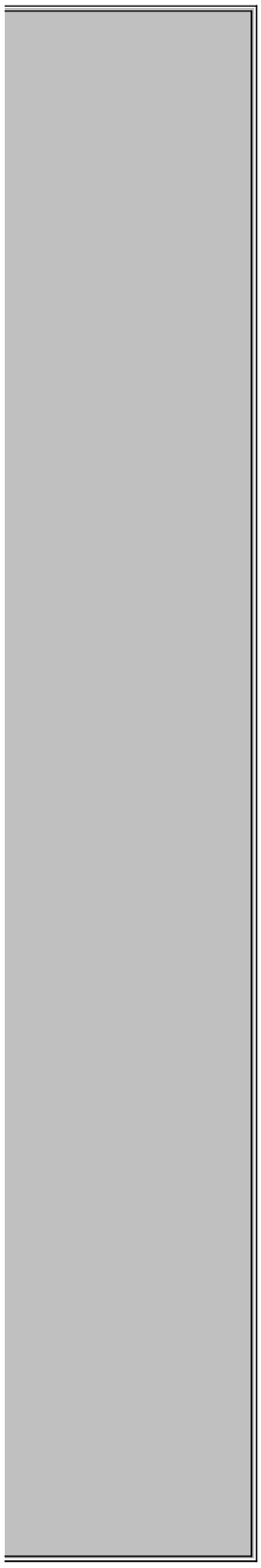
UNIT PRICES

FOR

BUILDING CONSTRUCTION ACTIVITIES



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ITEM NO.	DESCRIPTION	UNIT	UNIT PRICE
	4. REINFORCEMENTS		
4.1	dia. 6 & dia. 8 mm. plain bars	kg.	11.45 Birr/kg.
4.2	dia. 10 - dia. 16 mm. deformed bars	"	11.50 Birr/kg.
4.3	dia. 18 mm. and above deformed bars	"	7.88 Birr/kg.

ETHIOPIAN CONSTRUCTION WORK PROFESSIONALS

ITEM NO.	DESCRIPTION	UNIT	UNIT PRICE
	1. EXCAVATION AND EARTH WORKS		
1.1	20 cm. Clearing on loose & dry soil.	m^2	3.51 Birr/m2
1.2	20cm. Clearing on wet & black soil.	"	3.77 Birr/m2
1.3	Bulk excav. to a depth not exceeding 150cm loose and dry soil.	m^3	9.52 Birr/m3
1.4	Ditto. but on wet and black soil.	"	51.44 Birr/m3
1.5	Trench excavation not exceeding 150cm. in loose and dry soil.	"	13.33 Birr/m3
1.6	Trench excavation not exceeding 150cm. in loose and dry soil.	"	22.22 Birr/m3
1.7	Excavation foundation pits to adepth of 150-300cm. In loose soil.	"	39.06 Birr/m3
1.8	Excavation foundation pits to adepth not exceeding 150cm.on wet and black soil.	"	34.72 Birr/m3
1.9	Ditto. But, on loose soil.	"	14.29 Birr/m3
1.10	Ditto. but, 150cm. - 300cm. But, on wet clay and black soil.	"	33.33 Birr/m3
1.11	Excavation on soft rock to a depth not exceeding 150cm.	"	79.30 Birr/m3
1.12	Ditto. But, on hard rock.	"	185.89 Birr/m3
1.13	Back fill excavated materials from the site.	"	21.80 Birr/m3
1.14	Back fill selected excavated mats. from out side the site.	"	77.81 Birr/m3
1.15	Cart away surplus excavated mats. 1km. from the site.	"	13.06 Birr/m3
1.16	25cm. thick basaltic hard core.	m^2	42.82 Birr/m2

ITEM NO.	DESCRIPTION	UNIT	UNIT PRICE
	13. SANITARY INSTALLATION		
13.1	Low flash WC (Italy made)	pcs.	1150.83 Birr/pcs.
13.2	WC. Low Flash (Tabor Ceramics)	"	610.83 Birr/pcs.
13.3	WC high flash	"	706.83 Birr/pcs.
13.4	WC with high level flashing (Turkish)	"	632.53 Birr/pcs.
13.5	Hand wash basin (Italy made)	"	556.83 Birr/pcs.
13.6	50 X 60 HWB (Italy)	"	706.83 Birr/pcs.
13.7	Bath tab (Italy)	"	1148.67 Birr/pcs.
13.8	Bidet	"	556.83 Birr/pcs.
13.9	Shower plate	"	545.20 Birr/pcs.
13.10	urinals	"	545.98 Birr/pcs.
13.11	Kitchen sink (singel bowel)	"	548.14 Birr/pcs.
13.12	Kitchen sink (double bowel)	"	747.50 Birr/pcs.
13.13	Towel rack	"	57.29 Birr/pcs.
13.14	Toilet paper holder	"	57.10 Birr/pcs.
13.15	soap holder	"	50.85 Birr/pcs.
13.16	Glass mirror	"	161.91 Birr/pcs.
13.17	Floor drain	"	97.80 Birr/pcs.
13.18	Water heatr (50 Lit. Cap.)	"	1097.34 Birr/pcs.
13.19	Water heatr (80 Lit. capacity)	"	1235.34 Birr/pcs.
13.20	Water heatr (120 Lit. capacity)	"	1442.34 Birr/pcs.
13.21	1/2 " Galvanaized Steel Pipe (GSP)	ml.	35.36 Birr/ml.
13.22	3/4" Galvanaized Steel Pipe (GSP)	"	31.71 Birr/ml.

13.23	1" Galvanaized Steel Pipe (GSP)	"	39.53	Birr/ml.
13.24	2" Galvanaized Steel Pipe (GSP)	"	67.38	Birr/ml.
13.25	3" Galvanaized Steel Pipe (GSP)	"	95.40	Birr/ml.

ITEM NO.	DESCRIPTION	UNIT	UNIT PRICE	
13.26	Gate Valves 1/2"	pcs.	23.75	Birr/pcs.
13.27	Gate Valves 3/4"	"	27.500	Birr/pcs.
13.28	Gate Valves 1"	"	37.50	Birr/pcs.
13.29	Gate Valves 2"	"	88.15	Birr/pcs.
13.30	Gate Valves 3"	"	156.90	Birr/pcs.
13.31	50 mm. dia. PVC Pipe	ml.	43.63	Birr/ml.
13.32	75 mm. dia. PVC Pipe	"	57.00	Birr/ml.
13.33	100 mm. Dia. PVC Pipe	"	70.67	Birr/ml.
13.34	10 cm. dia. Concrete Pipe	"	20.32	Birr/ml.
13.35	15 cm. dia. Concrete Pipe	"	26.10	Birr/ml.
13.36	20 cm. dia. Concrete Pipe	"	31.81	Birr/ml.
13.37	30 cm. dia. Concrete Pipe	"	43.30	Birr/ml.
13.38	40 cm. dia. Concrete Pipe	"	60.65	Birr/ml.
13.39	60 cm. dia. Concrete Pipe	"	99.57	Birr/ml.
13.40	80 cm. dia. Concrete Pipe	"	163.59	Birr/ml.
13.41	100 cm. dia. Concrete Pipe	"	270.27	Birr/ml.
13.42	120 cm. dia. Concrete Pipe	"	307.36	Birr/ml.
13.43	1 m3 cap. Water tank (Black Iron Sheet)	pcs.	864.72	Birr/pcs.
13.44	2 m3 cap. Water tank (Black Iron Sheet)	"	1456.58	Birr/pcs.
13.45	1 m3 cap. Water tank (Galvanized Sheet Metal)	"	1486.46	Birr/pcs.
13.46	2 m3 cap. Water tank (Galvanaized Sheet Metal)	"	2450.37	Birr/pcs.
13.47	1 m3 cap. Water tank (Aluminium)	"	1593.59	Birr/pcs.

ITEM NO.	DESCRIPTION	UNIT	UNIT PRICE
	5. FORM WORKS		
5.1	For Foundation Footing & Column.	m^2	67.42 Birr/m2
5.2	For Grade Beam.	"	69.26 Birr/m2
5.3	For Elevation Column.	"	73.19 Birr/m2
5.4	For Suspended slab & shear wall.	"	68.18 Birr/m2

ITEM NO.	DESCRIPTION	UNIT	UNIT PRICE
	7. ROOFING WORKS		
7.1	G32 CIS Roofing (Including Truss & Purlins)	M^2	59.37 Birr/m2
7.2	G30 CIS Roofing (Including Truss & Purlins)	"	25.09 Birr/m2
7.3	G28 CIS Roofing (Including Truss & Purlins)	"	23.44 Birr/m2
7.4	G32 C I S Roofing (Without Truss & Purlin)	"	42.30 Birr/m2
7.5	G30 C I S Roofing (Without Truss & Purlin)	"	41.23 Birr/m2
7.6	G28 C I S Roofing (Without Truss & Purlin)	"	52.59 Birr/m2
7.7	10 cm. dia. Upper & Lower Chords Eucaliptus Wood.	ml.	5.37 Birr/ml.
7.8	6 cm. dia. Vertical & Diagonal Members of a Truss	"	3.52 Birr/ml.
7.9	5 X 7 cm. Tid Wood Roof Purlin	"	11.72 Birr/ml.
7.10	EGA 300 & 4mm. Thick Roof cover	m^2	58.49 Birr/m2
7.11	Steel Truss & Purlin With RHS	kg.	15.03 Birr/kg.
7.12	Gutter Development Size 33 cm.	ml.	25.84 Birr/m.
7.13	Gutter Development Size 40 cm.	"	29.78 Birr/m.
7.14	Gutter Development Size 50 cm.	"	35.69 Birr/m.
7.15	Gutter Development Size 60 cm.	"	48.43 Birr/m.
7.16	Gutter Development Size 100 cm.	"	63.25 Birr/m.
7.17	Down Pipe Development Size 33 cm.	"	24.97 Birr/m.
7.18	Down Pipe Development Size 40 cm.	"	28.91 Birr/m.
7.19	Down Pipe Development Size 50 cm.	"	34.81 Birr/m.

7.20	Down Pipe Development Size 60 cm.	"	40.06 Birr/m.
7.21	Copping Development Zize 33 cm.	"	24.45 Birr/ml.
7.22	Flashing Development Size 19 cm.	"	22.13 Birr/m.
7.23	15 cm. Wide Kerrero Facia Board	"	27.85 Birr/m.
7.24	20 cm. Wide Kerrero Facia Board	"	34.73 Birr/m.

