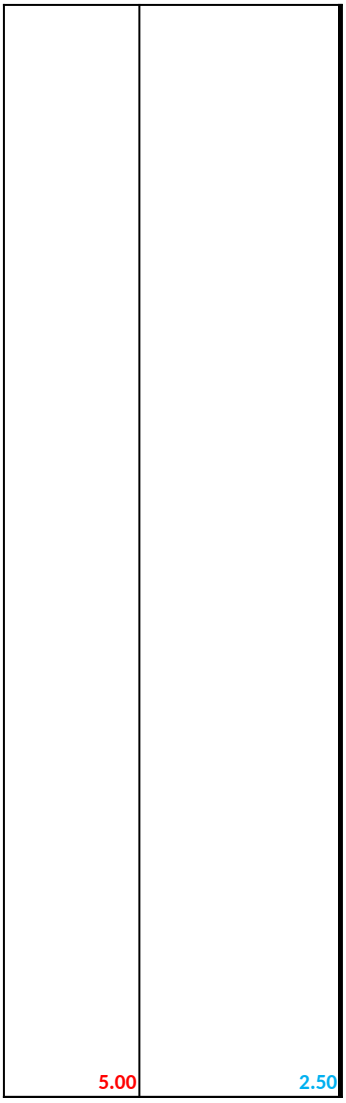
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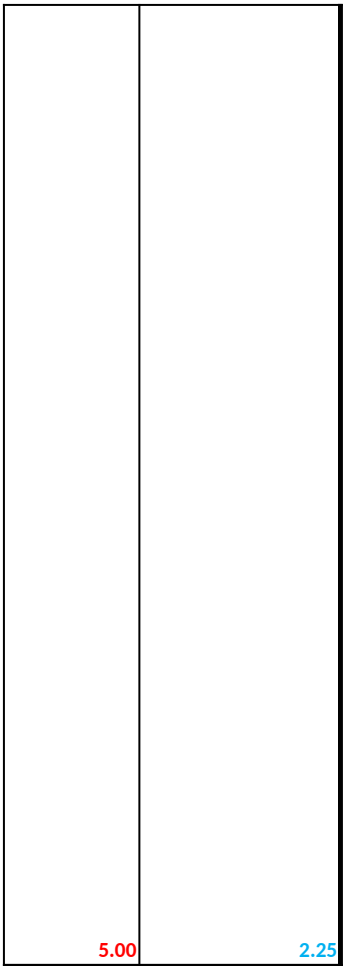
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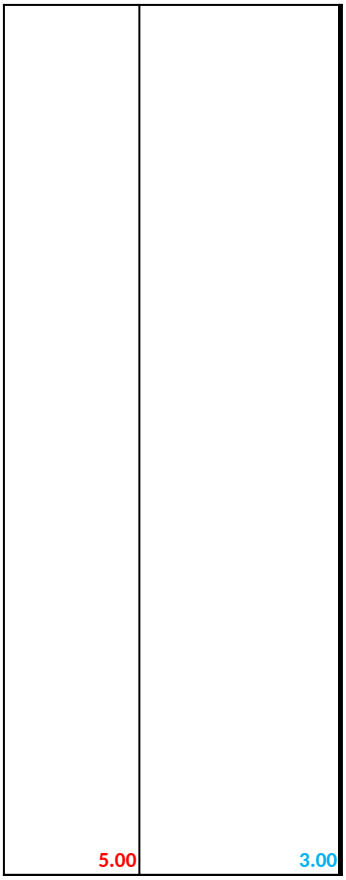
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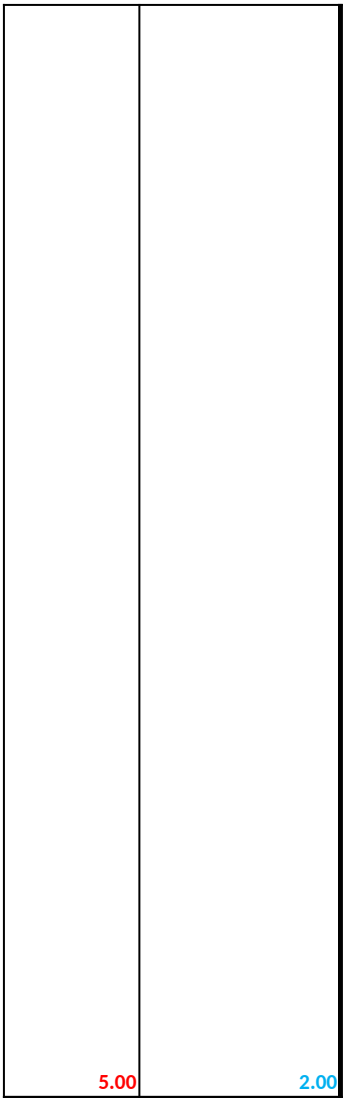
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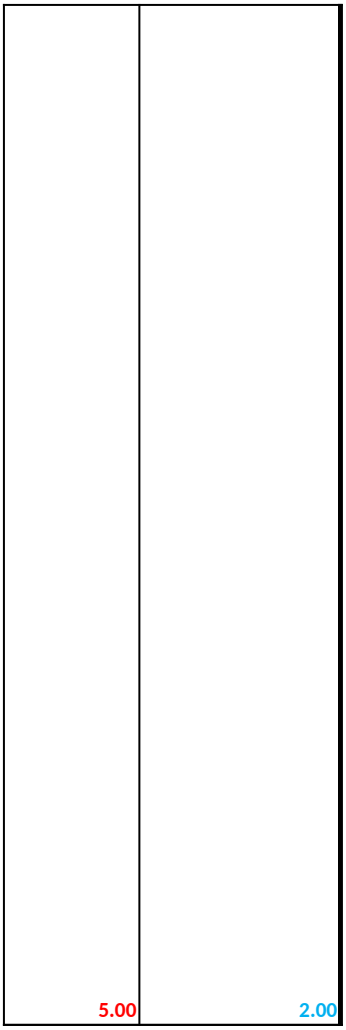
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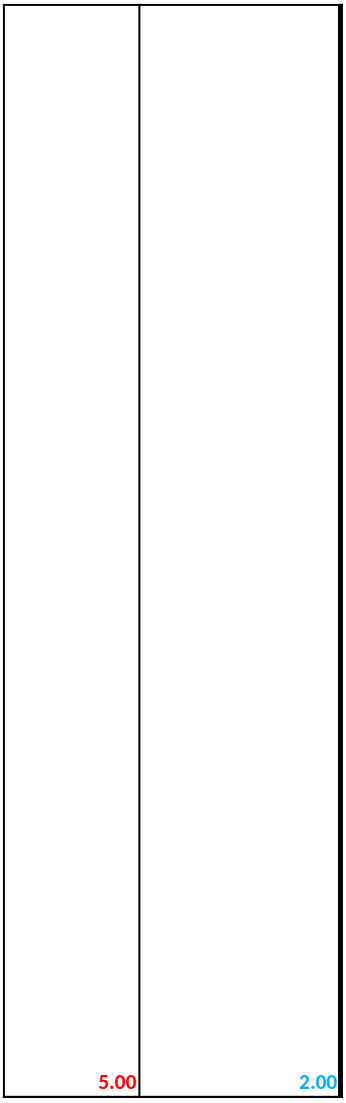