ITEM NO.	DESCRIPTION	UNIT	UNIT PRICE
	12. PAINTING WORKS		
12.1	Three coats of plastic paint to wall.	m^2	8.90 Birr/m2
12.2	Two coats of plastic paint to wall.	"	5.89 Birr/m2
12.3	Three coats of plastic paint to ceilling.	"	9.83 Birr/m2
12.4	Three coats of synthetic paint to metal surface.	"	12.45 Birr/m2
12.5	Two coats of varnish paint to wooden surface.	"	12.82 Birr/m2
12.6	Two coats of anti-rust paint.	"	11.39 Birr/m2
12.7	One coat of white washing paint.	"	3.79 Birr/m2

ITEM NO.	DESCRIPTION	UNIT	UNIT PRICE
	10. GLAZING WORKS		
10.1	Fixing 3mm clear glass .	m^2	96.45 Birr/m2
10.2	Fixing 4mm clear glass.	"	123.95 Birr/m2
10.3	Fixing 5mm. figured glass.	"	151.45 Birr/m2
10.4	Fixing 4 mm. Frosted glass.	"	158.32 Birr/m2
10.5	Fixing 4mm. Tinted glass.	"	419.57 Birr/m2
10.6	Fixing 5mm. security glass.	"	488.32 Birr/m2

ITEM NO.	DESCRIPTION	UNIT	UNIT PRICE
	11. FINISHING WORKS		
11.1	3 Coats of cement plastering (1:3)	m^2	209.80 Birr/m2
11.2	2 Coats of cement plastering to soffit celling.	"	20.47 Birr/m2
11.3	2 Coats of cement plastering to exposed beams and columns.	"	66.55 Birr/m2
11.4	1 coat (final coat) cement rendering.	"	45.12 Birr/m2
11.5	Cement pointing to brick wall surface (1:3).	"	69.39 Birr/m2
11.6	Cement pointing to H.C.B.wall surface (1:3).	"	6.69 Birr/m2
11.7	Recessed pointing to dressed masonry wall surface.	"	10.54 Birr/m2
11.8	3cm. Thick cement screed flooring (1:3).	"	38.61 Birr/m2
11.9	5cm. Thick cement screed flooring (1:3).	"	116.76 Birr/m2
11.10	20 x 20cm. cement tile flooring(1:3).	"	71.41 Birr/m2
11.11	20 x 20cm. terrazzo tile flooring(1:3).	"	106.26 Birr/m2
11.12	2cm. thick granolythic tile flooring (1:3).	"	75.35 Birr/m2
11.13	2cm thick Harar marble flooring (1:3).	"	267.11 Birr/m2
11.14	2cm thick white marble flooring (1:3).	"	685.52 Birr/m2
11.15	Marbel Chips Flooring.	"	105.00 Birr/m2
11.16	Ceramic tile flooring (1:3).	"	148.38 Birr/m2
11.17	2mm. thick PVC flooring. (Ethiopia)	"	78.55 Birr/m2

11.18	2mm. thick PVC flooring. (Italy)	"	112.59 Birr/m2
11.19	2mm. thick PVC flooring. (England)	"	163.10 Birr/m2
11.20	2mm. thick PVC flooring. (China.)	"	83.85 Birr/m2
11.21	Parque flooring with all accessories .	"	145.18 Birr/m2
11.22	10cm. High cement tile skirting (1:3).	ml.	10.64 Birr/ml
11.23	10cm. High terrazzo tile skirting (1:3).	"	13.49 Birr/ml
11.24	10cm. High Granolythic tile skirting (1:3).	"	11.91 Birr/ml
11.25	15 x 75mm. Marble skirting (1: 3).	"	32.66 Birr/ml
11.26	15 x 100 mm. Marble skirting (1: 3).	"	43.16 Birr/ml

ITEM NO.	DESCRIPTION	UNIT	UNIT PRICE
11.27	ceramic tile skirting (1:3).	ml.	46.54 Birr/ml
11.28	8cm.high PVC tile skirting.(ETHIOPIA)	"	12.56 Birr/ml
11.29	8cm. high PVC tile skirting.(ITALY)	"	13.83 Birr/ml
11.30	8cm. high PVC tile skirting.(ENGLAND)	"	17.26 Birr/ml
11.31	8cm. high PVC tile skirting.(CHINA)	"	12.25 Birr/ml
11.32	10cm. high wooden skirting.	"	14.04 Birr/ml
11.33	30mm. thick terrazo window cill (1:3) on HCB.	"	29.38 Birr/ml
11.34	30mm. thick terrazo window cill (1:3) on brick.	"	32.70 Birr/ml
11.35	30mm. thick terrazo window cill (1:3) on stone.	"	42.68 Birr/ml
11.36	30mm. thick Granite window cill (1:3) on HCB.	"	118.63 Birr/ml
11.37	30mm. thick Granite window cill (1:3) on brick.	"	138.58 Birr/ml
11.38	30mm. thick Granite window cill (1:3) on stone.	"	191.08 Birr/ml
11.39	30mm. thick white marble window cill (1:3)on HCB.	"	103.33 Birr/ml
11.40	30mm.thick white marble window cill (1:3) on Brick.	"	119.08 Birr/ml
11.41	30mm. thick white marble window cill (1:3) on Stone.	"	165.88 Birr/ml
11.42	30mm. thick HARAR marble window cill (1:3)on HCB .	"	80.38 Birr/ml

11.43	30mm. thick HARAR marble window cill (1:3)on Brick .	"	92.19 Birr/ml
11.44	30mm. thick HARAR marble window cill (1:3)on Stone .	"	127.63 Birr/ml
11.45	30mm.thick granolythic window cill (1:3) on HCB .	"	56.15 Birr/ml
11.46	30mm.thick granolythic window cill (1:3) on Brick .	"	87.22 Birr/ml
11.47	30mm. thick granite marble threads.(1:3)	"	183.98 Birr/ml
11.48	30mm. thick white marble threads.(1:3)	"	161.03 Birr/ml
11.49	30mm. thick harar marble threads.(1:3)	"	126.61 Birr/ml
11.50	30mm. thick Granolythic marble threads.(1:3)	"	90.27 Birr/ml
11.51	20mm. thick Granite marble riser. (1:3).	"	107.06 Birr/ml
11.52	20mm. thick white marble riser. (1:3).	"	94.31 Birr/ml

ITEM NO.	DESCRIPTION	UNIT	UNIT PRICE
11.53	20mm. thick Harar marble riser. (1:3).	ml.	63.71 Birr/ml
11.54	20mm. thick Granolythic marble riser. (1:3).	"	47.56 Birr/ml
11.55	20mm. thick Granite marble trechholds. (1:3).	"	116.34 Birr/ml
11.56	20mm. thick white marble trechholds. (1:3).	"	103.59 Birr/ml
11.57	15x15 cm. Ceramic wall tile.(1:3).	m^2	124.94 Birr/m2
11.58	20x20 cm. Ceramic wall tile.(1:3).	"	126.75 Birr/m2
11.59	Supply and fix mosaic tile.	"	221.27 Birr/m2
11.60	Addis decore wall finishing.	"	50.33 Birr/m2
11.61	Addis decore plastic wall paper.	"	11.70 Birr/m2
11.62	2cm. thick Granite wall marble (1:2) .	"	480.54 Birr/m2
11.63	2cm. thick Harar wall marble (1:2).	"	263.79 Birr/m2
11.64	2cm. thick white Gojam wall marble (1:2).	"	416.79 Birr/m2
11.65	Semi dressed stone pavement on 20cm. thick granular mats.	"	46.49 Birr/m2
11.66	C-15 8cm thick mass concrete pavement under hard core.	"	111157.87 Birr/m2

ITEM NO.	DESCRIPTION	UNIT	UNIT PRICE
	3. CONCRETE WORKS		
3.1	C-7 Lean Concrete (Hand mix) 1:2:7	m^2	89.40 Birr/m2
3.2	C-20 Concrete (Hand mix) 1:2:4	m^3	2255.89 Birr/m3
3.3	C-20 Concrete (Mechanical Mix) 1:2:4	"	749.26 Birr/m3
3.4	C-25 Concrete (Hand Mix) 1:2:3	"	513.35 Birr/m3
3.5	C-25 Concrete (Mechanical Mix) 1:2:3	"	2598.63 Birr/m3
3.6	C-30 Concrete (Mechanical Mix) 1:1:3	"	160.13 Birr/m3
3.7	C-20 Concrete Slab 10 cm. thick (Hand mix) 1:2:4	m^2	46.66 Birr/m2
3.8	C-20 Concrete Slab 10 cm. thick (Mech. Mix) 1:2:4	"	51.03 Birr/m2

ITEM NO.	DESCRIPTION	UNIT	UNIT PRICE
	9. METAL WORKS		
9.1	Fully metal doors of 28LTZ without grill	Pcs.	253.07 Br./m2
9.2	Fully metal doors of 38LTZ without grill	"	268.95 Br./m2
9.3	Halfglazed metal doors of 38LTZ withoutgrill	"	221.00 Br./m2
9.4	Halfglazed metal doors of 28LTZ withoutgrill	"	205.59 Br./m2
9.5	Guard rails & Balustrade of RHS	m^2	152.68 Br./m2
9.6	90 cm high verndah grill & RHS post .	"	134.33 Br./m2

ITEM NO.	DESCRIPTION	UNIT	UNIT PRICE
	6 . WALLING		
6.1	Chicka Wall (18 cm. Thick)	m^2	33.03 Birr/m^2
6.2	G-32 CIS Walling	"	58.83 Birr/m^2
6.3	G-28 CIS Walling .	"	75.21 Birr/m^2
6.4	12cm. thick Brick Wall Both Sides Left For Plastering.	"	75.18 Birr/m^2
6.5	12cm. thick Brick Wall One Side Left For Plast. The Other For Poiting.	"	84.50 Birr/m^2
6.6	25cm. thick Brick Wall Both Sides Left For Plastering.	"	162.53 Birr/m^2
6.7	25cm. thick Brick Wall One Side Left For Plast. The Other For Poiting.	"	166.01 Birr/m^2
6.8	10 cm. thick HCB Wall Both Sides Left For Plastering.	"	45.40 Birr/m^2
6.9	15 cm. thick HCB Wall Both Sides Left For Plastering.	"	64.56 Birr/m^2
6.10	15cm. thick HCB Wall One Side Left For Plast. The Other For Poiting.	"	65.73 Birr/m^2

6.11	20 cm. thick HCB Wall Both Sides Left For Plastering.	"	125.12	Birr/m^2
6.12	20cm. thick HCB Wall One Side Left For Plast. The Other For Poiting.	"	73.16	Birr/m^2
6.13	20 cm.thick HCB Wall Both Sides Left For Pointing	"	74.70	Birr/m^2
6.14	10 cm. thick Solid Bloket Wall Both Sides Left For Plastering.	"	95.95	Birr/m2
6.15	10cm. thick Solid Blocket Wall One Side Left For Plast. The Other For Poit.	"	81.31	Birr/m2
6.16	10 cm.thick Solid Blocket Wall Both Sides Left For Pointing.	"	62.84	Birr/m2
6.17	15 cm. thick Solid Bloket Wall Both Sides Left For Plastering.	"	95.75	Birr/m2
6.18	15cm. thick Solid Blocket Wall One Side Left For Plast. The Other For Poit.	"	72.34	Birr/m2
6.19	15 cm.thick Solid Blocket Wall Both Sides Left For Pointing.	"	73.89	Birr/m2

ITEM NO.	DESCRIPTION	UNIT	UNIT PRICE
	14. ELECTRICAL INSTALLATIONS		
14.1	MDB including bus bars of 160Amp.rating	Pcs	8335.00 Birr/Pcs
14.2	SDB including bus bars of 63 Amp.rating	Pcs	1710.00 Birr/Pcs
14.3	light point including two way switch	Pt	92.81 Birr/Pt
14.4	light point including one way switch	Pt	85.31 Birr/Pt
14.5	light point	Pt	75.94 Birr/Pt
14.6	Sockect point 16Amp.	Pt	167.50 Birr/Pt
14.7	Sockect point 10Amp.	Pt	164.38 Birr/Pt
14.8	Bell call point	Pt	81.98 Birr/Pt
14.9	Telephone point	Pt	83.63 Birr/Pt

14.10	TV point	Pt	104.63	Birr/Pt
14.11	Bell call indicator/system/ 1-8	No.	1177.34	Birr/No.
14.12	Bell call indicator/system/ 1-12	No.	1371.09	Birr/No.
14.13	Bell call indicator/system/ 1-16	No.	1896.09	Birr/No.
14.14	Flourecent fitting type philips TMS 012/136 with 1xTLD 36watt	No.	182.75	Birr/No.
14.15	Flourecent fitting type philipsTMW 065/136 with 1xTLD 36watt	No.	320.25	Birr/No.
14.16	Flourecent fitting type philipsTMW 065/236 with 1xTLD 36watt	No.	570.25	Birr/No.
14.17	Fitting type Simense 5NL-510 with 60 wattglobe	No.	57.75	Birr/No.
14.18	Fitting type Simense 5NL-302/140watt	No.	232.75	Birr/No.
14.19	Incandecent with 60 watt lamp	No.	7.63	Birr/No.

ITEM NO.	DESCRIPTION	UNIT	UNIT PRICE
	2 . MASONRY WORKS		
2.1	50cm. thick masonry foundation (B.G.L).	M^3	668.26 Birr/m3
2.2	50cm. thick masonry foundation (A.G.L).	"	675.30 Birr/m3
2.3	40cm. thick elevation wall (One side dressed) .	M2	667.07 Birr/m2
2.4	40cm. thick elevation wall (Two side dressed).	"	144.83 Birr/m2

ITEM NO.	DESCRIPTION	UNIT	UNIT PRICE
	8 . CARPENTRY & JOINERY		
8.1	Abujedi ceiling .	m^2	32.72 Birr/m^2
8.2	Hard board ceiling .	"	47.31 Birr/m^2
8.3	8mm. thick chipwood Ceiling.	"	74.09 Birr/m^2
8.4	Tanged & Groved (T & G) Tidwood Ceiling.	"	186.38 Birr/m^2
8.5	(90x210 cm.) Flush wooden door Coverd With Kerero Plywood.	"	274.13 Birr/m^2
8.6	(90x210 cm.) Flush wooden door Coverd With Mahogony Plywood.	"	489.15 Birr/m^2
8.7	Framed & Panelled solid Doors & Windows .	"	293.26 Birr/m^2

8.8	Built In Cupboard (Four drawers & openings) .	"	625.98 Birr/m^2

REMARKS
0.00

REMARKS

REMARKS
0.00

REMARKS
Average of 13.31%13.33

REMARKS

REMARKS

REMARKS

REMARKS

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REMARKS
5 cm. Thick
10 cm. Thick
10 cm. Thick

REMARKS

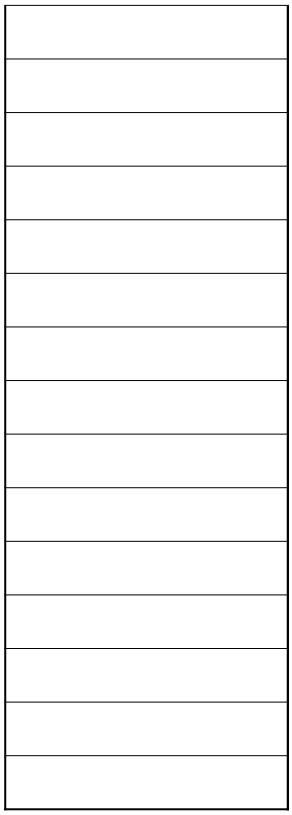
REMARKS
Mortar Ratio (1:3)
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REMARKS

REMARKS

REMARKS
0.00
0



ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **WALLING**
WORK ITEM: (6.1) Chicka Wall (18 cm. Thick)
TOTAL QANTITY OF WORK ITEM: 1.2 m^2

LABOUR HOURLY OUTPUT: 0.625
EQUIPEMENT:
RESULT: 33.03 Birr/m^2

Material Cost (1:01)					Labour (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Red clay soil	m^3	0.227	40	9.08	Helper	1	1	1.9	1.9		
diam.10 cm tid wood post	pcs.	1	10	10	D/L	2	1	1.25	2.5		
Splinter	bundle	1	3.5	3.5					0		
Tusha rope	ml.	1.332	0.15	0.20					0		
Chid	bundle	0.156	17	2.65					0		
				0					0		
				0					0		
Total (1:-01)				25.43	**Total (1:02)**				4.4	**Total (1:03**	

A= Materials Unit Cost 21.19317 Birr/m^2

B= Manpower Unit Cost 7.04 Birr/m^2
Total of (1:02)
Hourly Output: _____

C=Equipment Unit Cos
Total of (1:03)
Hourly output: ____

Direct Cost of Work Item = A+B+C =			28.23 Birr/m^2
Over head cost :		7%	1.98 "
Profit Cost:		10%	2.82 "
Total Unit Cost :			33.03 Birr/m^2

Remark _____

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

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

LABOUR HOURLY OUTPUT: 4

WORK ITEM: (6.3) G-28 CIS Walling .

EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1.2 M^2

RESULT: 75.21 $Birr/m^2$

Material Cost (1:01)					Labour (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
G-28 CIS Wall	m^2	1.2	37.5	45	Forman	1	0.17	4.4	0.75		
diam.10-12 Eucal.wood post	ml	1.1	13	14.3	carpentor	1	1	3.75	3.75		
diam. 6cm purlin	ml	1.32	6	7.92	Helper	1	1	1.9	1.9		
Nails	kg	0.3	9	2.70	D/L	1	1	1.2	1.2		
				0					0		
				0					0		
				0					0		
Total (1:-01)				69.92	**Total (1:02)**				7.60	**Total (1:03**	

A= Materials Unit Cost 58.26667 $Birr/m^2$

B= Manpower Unit Cost 1.90 $Birr/m^2$

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: ____

Direct Cost of Work Item = A+B+C = 60.17 $Birr/m^2$

Over head cost : 10% 6.02 "

Profit Cost: 15% 9.02 "

Total Unit Cost : 75.21 $Birr/m^2$

Remark _____

UF: UTILIZATION FACTOR

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**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **WALLING**
WORK ITEM: (6.2) G-32 CIS Walling
TOTAL QANTITY OF WORK ITEM: 1.2 M^2

LABOUR HOURLY OUTPUT: 4
EQUIPEMENT:
RESULT: 58.83 $Birr/m^2$

Material Cost (1:01)					Labour (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
G-32 CIS Wall	m^2	1.2	24.4	29.28	Forman	1	0.17	4.4	0.75		
diam.10-12 Eucal.wood post	ml.	1.1	13	14.3	carpentor	1	1	3.75	3.75		
diam. 6cm purlin	ml.	1.32	6	7.92	Helper	1	1	1.9	1.9		
Nails	kg.	0.3	9	2.70	D/L	1	1	1.2	1.2		
				0					0		
				0					0		
				0					0		
Total (1:-01)				54.20	**Total (1:02)**				7.60	**Total (1:03**	

A= Materials Unit Cost 45.16667 $Birr/m^2$

B= Manpower Unit Cost 1.90 $Birr/m^2$
Total of (1:02)
Hourly Output: _____

C=Equipment Unit Cos
Total of (1:03)
Hourly output: ____

Direct Cost of Work Item = A+B+C =		47.07 $Birr/m^2$
Over head cost :	10%	4.71 "
Profit Cost:	15%	7.06 "
Total Unit Cost :		58.83 $Birr/m^2$

Remark _____

UF: UTILIZATION FACTOR
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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **WALLING**
WORK ITEM: (6.4) 12cm. thick Brick Wall Both Sides Left For Plastering.
TOTAL QANTITY OF WORK ITEM: 1 m^2

LABOUR HOURLY OUTPUT: 0.65
EQUIPEMENT:
RESULT: 75.18 $Birr/m^2$

Material Cost (1:01)					Labour (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
6 x 12 x 24 cm. Brick	Pcs.	57.7	0.61	35.197	Foreman	1	1	5	5.00		
Cement	Qt.	0.115	60	6.9	Mason	1	1	3.75	3.75		
Sand	m^3	0.028	95	2.66	D/L	1	1	1.25	1.25		
Water	m^3	0.0057	0.75	0.0043					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				44.76	**Total (1:02)**				10.00	**Total (1:03**	

A= Materials Unit Cost 44.76128 $Birr/m^2$

B= Manpower Unit Cost 15.38 $Birr/m^2$
Total of (1:02)
Hourly Output: _____

C=Equipment Unit Cos
Total of (1:03)
Hourly output: _____

Direct Cost of Work Item = A+B+C = 60.15 $Birr/m^2$
Over head cost : 10% 6.01 "
Profit Cost: 15% 9.02 "
Total Unit Cost : 75.18 $Birr/m^2$

Remark : Mortar Quantity (1:3) With 15% Wastage = 0.026 m^3/m^2
UF: UTILIZATION FACTOR
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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **WALLING**
WORK ITEM: (6.5) 12cm. thick Brick Wall One Side Left For Plast. The Other For Poiting.
TOTAL QANTITY OF WORK ITEM: 1 m^2

LABOUR HOURLY OUTPUT: 0.6
EQUIPEMENT:
RESULT: 84.50 Birr/m^2

Material Cost (1:01)					Labour (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
6 x 12 x 24 cm. Brick	Pcs.	57.7	0.61	35.197	Foreman	1	1	5	5.00		
Cement	Qt.	0.115	110	12.65	Mason	1	1	3.75	3.75		
Sand	m^3	0.028	110	3.08	D/L	1	1	1.25	1.25		
Water	m^3	0.0057	0.75	0.0043					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				50.93	**Total (1:02)**				10.00	**Total (1:03**	

A= Materials Unit Cost 50.93128 Birr/m^2

B= Manpower Unit Cost 16.67 Birr/m^2
Total of (1:02)
Hourly Output: _____

C=Equipment Unit Cos
Total of (1:03)
Hourly output: ____

Direct Cost of Work Item = A+B+C = 67.60 Birr/m^2
Over head cost : 10% 6.76 "
Profit Cost: 15% 10.14 "
Total Unit Cost : 84.50 Birr/m^2

Remark : Mortar Quantity (1:3) With 15% Wastage = 0.026 m^3/m^2
UF: UTILIZATION FACTOR
*: INCLUSIVE OF WASTAGE, TRANSPORTING, HANDLING, ETC.

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **WALLING**
WORK ITEM: (6.6) 25cm. thick Brick Wall Both Sides Left For Plastering.
TOTAL QANTITY OF WORK ITEM: 1 m^2

LABOUR HOURLY OUTPUT: 0.45
EQUIPEMENT:
RESULT: 162.53 Birr/m^2

Material Cost (1:01)					Labour (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
6 x 12 x 24 cm. Brick	Pcs.	115.4	0.61	70.394	Foreman	1	1	5	5.00		
Cement	Qt.	0.273	110	30.03	Mason	1	1	3.75	3.75		
Sand	m^3	0.067	110	7.37	D/L	1	1	1.25	1.25		
Water	m^3	0.0137	0.75	0.0103					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				107.80	**Total (1:02)**				10.00	**Total (1:03**	

A= Materials Unit Cost 107.80 Birr/m^2

B= Manpower Unit Cost 22.22 Birr/m^2
Total of (1:02)
Hourly Output: _____

C=Equipment Unit Cos
Total of (1:03)
Hourly output: _____

Direct Cost of Work Item = A+B+C = 130.03 Birr/m^2
Over head cost : 10% 13.00 "
Profit Cost: 15% 19.50 "
Total Unit Cost : 162.53 Birr/m^2

Remark : Mortar Quantity (1:3) With 15% Wastage = 0.062 m^3/m^2
UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **WALLING**
WORK ITEM: (6.7) 25cm. thick Brick Wall One Side Left For Plast. The Other For Poiting.
TOTAL QANTITY OF WORK ITEM: 1 m^2

LABOUR HOURLY OUTPUT: 0.4
EQUIPEMENT:
RESULT: 166.01 Birr/m^2

Material Cost (1:01)					Labour (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
6 x 12 x 24 cm. Brick	Pcs.	115.4	0.61	70.394	Foreman	1	1	5	5.00		
Cement	Qt.	0.273	110	30.03	Mason	1	1	3.75	3.75		
Sand	m^3	0.067	110	7.37	D/L	1	1	1.25	1.25		
Water	m^3	0.0137	0.75	0.0103					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				107.80	**Total (1:02)**				10.00	**Total (1:03**	

A= Materials Unit Cost 107.80 Birr/m^2

B= Manpower Unit Cost 25.00 Birr/m^2
Total of (1:02)
Hourly Output: _____

C=Equipment Unit Cos
Total of (1:03)
Hourly output: _____

Direct Cost of Work Item = A+B+C = 132.80 Birr/m^2
Over head cost : 10% 13.28 "
Profit Cost: 15% 19.92 "
Total Unit Cost : 166.01 Birr/m^2

Remark : Mortar Quantity (1:3) With 15% Wastage = 0.062 m^3/m^2

UF: UTILIZATION FACTOR
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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **WALLING**
WORK ITEM: (6.8) 10 cm. thick HCB Wall Both Sides Left For Plastering.
TOTAL QANTITY OF WORK ITEM: 1 m^2

LABOUR HOURLY OUTPUT: 1
EQUIPEMENT:
RESULT: 45.40 Birr/m^2

Material Cost (1:01)					Labour (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
10 cm. Thick HCB	Pcs.	13	1.7	22.1	Foreman	1	1	5	5.00		
Cement	Qt.	0.032	60	1.92	Mason	1	1	3.75	3.75		
Sand	m^3	0.011	95	1.045	D/L	2	1	1.25	2.5		
Water	m^3	0.0016	0.75	0.0012					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				25.07	**Total (1:02)**				11.25	**Total (1:03**	

A= Materials Unit Cost 25.07 Birr/m^2

B= Manpower Unit Cost 11.25 Birr/m^2
Total of (1:02)
Hourly Output: _____

C=Equipment Unit Cos
Total of (1:03)
Hourly output: ____

Direct Cost of Work Item = A+B+C =			36.32 Birr/m^2
Over head cost :	10%		3.63 "
Profit Cost:	15%		5.45 "
Total Unit Cost :			45.40 Birr/m^2

Remarks : Mortar Quantity (1:3) With 15 % Wastage =0.0092 m^3/m^2

UF: UTILIZATION FACTOR

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

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **WALLING**

WORK ITEM: (6.9) 15 cm. thick HCB Wall Both Sides Left For Plastering.