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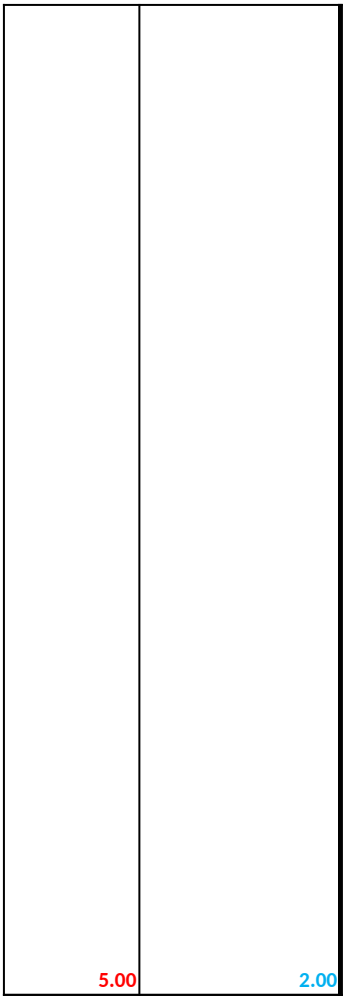
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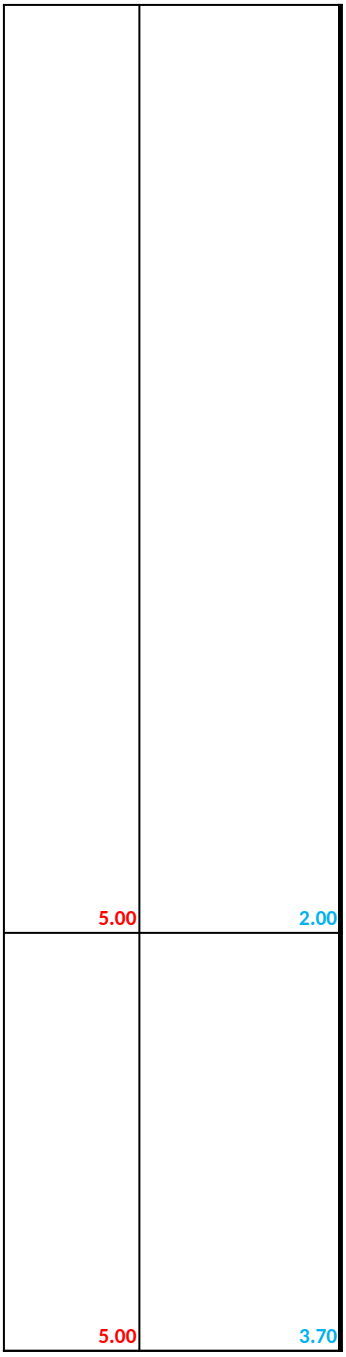
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5.00	10.00
5.00	100.00

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5.00	0.00
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5.00	0.01

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