TOTAL QANTITY OF WORK ITEM: 1 m^2

LABOUR HOURLY OUTPUT: 0.8

EQUIPEMENT:

RESULT: 64.56 $Birr/m^2$

Material Cost (1:01)					Labour (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
15 cm. Thick HCB	Pcs.	13	2.5	32.5	Foreman	1	1	5	5.00		
Cement	Qt.	0.061	60	3.66	Mason	1	1	3.75	3.75		
Sand	m^3	0.015	95	1.425	D/L	2	1	1.25	2.5		
Water	m^3	0.0025	0.75	0.0019					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				37.59	**Total (1:02)**				11.25	**Total (1:03**	

A= Materials Unit Cost 37.59 $Birr/m^2$

B= Manpower Unit Cost 14.06 $Birr/m^2$

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 51.65 $Birr/m^2$

Over head cost : 10% 5.16 "

Profit Cost: 15% 7.75 "

Total Unit Cost : 64.56 Birr/m²

Remark : Mortar Quantity (1:3) With 15 % Wastage = 0.0138 m³/m²

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **WALLING** LABOUR HOURLY OUTPUT: 0.75

WORK ITEM: (6.10) 15cm. thick HCB Wall One Side Left For Plast. The Other For Poiting. EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 m² RESULT: 65.73 Birr/m²

Material Cost (1:01)					Labour (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
15 cm. Thick HCB	Pcs.	13	2.5	32.5	Foreman	1	1	5	5.00		
Cement	Qt.	0.061	60	3.66	Mason	1	1	3.75	3.75		
Sand	m³	0.015	95	1.425	D/L	2	1	1.25	2.5		
Water	m³	0.0025	0.75	0.0019					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				37.59	**Total (1:02)**				11.25	**Total (1:03**	

A= Materials Unit Cost 37.59 Birr/m²

B= Manpower Unit Cost 15.00 Birr/m²

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: ____

Direct Cost of Work Item = A+B+C = 52.59 Birr/m²

Over head cost : 10% 5.26 "

Profit Cost:	15%	7.89	"
Total Unit Cost :		65.73	Birr/m²

Remark : Mortar Quantity (1:3) With 15 % Wastage = 0.0138 m³/m²

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **WALLING**

WORK ITEM: (6.11) 20 cm. thick HCB Wall Both Sides Left For Plastering.

TOTAL QANTITY OF WORK ITEM: 1 m²

LABOUR HOURLY OUTPUT: 0.75

EQUIPEMENT:

RESULT: 125.12 Birr/m²

Material Cost (1:01)					Labour (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
20 cm. Thick HCB	Pcs.	13	4.2	54.6	Foreman	1	1	6.25	6.25		
Cement	Qt.	0.08	280	22.4	Mason	1	1	5	5		
Sand	m³	0.02	138	2.76	D/L	2	1	2	4		
Water	m³	0.004	0.75	0.0030					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				79.76	**Total (1:02)**				15.25	**Total (1:03**	

A= Materials Unit Cost 79.76 Birr/m²

B= Manpower Unit Cost 20.33 Birr/m²

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 100.10 Birr/m²

Over head cost :	10%	10.01	"
Profit Cost:	15%	15.01	"
Total Unit Cost :		125.12	Birr/m²

Remark : Mortar Quantity (1:3) With 15 % Wastage =0.0184 m³/m²

UF: UTILIZATION FACTOR

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**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **WALLING**

WORK ITEM: (6.12) 20cm. thick HCB Wall One Side Left For Plast. The Other For Poiting.

TOTAL QANTITY OF WORK ITEM: 1 m²

LABOUR HOURLY OUTPUT: 0.7

EQUIPEMENT:

RESULT: 73.16 Birr/m²

Material Cost (1:01)					Labour (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
20 cm. Thick HCB	Pcs.	13	2.75	35.75	Foreman	1	1	5	5.00		
Cement	Qt.	0.08	60	4.8	Mason	1	1	3.75	3.75		
Sand	m³	0.02	95	1.9	D/L	2	1	1.25	2.5		
Water	m³	0.004	0.75	0.0030					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				42.45	**Total (1:02)**				11.25	**Total (1:03**	

A= Materials Unit Cost 42.45 Birr/m²

B= Manpower Unit Cost 16.07 Birr/m²

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		58.52	Birr/m²
Over head cost :	10%	5.85	"
Profit Cost:	15%	8.78	"
Total Unit Cost :		73.16	Birr/m²

Remark : Mortar Quantity (1:3) With 15 % Wastage = 0.0184 m³/m²

UF: UTILIZATION FACTOR

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**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **WALLING**

WORK ITEM: (6.13) 20 cm.thick HCB Wall Both Sides Left For Pointing

TOTAL QANTITY OF WORK ITEM: 1 m²

LABOUR HOURLY OUTPUT: 0.65

EQUIPEMENT:

RESULT: 74.70 Birr/m²

Material Cost (1:01)					Labour (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
20 cm. Thick HCB	Pcs.	13	2.75	35.75	Foreman	1	1	5	5.00		
Cement	Qt.	0.08	60	4.8	Mason	1	1	3.75	3.75		
Sand	m³	0.02	95	1.9	D/L	2	1	1.25	2.5		
Water	m³	0.004	0.75	0.0030					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				42.45	**Total (1:02)**				11.25	**Total (1:03**	

A= Materials Unit Cost 42.45 Birr/m²

B= Manpower Unit Cost 17.31 Birr/m²
Total of (1:02)

C=Equipment Unit Cos
Total of (1:03)

Hourly Output: _____		Hourly output: ____	
Direct Cost of Work Item = A+B+C =		59.76	Birr/m²
Over head cost :	10%	5.98	"
Profit Cost:	15%	8.96	"
Total Unit Cost :		74.70	Birr/m²

Remark : Mortar Quantity (1:3) With 15 % Wastage =0.0184 m³/m²

UF: UTILIZATION FACTOR

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**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **WALLING**

WORK ITEM: (6.14) 10 cm. thick Solid Bloket Wall Both Sides Left For Plastering.

TOTAL QANTITY OF WORK ITEM: 1 m²

LABOUR HOURLY OUTPUT: 0.75

EQUIPEMENT:

RESULT: 95.95 Birr/m²

Material Cost (1:01)					Labour (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
10 cm. thick Solid Blocket	Pcs.	13	3	39	Foreman	1	1	5	5.00		
Cement	Qt.	0.08	250	20	Mason	1	1	3.75	3.75		
Sand	m³	0.02	138	2.76	D/L	2	1	1.25	2.5		
Water	m³	0.004	0.75	0.0030					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				61.76	**Total (1:02)**				11.25	**Total (1:03**	

A= Materials Unit Cost 61.76 Birr/m²

B= Manpower Unit Cost 15.00 Birr/m²

Total of (1:02)

C=Equipment Unit Cos

Total of (1:03)

Hourly Output: _____		Hourly output: ____	
Direct Cost of Work Item = A+B+C =		76.76	Birr/m²
Over head cost :	10%	7.68	"
Profit Cost:	15%	11.51	"
Total Unit Cost :		95.95	Birr/m²

Remark : Mortar Quantity (1:3) With 15 % Wastage =0.0184 m³/m²

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **WALLING** LABOUR HOURLY OUTPUT: 0.7

WORK ITEM: (6.15) 10cm. thick Solid Blocket Wall One Side Left For Plast. The Other For Poit. EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 m² RESULT: 81.31 Birr/m²

Material Cost (1:01)					Labour (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
10 cm. thick Solid Blocket	Pcs.	13	2.5	32.5	Foreman	1	1	6.25	6.25		
Cement	Qt.	0.08	100	8	Mason	1	1	5	5		
Sand	m³	0.02	138	2.76	D/L	2	1	2	4		
Water	m³	0.004	0.75	0.0030					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				43.26	**Total (1:02)**				15.25	**Total (1:03**	

A= Materials Unit Cost 43.26 Birr/m² B= Manpower Unit Cost 21.79 Birr/m² C=Equipment Unit Cos

Total of (1:02) Total of (1:03)

Hourly Output: _____		Hourly output: ____	
Direct Cost of Work Item = A+B+C =		65.05	Birr/m²
Over head cost :	10%	6.50	"
Profit Cost:	15%	9.76	"
Total Unit Cost :		81.31	Birr/m²

Remark : Mortar Quantity (1:3) With 15 % Wastage = 0.0184 m³/m²

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **WALLING**

WORK ITEM: (6.16) 10 cm.thick Solid Blocket Wall Both Sides Left For Pointing.

TOTAL QANTITY OF WORK ITEM: 1 m²

LABOUR HOURLY OUTPUT: 0.65

EQUIPEMENT:

RESULT: 62.84 Birr/m²

Material Cost (1:01)					Labour (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
10 cm. thick Solid Blocket	Pcs.	13	2.02	26.26	Foreman	1	1	5	5.00		
Cement	Qt.	0.08	60	4.8	Mason	1	1	3.75	3.75		
Sand	m³	0.02	95	1.9	D/L	2	1	1.25	2.5		
Water	m³	0.004	0.75	0.0030					0		
				0					0		
				0					0		
				0					0		

Total (1:-01)	32.96	Total (1:02)	11.25	Total (1:03

A= Materials Unit Cost 32.96 Birr/m²

B= Manpower Unit Cost 17.31 Birr/m²

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		50.27	Birr/m²
Over head cost :	10%	5.03	"
Profit Cost:	15%	7.54	"
Total Unit Cost :		62.84	Birr/m²

Remark : Mortar Quantity (1:3) With 15 % Wastage =0.0184 m³/m²

UF: UTILIZATION FACTOR

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**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **WALLING**

WORK ITEM: (6.17) 15 cm. thick Solid Bloket Wall Both Sides Left For Plastering.

TOTAL QANTITY OF WORK ITEM: 1 m²

LABOUR HOURLY OUTPUT: 0.75

EQUIPEMENT:

RESULT: 95.75 Birr/m²

Material Cost (1:01)					Labour (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
15 cm. thick Solid Blocket	Pcs.	13	3.5	45.5	Foreman	1	1	6.25	6.25		
Cement	Qt.	0.08	100	8	Mason	1	1	5	5		
Sand	m³	0.02	138	2.76	D/L	2	1	2	4		
Water	m³	0.004	0.75	0.0030					0		
				0					0		
				0					0		
				0					0		

Total (1:-01)	56.26	Total (1:02)	15.25	Total (1:03

A= Materials Unit Cost 56.26 Birr/m²

B= Manpower Unit Cost 20.33 Birr/m²

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		76.60	Birr/m²
Over head cost :	10%	7.66	"
Profit Cost:	15%	11.49	"
Total Unit Cost :		95.75	Birr/m²

Remark : Mortar Quantity (1:3) With 15 % Wastage =0.0184 m³/m²

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **WALLING**

WORK ITEM: (6.18) 15cm. thick Solid Blocket Wall One Side Left For Plast. The Other For Poit.

TOTAL QANTITY OF WORK ITEM: 1 m²

LABOUR HOURLY OUTPUT: 0.7

EQUIPEMENT:

RESULT: 72.34 Birr/m²

Material Cost (1:01)					Labour (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
15 cm. thick Solid Blocket	Pcs.	13	2.7	35.1	Foreman	1	1	5	5.00		
Cement	Qt.	0.08	60	4.8	Mason	1	1	3.75	3.75		
Sand	m³	0.02	95	1.9	D/L	2	1	1.25	2.5		
Water	m³	0.004	0.75	0.0030					0		
				0					0		
				0					0		
				0					0		

Total (1:-01)	41.80	Total (1:02)	11.25	Total (1:03

A= Materials Unit Cost 41.80 Birr/m²

B= Manpower Unit Cost 16.07 Birr/m²

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		57.87	Birr/m²
Over head cost :	10%	5.79	"
Profit Cost:	15%	8.68	"
Total Unit Cost :		72.34	Birr/m²

Remark : Mortar Quantity (1:3) With 15 % Wastage = 0.0184 m³/m²

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **WALLING**

WORK ITEM: (6.19) 15 cm.thick Solid Blocket Wall Both Sides Left For Pointing.

TOTAL QANTITY OF WORK ITEM: 1 m²

LABOUR HOURLY OUTPUT: 0.65

EQUIPEMENT:

RESULT: 73.89 Birr/m²

Material Cost (1:01)					Labour (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
15 cm. thick Solid Blocket	Pcs.	13	2.7	35.1	Foreman	1	1	5	5.00		
Cement	Qt.	0.08	60	4.8	Mason	1	1	3.75	3.75		
Sand	m³	0.02	95	1.9	D/L	2	1	1.25	2.5		
Water	m³	0.004	0.75	0.0030					0		
				0					0		
				0					0		
				0					0		

Total (1:-01)	41.80	Total (1:02)	11.25	Total (1:03

A= Materials Unit Cost 41.80 Birr/m²

B= Manpower Unit Cost 17.31 Birr/m²

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		59.11	Birr/m²
Over head cost :	10%	5.91	"
Profit Cost:	15%	8.87	"
Total Unit Cost :		73.89	Birr/m²

Remark : Mortar Quantity (1:3) With 15 % Wastage =0.0184 m³/m²

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ELECTRICAL INSTALLATION**

WORK ITEM: (14.1) MDB including bus bars of 160Amp.rating

TOTAL QANTITY OF WORK ITEM: 1 Pcs

LABOUR HOURLY OUTPUT: 0.125

EQUIPEMENT:

RESULT: 8335.00 Birr/Pcs

Material Cost (1:01)					Labour (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
MDB with locable door				0	Foreman	1	0.45	5	2.25		
Including all accesseries.	No.	1	6600	6600	EL	1	1	5	5		
				0	D/L	1	1	1.25	1.25		
				0					0		

				0					0		
				0					0		
				0					0		
Total (1:-01)				6600.00	**Total (1:02)**				8.50	**Total (1:03**	

A= Materials Unit Cost 6600.00 Birr/Pcs

B= Manpower Unit Cost 68.00 Birr/Pcs

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		6668.00	Birr/Pcs
Over head cost :	10%	666.80	"
Profit Cost:	15%	1000.20	"
Total Unit Cost :		8335.00	Birr/Pcs

Remark :

UF: UTILIZATION FACTOR

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**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ELECTRICAL INSTALLATION**

WORK ITEM: (14.2) SDB including bus bars of 63 Amp.rating

TOTAL QANTITY OF WORK ITEM: 1 Pcs

LABOUR HOURLY OUTPUT: 0.125

EQUIPEMENT:

RESULT: 1710.00 Birr/Pcs

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
SDB with locable door				0	Foreman	1	0.45	5	2.25		
Including all accesseries.	No.	1	1300	1300	EL	1	1	5	5		
				0	D/L	1	1	1.25	1.25		

				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				1300.00	**Total (1:02)**				8.50	**Total (1:03**	

A= Materials Unit Cost 1300.00 Birr/Pcs

B= Manpower Unit Cost 68.00 Birr/Pcs

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		1368.00	Birr/Pcs
Over head cost :	10%	136.80	"
Profit Cost:	15%	205.20	"
Total Unit Cost :		1710.00	Birr/Pcs

Remark :

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ELECTRICAL INSTALLATION**

WORK ITEM: (14.3) light point including two way switch

TOTAL QANTITY OF WORK ITEM: 1 Pt

LABOUR HOURLY OUTPUT: 0.5

EQUIPEMENT:

RESULT: 92.81 Birr/Pt

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
diam.13mm conduit	m	2.4	4.5	10.8	Foreman	1	0.45	5	2.25		
pvc insulated conductor				0	EL	1	1	5	5		
of 2x2.5mm^2	m	4.7	4	18.8	Mason	1	1	3.75	3.75		
connectors	No.	1	0.4	0.4	Plaster	1	1	2.5	2.5		

junction box	No.	1	1.25	1.25	D/L	1	1	1.25	1.25		
Flush mounted two way switch	No.	1	13.5	13.5					0		
				0					0		
Total (1:-01)				44.75	**Total (1:02)**				14.75	**Total (1:03**	

A= Materials Unit Cost 44.75 Birr/Pt

B= Manpower Unit Cost 29.50 Birr/Pt

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		74.25	Birr/Pt
Over head cost :	10%	7.43	"
Profit Cost:	15%	11.14	"
Total Unit Cost :		92.81	Birr/Pt

Remark :

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ELECTRICAL INSTALLATION**

WORK ITEM: (14.4) light point including one way switch

TOTAL QANTITY OF WORK ITEM: 1 Pt

LABOUR HOURLY OUTPUT: 0.5

EQUIPEMENT:

RESULT: 85.31 Birr/Pt

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
diam.13mm conduit	m	2.4	4.5	10.8	Foreman	1	0.45	5	2.25		
pvc insulated conductor				0	EL	1	1	5	5		
of 2x2.5mm²	m	4.7	4	18.8	Mason	1	1	3.75	3.75		
connectors	No.	1	0.4	0.4	Plaster	1	1	2.5	2.5		

junction box	No.	1	1.25	1.25	D/L	1	1	1.25	1.25		
Flush mounted one way switch	No.	1	7.5	7.5					0		
				0					0		
Total (1:-01)				38.75	**Total (1:02)**				14.75	**Total (1:03**	

A= Materials Unit Cost 38.75 Birr/Pt

B= Manpower Unit Cost 29.50 Birr/Pt

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		68.25	Birr/Pt
Over head cost :	10%	6.83	"
Profit Cost:	15%	10.24	"
Total Unit Cost :		85.31	Birr/Pt

Remark :

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ELECTRICAL INSTALLATION**

WORK ITEM: (14.5) light point

TOTAL QANTITY OF WORK ITEM: 1 Pt

LABOUR HOURLY OUTPUT: 0.5

EQUIPEMENT:

RESULT: 75.94 Birr/Pt

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
diam.13mm conduit	m	2.4	4.5	10.8	Foreman	1	0.45	5	2.25		
pvc insulated conductor				0	EL	1	1	5	5		
of 2x2.5mm²	m	4.7	4	18.8	Mason	1	1	3.75	3.75		

connectors	No.	1	0.4	0.4	Plaster	1	1	2.5	2.5		
junction box	No.	1	1.25	1.25	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
Total (1:-01)				31.25	**Total (1:02)**				14.75	**Total (1:03**	

A= Materials Unit Cost 31.25 Birr/Pt

B= Manpower Unit Cost 29.50 Birr/Pt

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		60.75 Birr/Pt
Over head cost :	10%	6.08 "
Profit Cost:	15%	9.11 "
Total Unit Cost :		75.94 Birr/Pt

Remark :

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ELECTRICAL INSTALLATION**

WORK ITEM: (14.6) Sockect point 16Amp.

TOTAL QANTITY OF WORK ITEM: 1 Pt

LABOUR HOURLY OUTPUT: 0.5

EQUIPEMENT:

RESULT: 167.50 Birr/Pt

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
diam.16mm conduit	m	5.6	5.5	30.8	Foreman	1	0.45	5	2.25		
pvc insulated conductor				0	EL	1	1	5	5		
of 3x2.5mm^2	m	11.2	5.25	58.8	Mason	1	1	3.75	3.75		

Socket out let 16Amp.	No.	1	14.5	14.5	Plaster	1	1	2.5	2.5		
junction box	No.	1	0.4	0.4	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
Total (1:-01)				104.50	**Total (1:02)**				14.75	**Total (1:03**	

A= Materials Unit Cost 104.50 Birr/Pt

B= Manpower Unit Cost 29.50 Birr/Pt

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		134.00	Birr/Pt
Over head cost :	10%	13.40	"
Profit Cost:	15%	20.10	"
Total Unit Cost :		167.50	Birr/Pt

Remark :

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ELECTRICAL INSTALLATION**

WORK ITEM: (14.7) Sockect point 10Amp.

TOTAL QANTITY OF WORK ITEM: 1 Pt

LABOUR HOURLY OUTPUT: 0.5

EQUIPEMENT:

RESULT: 164.38 Birr/Pt

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
diam.16mm conduit	m	5.6	5.5	30.8	Foreman	1	0.45	5	2.25		
pvc insulated conductor				0	EL	1	1	5	5		

of 3x2.5mm²	m	11.2	5.25	58.8	Mason	1	1	3.75	3.75		
Socket out let 10Amp.	No.	1	12	12	Plaster	1	1	2.5	2.5		
junction box	No.	1	0.4	0.4	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
Total (1:-01)				102.00	**Total (1:02)**				14.75	**Total (1:03**	

A= Materials Unit Cost 102.00 Birr/Pt

B= Manpower Unit Cost 29.50 Birr/Pt

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		131.50	Birr/Pt
Over head cost :	10%	13.15	"
Profit Cost:	15%	19.72	"
Total Unit Cost :		164.38	Birr/Pt

Remark :

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ELECTRICAL INSTALLATION**

WORK ITEM: (14.8) Bell call point

TOTAL QANTITY OF WORK ITEM: 1 Pt

LABOUR HOURLY OUTPUT: 0.5

EQUIPEMENT:

RESULT: 81.98 Birr/Pt

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
diam.16mm conduit	m	2.4	5.5	13.2	Foreman	1	0.45	5	2.25		

pvc insulated conductor	m	4.7	2.5	11.75	EL	1	1	5	5		
junction box	No.	0.33	0.4	0.132	Mason	1	1	3.75	3.75		
Push button	No.	1	11	11	Plaster	1	1	2.5	2.5		
				0	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
Total (1:-01)				36.08	**Total (1:02)**				14.75	**Total (1:03**	

A= Materials Unit Cost 36.08 Birr/Pt

B= Manpower Unit Cost 29.50 Birr/Pt

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		65.58	Birr/Pt
Over head cost :	10%	6.56	"
Profit Cost:	15%	9.84	"
Total Unit Cost :		81.98	Birr/Pt

Remark :

UF: UTILIZATION FACTOR

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**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ELECTRICAL INSTALLATION**

WORK ITEM: (14.9) Telephone point

TOTAL QANTITY OF WORK ITEM: 1 Pt

LABOUR HOURLY OUTPUT: 0.5

EQUIPEMENT:

RESULT: 83.63 Birr/Pt

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
diam.16mm conduit	m	4	5.5	22	Foreman	1	0.45	5	2.25		
Telephone cable wire	m	2	1.5	3	EL	1	1	5	5		

junction box	No.	1	0.4	0.4	Mason	1	1	3.75	3.75		
Flush mounted socket	No.	1	12	12	Plaster	1	1	2.5	2.5		
				0	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
Total (1:-01)				37.40	**Total (1:02)**				14.75	**Total (1:03**	

A= Materials Unit Cost 37.40 Birr/Pt

B= Manpower Unit Cost 29.50 Birr/Pt

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		66.90	Birr/Pt
Over head cost :	10%	6.69	"
Profit Cost:	15%	10.04	"
Total Unit Cost :		83.63	Birr/Pt

Remark :

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ELECTRICAL INSTALLATION**

WORK ITEM: (14.10) TV point

TOTAL QANTITY OF WORK ITEM: 1 Pt

LABOUR HOURLY OUTPUT: 0.5

EQUIPEMENT:

RESULT: 104.63 Birr/Pt

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.

diam.16mm conduit	m	4	5.5	22	Foreman	1	0.45	5	2.25		
TV cable wire	m	8	2.5	20	EL	1	1	5	5		
junction box	No.	0.5	0.4	0.2	Mason	1	1	3.75	3.75		
Flush mounted socket	No.	1	12	12	Plaster	1	1	2.5	2.5		
				0	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
Total (1:-01)				54.20	**Total (1:02)**				14.75	**Total (1:03**	

A= Materials Unit Cost 54.20 Birr/Pt

B= Manpower Unit Cost 29.50 Birr/Pt

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		83.70	Birr/Pt
Over head cost :	10%	8.37	"
Profit Cost:	15%	12.56	"
Total Unit Cost :		104.63	Birr/Pt

Remark :

UF: UTILIZATION FACTOR

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

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ELECTRICAL INSTALLATION**

WORK ITEM: (14.11) Bell call indicator/system/ 1-8

TOTAL QANTITY OF WORK ITEM: 1 No.

LABOUR HOURLY OUTPUT: 0.4

EQUIPEMENT:

RESULT: 1177.34 Birr/No.

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Indicator 1-8	Pcs	1	795	795	Foreman	1	0.45	5	2.25		

Buzzer	m	1	55	55	EL	1	1	5	5		
Transformer /220-12Volt	No.	1	55	55	Mason	1	1	3.75	3.75		
				0	Plaster	1	1	2.5	2.5		
				0	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
Total (1:-01)				905.00	**Total (1:02)**				14.75		**Total (1:03**

A= Materials Unit Cost 905.00 Birr/No.

B= Manpower Unit Cost 36.88 Birr/No.

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		941.88	Birr/No.
Over head cost :	10%	94.19	"
Profit Cost:	15%	141.28	"
Total Unit Cost :		1177.34	Birr/No.

Remark :

UF: UTILIZATION FACTOR

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

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ELECTRICAL INSTALLATION**

WORK ITEM: (14.12) Bell call indicator/system/ 1-12

TOTAL QANTITY OF WORK ITEM: 1 No.

LABOUR HOURLY OUTPUT: 0.4

EQUIPEMENT:

RESULT: 1371.09 Birr/No.

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Indicator 1-12	Pcs	1	950	950	Foreman	1	0.45	5	2.25		

Buzzer	m	1	55	55	EL	1	1	5	5		
Transformer /220-12Volt	No.	1	55	55	Mason	1	1	3.75	3.75		
				0	Plaster	1	1	2.5	2.5		
				0	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
Total (1:-01)				1060.00	**Total (1:02)**				14.75	**Total (1:03**	

A= Materials Unit Cost 1060.00 Birr/No.

B= Manpower Unit Cost 36.88 Birr/No.

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		1096.88	Birr/No.
Over head cost :	10%	109.69	"
Profit Cost:	15%	164.53	"
Total Unit Cost :		1371.09	Birr/No.

Remark :

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ELECTRICAL INSTALLATION**

WORK ITEM: (14.13) Bell call indicator/system/ 1-16

TOTAL QANTITY OF WORK ITEM: 1 No.

LABOUR HOURLY OUTPUT: 0.4

EQUIPEMENT:

RESULT: 1896.09 Birr/No.

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Indicator 1-16	Pcs	1	1370	1370	Foreman	1	0.45	5	2.25		

Buzzer	m	1	55	55	EL	1	1	5	5		
Transformer /220-12Volt	No.	1	55	55	Mason	1	1	3.75	3.75		
				0	Plaster	1	1	2.5	2.5		
				0	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
Total (1:-01)				1480.00	**Total (1:02)**				14.75	**Total (1:03**	

A= Materials Unit Cost 1480.00 Birr/No.

B= Manpower Unit Cost 36.88 Birr/No.

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		1516.88	Birr/No.
Over head cost :	10%	151.69	"
Profit Cost:	15%	227.53	"
Total Unit Cost :		1896.09	Birr/No.

Remark :

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ELECTRICAL INSTALLATION**

WORK ITEM: (14.14) Flourecent fitting type philips TMS 012/136 with 1xTLD 36watt

TOTAL QANTITY OF WORK ITEM: 1 No.

LABOUR HOURLY OUTPUT: 1.25

EQUIPEMENT:

RESULT: 182.75 Birr/No.

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Flourecent philips type TMS				0	Foreman	1	0.3	5	1.50		

012/136with1xTLD36 watt	No.	1	140	140	EL	1	1	5	5		
				0	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				140.00	**Total (1:02)**				7.75	**Total (1:03**	

A= Materials Unit Cost 140.00 Birr/No.

B= Manpower Unit Cost 6.20 Birr/No.

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		146.20	Birr/No.
Over head cost :	10%	14.62	"
Profit Cost:	15%	21.93	"
Total Unit Cost :		182.75	Birr/No.

Remark :

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ELECTRICAL INSTALLATION**

WORK ITEM: (14.15) Flourecent fitting type philipsTMW 065/136 with 1xTLD 36watt

TOTAL QANTITY OF WORK ITEM: 1 No.

LABOUR HOURLY OUTPUT: 1.25

EQUIPEMENT:

RESULT: 320.25 Birr/No.

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Flourecent philips type TMW				0	Foreman	1	0.3	5	1.50		

065/136with1xTLD36 watt	No.	1	250	250	EL	1	1	5	5		
				0	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				250.00	**Total (1:02)**				7.75	**Total (1:03**	

A= Materials Unit Cost 250.00 Birr/No.

B= Manpower Unit Cost 6.20 Birr/No.

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		256.20	Birr/No.
Over head cost :	10%	25.62	"
Profit Cost:	15%	38.43	"
Total Unit Cost :		320.25	Birr/No.

Remark :

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ELECTRICAL INSTALLATION**

WORK ITEM: (14.16) Flourecent fitting type philipsTMW 065/236 with 1xTLD 36watt

TOTAL QANTITY OF WORK ITEM: 1 No.

LABOUR HOURLY OUTPUT: 1.25

EQUIPEMENT:

RESULT: 570.25 Birr/No.

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Flourecent philips type				0	Foreman	1	0.3	5	1.50		

TMW 065/236with1xTLD36	No.	1	450	450	EL	1	1	5	5		
				0	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				450.00	**Total (1:02)**				7.75	**Total (1:03**	

A= Materials Unit Cost 450.00 Birr/No.

B= Manpower Unit Cost 6.20 Birr/No.

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =			456.20 Birr/No.
Over head cost :	10%		45.62 "
Profit Cost:	15%		68.43 "
Total Unit Cost :			570.25 Birr/No.

Remark :

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ELECTRICAL INSTALLATION**

WORK ITEM: (14.17) Fitting type Simense 5NL-510 with 60 wattglobe

TOTAL QANTITY OF WORK ITEM: 1 No.

LABOUR HOURLY OUTPUT: 1.25

EQUIPEMENT:

RESULT: 57.75 Birr/No.

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Simense 5NL-510 with 60watt	No.	1	40	40	Foreman	1	0.3	5	1.50		

				0	EL	1	1	5	5		
				0	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				40.00	**Total (1:02)**				7.75	**Total (1:03**	

A= Materials Unit Cost 40.00 Birr/No.

B= Manpower Unit Cost 6.20 Birr/No.

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		46.20	Birr/No.
Over head cost :	10%	4.62	"
Profit cost	15%	6.93	"
Total Unit Cost :		57.75	Birr/No.

Remark :

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ELECTRICAL INSTALLATION**

WORK ITEM: (14.18) Fitting type Simense 5NL-302/140watt

TOTAL QANTITY OF WORK ITEM: 1 No.

LABOUR HOURLY OUTPUT: 1.25

EQUIPEMENT:

RESULT: 232.75 Birr/No.

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Simense 5NL-302/140watt	No.	1	180	180	Foreman	1	0.3	5	1.50		

				0	EL	1	1	5	5		
				0	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				180.00	**Total (1:02)**				7.75	**Total (1:03**	

A= Materials Unit Cost 180.00 Birr/No.

B= Manpower Unit Cost 6.20 Birr/No.

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		186.20	Birr/No.
Over head cost :	10%	18.62	"
Profit Cost:	15%	27.93	"
Total Unit Cost :		232.75	Birr/No.

Remark :

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ELECTRICAL INSTALLATION**

WORK ITEM: (14.19) Incandecent with 60 watt lamp

TOTAL QANTITY OF WORK ITEM: 1 No.

LABOUR HOURLY OUTPUT: 2.5

EQUIPEMENT:

RESULT: 7.63 Birr/No.

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Incandecent with 60 watt lamp	No.	1	3	3	Foreman	1	0.3	5	1.50		

				0	EL	1	1	5	5		
				0	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				3.00	**Total (1:02)**				7.75	**Total (1:03**	

A= Materials Unit Cost 3.00 Birr/No.

B= Manpower Unit Cost 3.10 Birr/No.

Total of (1:02)

Hourly Output: _____

C=Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		6.10 Birr/No.
Over head cost :	10%	0.61 "
Profit Cost:	15%	0.91 "
Total Unit Cost :		7.63 Birr/No.

Remark :

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**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.


ETHIOPIA
PROFESSIONALS

m²/hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0.00

0 Birr/m²

M²/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0.00

0 Birr/m²

M²

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0.00

0 Birr/m²

m²/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0.00

0 Birr/m²

m²/hr.

nt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0.00

0 Birr/m²

m²/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0.00

0 Birr/m²

m²/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0.00

0 Birr/m²

m²/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0.00

0 Birr/m²

m²/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0.00

0 Birr/m²

m^2/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0.00

0 Birr/m^2



m²/hr.

nt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0.00

0 Birr/m²

m²/hr.

nt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0.00

0 Birr/m²

m²/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0.00

0 Birr/m²

m²/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0.00

0 Birr/m²

m²/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0.00

0 Birr/m²

m²/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0

)	0.00

0 Birr/m²

m²/hr.

nt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0

)	0.00

0 Birr/m²

m²/hr.

nt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0

)	0.00

0 Birr/m²

m²/hr.

nt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0

)	0.00

0 Birr/m²

Pcs/hr

nt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0

	0
	0
	0
)	0.00

0 Birr/Pcs

Pcs/hr

Hourly Rental	Hourly Cost
	0
	0
	0

	0
	0
	0
	0
)	0.00

0 Birr/Pcs

Pt/hr

Hourly Rental	Hourly Cost
	0
	0
	0
	0

	0
	0
	0
)	0.00

0 Birr/Pt

Pt/hr

Hourly Rental	Hourly Cost
	0
	0
	0
	0

	0
	0
	0
)	0.00

0 Birr/Pt

Pt/hr

Hourly Rental	Hourly Cost
	0
	0
	0

	0
	0
	0
	0
)	0.00

0 Birr/Pt

Pt/hr

Hourly Rental	Hourly Cost
	0
	0
	0

	0
	0
	0
	0
)	0.00

0 Birr/Pt

Pt/hr

Hourly Rental	Hourly Cost
	0
	0

	0
	0
	0
	0
	0
)	0.00

0 Birr/Pt

Pt/hr

Hourly Rental	Hourly Cost
	0

	0
	0
	0
	0
	0
	0
)	0.00

0 Birr/Pt

Pt/hr

Hourly Rental	Hourly Cost
	0
	0

	0
	0
	0
	0
	0
)	0.00

0 Birr/Pt

Pt/hr

Hourly Rental	Hourly Cost

	0
	0
	0
	0
	0
	0
	0
)	0.00

0 Birr/Pt

No./hr

Hourly Rental	Hourly Cost
	0

	0
	0
	0
	0
	0
	0
)	0.00

0 Birr/No.

No./hr

Hourly Rental	Hourly Cost
	0

	0
	0
	0
	0
	0
	0
)	0.00

0 Birr/No.

No./hr

Hourly Rental	Hourly Cost
	0

	0
	0
	0
	0
	0
	0
)	0.00

0 Birr/No.

No./hr

Hourly Rental	Hourly Cost
	0

	0
	0
	0
	0
	0
	0
)	0.00

0 Birr/No.

No./hr

Hourly Rental	Hourly Cost
	0

	0
	0
	0
	0
	0
	0
)	0.00

0 Birr/No.

No./hr

Hourly Rental	Hourly Cost
	0

	0
	0
	0
	0
	0
	0
)	0.00

0 Birr/No.

No./hr

Hourly Rental	Hourly Cost
	0

	0
	0
	0
	0
	0
	0
)	0.00

0 Birr/No.

No./hr

Hourly Rental	Hourly Cost
	0

	0
	0
	0
	0
	0
	0
)	0.00

0 Birr/No.

No./hr

Hourly Rental	Hourly Cost
	0

	0
	0
	0
	0
	0
	0
)	0.00

0 Birr/No.

STRUCTION WORK

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT : REINFORCEMENT BARS

LABOUR HOURLY OUTPUT: 9

WORK ITEM: (4.1) dia. 6 & dia. 8 mm. plain bars

EQUIPMENT:

TOTAL QUANTITY OF WORK ITEM: 1 kg.

RESULT: 11.45 Birr/kg

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
ϕ 6 - ϕ 8 mm plain bars	kg	1.05	7.5	7.88	Foreman	1	0.17	5	0.84		
1.5 mm black annealed wire	"	0.05	10	0.50	Bar bender	1	1	2.5	2.50		
				0	D/L	3	1	1.25	3.75		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
Total (1:-01)				8.38	**Total (1:02)**				7.09	**Total (1:03)**	

A= Materials Unit Cost 8.38 birr/kg

B= Manpower Unit Cost 0.79 Birr/kg.

Total of (1:02)

hourly output: 7.08/9=0.79

Equipment Unit Cost

Total of (1:03)

Hourly output:

Direct Cost of Work Item = A+B+C = 9.16 Birr/kg

Over head cost : 10% 0.92 "

Profit Cost: 15% 1.37 "

Total Unit Cost : 11.45 Birr/kg

Remark

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT : REINFORCEMENT BARS

LABOUR HOURLY OUTPUT: 12.5

WORK ITEM: (4.2) dia. 10 - dia. 16 mm. deformed bars

EQUIPMENT:

TOTAL QUANTITY OF WORK ITEM : 1 kg

RESULT: 11.50 Birr/kg

Material Cost (1:01)					Labour (1:02)					Equipment Cost	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
ϕ 10- ϕ 16 mm deformed bars	kg	1.05	7.5	7.875	foreman	1	1	6.25	6.25		
1.5 mm black Annealed wire	"	0.0125	10	0.125	bar bender	1	1	5	5.00		
				0	D/L	3	1	1.25	3.75		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
Total (1:-01)				8	**Total (1:02)**				15	**Total (1:03)**	

A= Materials Unit Cost 8 Birr/kg.

B= Manpower Unit Cost 1.20 Birr/kg.

Total of (1:02)

Hourly Output: 11.25/12.5=0.90

C= Equipment Unit Cost

Total of (1:03)

Hourly output:

Direct Cost of Work Item = A+B+C = 9.20 Birr/kg

Over head cost : 10% 0.920 "

Profit Cost: 15% 1.380 "

Total Unit Cost : 11.500 Birr/kg

Remark

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT : REINFORCEMENT BARS LABOUR HOURLY OUTPUT: 12.5

WORK ITEM: (4.3) dia. 18 mm. and above deformed bars EQUIPMENT:

TOTAL QUANTITY OF WORK ITEM: 1 kg. RESULT: 7.88 Birr/kg

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
ϕ 18 mm and above deformed bars	kg	1.05	4.7	4.94	Foreman	1	1	5	5		
1.5 mm black annealed wire	"	0.0125	10	0.13	Bar Bender	1	1	2.5	2.5		
				0.00	D/L	4	1	1.25	5		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				5.06	**Total (1:02)**				12.50	**Total (1:03)**	

A= Materials Unit Cost 5.06 Birr/kg.

B= Manpower Unit Cost 1.00 Birr/kg.

Total of (1:02)

Hourly Output: _____ 12.5/12.5=1.00

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 6.06 Birr/kg

Over head cost : 15% 0.91 "

Profit Cost: 15% 0.91 "

Total Unit Cost : 7.88 Birr/kg

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**
WORK ITEM: (13.1) Low flash WC (Italy made)
TOTAL QUANTITY OF WORK ITEM: 1 pcs.

LABOUR HOURLY OUTPUT: 0.38
EQUIPMENT:_Drill (hand held) = 4.53 Birr/hr
RESULT: _ 1150.83 Birr/pc

Material Cost (1:01)										Equipment C	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
WC low flash with all accessories	pcs	1	920	920	Plumber	1	1	5	5.00	Drill	1
				0	Helper	1	1	1.9	1.90		
				0	Chiseler	1	1	2.15	2.15		
				0	D/L	1	1	1.25	1.25		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
Total (1:-01)				920	**Total (1:02)**				10.3	**Total (1:03)**	

A= Materials Unit Cost 920 Birr/pcs.

B= Manpower Unit Cost _ 27.11 Birr/pcs.
Total of (1:02)
Hourly Output: _____ 10.3/0.38=27.10

C= Equipment Unit Cost
Total of (1:03)
Hourly output: _____

Direct Cost of Work Item = A+B+C = _ 959.03 Birr/kg
Over head cost : _ 10% 95.90 "
Profit Cost: __ 10% 95.90 "
Total Unit Cost : _ 1150.83 Birr/kg

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION** LABOUR HOURLY OUTPUT: 0.38

WORK ITEM: (13.2) WC. Low Flash (Tabor Ceramics) EQUIPMENT: Drilling Machine

TOTAL QUANTITY OF WORK ITEM: 1 pcs. RESULT: 610.83 Birr/pc

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
WC. Low flash Tabor Ceramics				0.00	plumber	1	1	5	5	Drill	1
with Italy accessories	pcs.	1	470	470.00	helper	1	1	1.9	1.9		
				0.00	chisler	1	1	2.15	2.15		
				0.00	D/L	1	1	1.25	1.25		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				470.00	**Total (1:02)**				10.30	**Total (1:0**	

A= Materials Unit Cost 470 Birr/pcs.

B= Manpower Unit Cost 27.11 Birr/pcs.

Total of (1:02)

Hourly Output: 10.30/0.38 = 27.10

C= Equipment Unit Cost

Total of (1:03)

Hourly output:

Direct Cost of Work Item = A+B+C = 509.03 Birr/pc

Over head cost : 10% 50.90 "

Profit Cost: 10% 50.90 "

Total Unit Cost : 610.83 Birr/pc

Remark

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION** LABOUR HOURLY OUTPUT: 0.38

WORK ITEM: (13.3) WC high flash EQUIPMENT: drilling machine

TOTAL QUANTITY OF WORK ITEM: 1 pcs. RESULT: 706.83 Birr/pc

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
WC high with all accessories	pcs	1	550	550.00	Plumber	1	1	5	5	Drill	1
				0.00	helper	1	1	1.9	1.9		
				0.00	chiseler	1	1	2.15	2.15		
				0.00	D/L	1	1	1.25	1.25		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				550.00	**Total (1:02)**				10.30	**Total (1:03)**	

A= Materials Unit Cost _ 550 Birr/pcs.

B= Manpower Unit Cost _ 27.11 Birr/pcs.
Total of (1:02)
Hourly Output: _____ 10.30/0.38 = 27.10

C= Equipment Unit Cost
Total of (1:03)
Hourly output: _____

Direct Cost of Work Item = A+B+C =		589.03	Birr/pc
Over head cost :	10%	58.90	"
Profit Cost:	10%	58.90	"
Total Unit Cost :		706.83	Birr/pc

Remark _____
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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**
WORK ITEM: (13.4) WC with high level flashing (Turkish)
TOTAL QUANTITY OF WORK ITEM: _ 1 pcs.

LABOUR HOURLY OUTPUT: 0.38
EQUIPMENT:
RESULT: 632.53 Birr/pc

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Turkish type WC with all accessories	pcs	1	500	500.00	plumber	1	1	5	5		

				0.00	helper	1	1	1.9	1.9		
				0.00	chiseler	1	1	2.15	2.15		
				0.00	D/L	1	1	1.25	1.25		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				500.00	**Total (1:02)**				10.30	**Total (1:03)**	

A= Materials Unit Cost 500 Birr/pcs.

B= Manpower Unit Cost 27.11 Birr/pcs.

Total of (1:02)

Hourly Output: 10.3/0.38 = 27.10

C= Equipment Unit Cost

Total of (1:03)

500.00+27.10 = 527.10

Direct Cost of Work Item = A+B+C =		527.11	Birr/pc
Over head cost :	10%	52.71	"
Profit Cost:	10%	52.71	"
Total Unit Cost :		632.53	Birr/pc

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**

WORK ITEM: _ (13.5) Hand wash basin (Italy made)

TOTAL QUANTITY OF WORK ITEM: 1 pcs.

LABOUR HOURLY OUTPUT: 0.38

EQUIPMENT: Drilling machine

RESULT: 556.83 Birr/pc

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
HWB size 45 * 55 cm with all				0.00	plumber	1	1	5	5	drill	1
accessories	pcs	1	425	425.00	helper	1	1	1.9	1.9		
				0.00	chiseler	1	1	2.15	2.15		
				0.00	D/L	1	1	1.25	1.25		
				0.00					0		
				0.00					0		
				0.00					0		

				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				425.00	**Total (1:02)**				10.30	**Total (1:0**	

A= Materials Unit Cost __ 425 Birr/pcs.

B= Manpower Unit Cost 27.11 Birr/pcs.

Total of (1:02)

Hourly Output: _____ 10.3/0.38 = 27.10

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =			464.03 Birr/pc
Over head cost :	10%		46.40 "
Profit Cost:	10%		46.40 "
Total Unit Cost :			556.83 Birr/pc

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**

WORK ITEM: (13.6) 50 X 60 HWB (Italy)

TOTAL QUANTITY OF WORK ITEM: 1 pcs.

LABOUR HOURLY OUTPUT: 0.38

EQUIPMENT: Drilling machine

RESULT: _ 706.83 Birr/pc

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
HWB size 50 X 60 cm with				0.00	plumber	1	1	5	5	drill	1
all accessories	pcs	1	550	550.00	helper	1	1	1.9	1.9		
				0.00	chisler	1	1	2.15	2.15		
				0.00	D/L	1	1	1.25	1.25		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		

				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				550.00	**Total (1:02)**				10.30	**Total (1:03)**	

A= Materials Unit Cost _ 550 Birr/pcs.

B= Manpower Unit Cost 27.11 Birr/pcs.
Total of (1:02)
Hourly Output: _____ 10.3/0.38 = 27.10

C= Equipment Unit Cost
Total of (1:03)
Hourly output: _____

Direct Cost of Work Item = A+B+C = _ 589.03 Birr/pc
Over head cost : 10% 58.90 "
Profit Cost: 10% 58.90 "
Total Unit Cost : 706.83 Birr/pc

Remark _____
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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**
WORK ITEM: (13.7) Bath tab (Italy)
TOTAL QANTITY OF WORK ITEM: 1 pcs.

LABOUR HOURLY OUTPUT: _ 0.18
EQUIPEMENT:
RESULT: 1148.67 Birr/pc

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Bath tab with all accessories	pcs	1	900	900.00	plumber	1	1	5	5		
				0.00	helper	1	1	1.9	1.9		
				0.00	chisler	1	1	2.15	2.15		
				0.00	D/L	1	1	1.25	1.25		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				900.00	**Total (1:02)**				10.30	**Total (1:03)**	

A= Materials Unit Cost 900 Birr/pcs.

B= Manpower Unit Cost 57.22 Birr/pcs.

C= Equipment Unit Cost

	Total of (1:02)			Total of (1:03)
	Hourly Output: _____ 10.3/0.3 .18 =57.22			Hourly output: _____
Direct Cost of Work Item = A+B+C =			957.22	Birr/pc
	Over head cost :	10%	95.72	"
	Profit Cost:	10%	95.72	"
	Total Unit Cost :		1148.67	Birr/pc

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION** LABOUR HOURLY OUTPUT: 0.38

WORK ITEM: _ (13.8) Bidet EQUIPEMENT: Drilling machine

TOTAL QANTITY OF WORK ITEM: 1 pcs. RESULT: 556.83 Birr/pc

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Bidet complet with all accessories	pcs	1	425	425.00	plumber	1	1	5	5	drill	1
				0.00	helper	1	1	1.9	1.9		
				0.00	chisler	1	1	2.15	2.15		
				0.00	D/L	1	1	1.25	1.25		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				425.00	**Total (1:02)**				10.30	**Total (1:03)**	

A= Materials Unit Cost _ 425 Birr/pcs. B= Manpower Unit Cost 27.11 Birr/pcs. C= Equipment Unit Cost

	Total of (1:02)			Total of (1:03)
	Hourly Output: _____ 10.3/0.38 = 27.10			Hourly output: _____
Direct Cost of Work Item = A+B+C = _			464.03	Birr/pc
	Over head cost :	10%	46.40	"

Profit Cost:	10%	46.40	"
Total Unit Cost :		556.83	Birr/pc

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**

WORK ITEM: _(13.9) Shower plate

TOTAL QANTITY OF WORK ITEM: 1 pcs.

LABOUR HOURLY OUTPUT: __ 0.3

EQUIPEMENT:

RESULT: 545.20 Birr/pc

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
70 x 70 cm shower plate with all				0.00	plumber	1	1	5	5		
accessories	pcs	1	420	420.00	helper	1	1	1.9	1.9		
				0.00	chisler	1	1	2.15	2.15		
				0.00	D/L	1	1	1.25	1.25		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				420.00	**Total (1:02)**				10.30	**Total (1:03)**	

A= Materials Unit Cost _ 420 Birr/pcs.

B= Manpower Unit Cost _ 34.33 Birr/pcs.

Total of (1:02)

Hourly Output: _____ 10.30/0.30=34.33

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		454.33	Birr/pc
Over head cost :	10%	45.43	"
Profit Cost:	10%	45.43	"
Total Unit Cost :		545.20	Birr/pc

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION** LABOUR HOURLY OUTPUT: _ 0.28

WORK ITEM: (13.10) urinals EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 pcs. RESULT: 545.98 Birr/pc

Material Cost (1:01)					Labour (1:02)					Equipment	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
white glazed urinal with all				0.00	plumber	1	1	5	5		
accessories	pcs	1	400	400.00	helper	1	1	1.9	1.9		
				0.00	chisler	1	1	2.15	2.15		
				0.00	D/L	1	1	1.25	1.25		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				400.00	**Total (1:02)**				10.30	**Total (1:03)**	

A= Materials Unit Cost 400 Birr/pcs.

B= Manpower Unit Cost 36.79 Birr/pcs.

Total of (1:02)

Hourly Output: _____ 10.30/0.28 =36.79

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 436.79 Birr/pc

Over head cost : 10% 43.68 "

Profit Cost: 15% 65.52 "

Total Unit Cost : 545.98 Birr/pc

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION** LABOUR HOURLY OUTPUT: 0.28

WORK ITEM: (13.11) Kitchen sink (singel bowel) EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 pcs. RESULT: 548.14 Birr/pc

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
50 x 120 singel bowel kitchen sink	pcs	1	420	420.00	plumber	1	1	5	5		
				0.00	helper	1	1	1.9	1.9		
				0.00	chisler	1	1	2.15	2.15		
				0.00	D/L	1	1	1.25	1.25		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				420.00	**Total (1:02)**				10.30	**Total (1:03)**	

A= Materials Unit Cost 420 Birr/pcs.

B= Manpower Unit Cost 36.79 Birr/pcs.

Total of (1:02)

Hourly Output: 10.30/0.28 =36.79

C= Equipment Unit Cost

Total of (1:03)

Hourly output:

Direct Cost of Work Item = A+B+C = 456.79 Birr/pc

Over head cost : 10% 45.68 "

Profit Cost: 10% 45.68 "

Total Unit Cost : 548.14 Birr/pc

Remark

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION** LABOUR HOURLY OUTPUT: 0.24

WORK ITEM: (13.12) Kitchen sink (double bowel) EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 pcs. RESULT: 747.50 Birr/pc

Material Cost (1:01)	Labour (1:02)	Equipment (

Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
50 x 120 double bowel kitchen sink	pcs	1	580	580.00	plumber	1	1	5	5		
				0.00	helper	1	1	1.9	1.9		
				0.00	chisler	1	1	2.15	2.15		
				0.00	D/L	1	1	1.25	1.25		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				580.00	**Total (1:02)**				10.30	**Total (1:03)**	

A= Materials Unit Cost 580 Birr/pcs.

B= Manpower Unit Cost _ 42.92 Birr/pcs.
Total of (1:02)
Hourly Output: _____ 10.30/0.24 = 42.92

C= Equipment Unit Cost
Total of (1:03)
Hourly output: _____

Direct Cost of Work Item = A+B+C =			622.92 Birr/pc
	Over head cost :	10%	62.29 "
	Profit Cost:	10%	62.29 "
	Total Unit Cost :		747.50 Birr/pc

Remark _____
UF: UTILIZATION FACTOR
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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**
WORK ITEM: (13.13) Towel rack
TOTAL QANTITY OF WORK ITEM: _____ 1 pcs.

LABOUR HOURLY OUTPUT: _ 0.88
EQUIPEMENT: drilling machine
RESULT: _____ 57.29 Birr/pc

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
chromplated towel rack	pcs	1	35	35.00	plumber	1	1	5	5	drill	1
				0.00					0		
				0.00					0		
				0.00					0		

				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				35.00	**Total (1:02)**				5.00	**Total (1:03)**	

A= Materials Unit Cost _ 35 Birr/pcs.

B= Manpower Unit Cost 5.68 Birr/pcs.
Total of (1:02)
Hourly Output: _____ 5.00/0.88 = 5.68

C= Equipment Unit Cost
Total of (1:03)
Hourly output: _____

Direct Cost of Work Item = A+B+C =			45.83 Birr/pc
Over head cost : _	10%		4.58 "
Profit Cost:	15%		6.87 "
Total Unit Cost :			57.29 Birr/pc

Remark _____
UF: UTILIZATION FACTOR
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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**
WORK ITEM: _ (13.14) Toilet paper holder
TOTAL QANTITY OF WORK ITEM: _____ 1 pcs.

LABOUR HOURLY OUTPUT: 0.88
EQUIPEMENT:
RESULT: _____ 57.10 Birr/pc

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
soft paper holder	pcs	1	40	40.00	plumber	1	1	5	5		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		

				0.00					0		
				0.00					0		
Total (1:-01)				40.00	**Total (1:02)**				5.00	**Total (1:03)**	

A= Materials Unit Cost _ 40 Birr/pcs.

B= Manpower Unit Cost 5.68 Birr/pcs.
Total of (1:02)
Hourly Output: _____ 5.00/0.88 = 5.68

C= Equipment Unit Cost
Total of (1:03)
Hourly output: _____

Direct Cost of Work Item = A+B+C =		45.68 Birr/pc
Over head cost : _	10%	4.57 "
Profit Cost:	15%	6.85 "
Total Unit Cost : _		57.10 Birr/pc

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**
WORK ITEM: (13.15) soap holder
TOTAL QANTITY OF WORK ITEM: _____ 1 pcs.

LABOUR HOURLY OUTPUT: 0.88
EQUIPEMENT: .
RESULT: _____ 50.85 Birr/pc

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
soap holder medium sized	pcs	1	35	35.00	plumber	1	1	5	5		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				35.00	**Total (1:02)**				5.00	**Total (1:03)**	

A= Materials Unit Cost _ 35 Birr/pcs.

B= Manpower Unit Cost 5.68 Birr/pcs.
Total of (1:02)

C= Equipment Unit Cost
Total of (1:03)

Hourly Output: _____ 5.00/0.88 = 5.68 Hourly output: _____

Direct Cost of Work Item = A+B+C =_		40.68	Birr/pc
Over head cost :	10%	4.07	"
Profit Cost:	15%	6.10	"
Total Unit Cost : _		50.85	Birr/pc

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**

WORK ITEM: (13.16) Glass mirror

TOTAL QANTITY OF WORK ITEM: _____ 1 pcs.

LABOUR HOURLY OUTPUT: _ 1

EQUIPEMENT: drilling machine

RESULT: _____ 161.91 Birr/pc

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
40 x 50 cm glass mirror	pcs	1	120	120.00	plumber	1	1	5	5	drill	1
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				120.00	**Total (1:02)**				5.00	**Total (1:03)**	

A= Materials Unit Cost _ 120 Birr/pcs.

B= Manpower Unit Cost 5.00 Birr/pcs.

Total of (1:02)

Hourly Output: _____ 5.00/1 = 5

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = _		129.53	Birr/pc
Over head cost : _	10%	12.95	"
Profit Cost:	15%	19.43	"
Total Unit Cost : _		161.91	Birr/pc

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION** LABOUR HOURLY OUTPUT: 1.25
WORK ITEM____ (13.17)_ Floor drain EQUIPEMENT:
TOTAL QANTITY OF WORK ITEM: 1 pcs. RESULT 97.80 Birr/pc

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
10 x 10 cm Floor drain (chrom plated)	pcs	1	70	70.00	plumber	1	1	5	5		
				0.00	helper	1	1	1.9	1.9		
				0.00	chisler	1	1	2.15	2.15		
				0.00	D/L	1	1	1.25	1.25		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				70.00	**Total (1:02)**				10.30	**Total (1:03)**	

A= Materials Unit Cost 70 Birr/pcs.

B= Manpower Unit Cost 8.24 Birr/pcs.
Total of (1:02)
Hourly Output: _____ 10.30/1.25 = 8.24

C= Equipment Unit Cost
Total of (1:03)
Hourly output: _____

Direct Cost of Work Item = A+B+C = 78.24 Birr/pc
Over head cost : 10% 7.82 "
Profit Cost: 15% 11.74 "
Total Unit Cost : 97.80 Birr/pc

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION** LABOUR HOURLY OUTPUT: __ 0.19

WORK ITEM: _ (13.18) Water heatr (50 Lit. Cap.) EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 pcs. RESULT 1097.34 Birr/pc

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
50 Lit. capacity water boiler	pcs	1	900	900.00	plumber	1	1	5	5		
				0.00	helper	1	1	1.9	1.9		
				0.00	chisler	1	1	2.15	2.15		
				0.00	D/L	1	1	1.25	1.25		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				900.00	**Total (1:02)**				10.30	**Total (1:03)**	

A= Materials Unit Cost 900 Birr/pcs.

B= Manpower Unit Cost 54.21 Birr/pcs.

Total of (1:02)

Hourly Output: _____ 10.30/0.19 = 54.21

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 954.21 Birr/pc

Over head cost : 5% 47.71 "

Profit Cost: 10% 95.42 "

Total Unit Cost : 1097.34 Birr/pc

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION** LABOUR HOURLY OUTPUT: __ 0.19

WORK ITEM: (13.19) Water heatr (80 Lit. capacity) EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 pcs. RESULT 1235.34 Birr/pc

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
80 Lit. capacity water boiler	pcs	1	1020	1020.00	plumber	1	1	5	5		
				0.00	helper	1	1	1.9	1.9		
				0.00	chisler	1	1	2.15	2.15		
				0.00	D/L	1	1	1.25	1.25		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				1020.00	**Total (1:02)**				10.30	**Total (1:03)**	

A= Materials Unit Cost 1020 Birr/pcs.

B= Manpower Unit Cost 54.21 Birr/pcs.

Total of (1:02)

Hourly Output: 10.30/0.19 = 54.21

C= Equipment Unit Cost

Total of (1:03)

Hourly output:

Direct Cost of Work Item = A+B+C = 1074.21 Birr/pc

Over head cost : 5% 53.71 "

Profit Cost: 10% 107.42 "

Total Unit Cost : 1235.34 Birr/pc

Remark

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION** LABOUR HOURLY OUTPUT: 0.19

WORK ITEM: (13.20) Water heatr (120 Lit. capacity) EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 pcs. RESULT 1442.34 Birr/pc

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.

120 Lit. capacity water boiler	pcs	1	1200	1200.00	plumber	1	1	5	5		
				0.00	helper	1	1	1.9	1.9		
				0.00	chisler	1	1	2.15	2.15		
				0.00	D/L	1	1	1.25	1.25		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				1200.00	**Total (1:02)**				10.30	**Total (1:03)**	

A= Materials Unit Cost 1200 Birr/pcs.

B= Manpower Unit Cost 54.21 Birr/pcs.

Total of (1:02)

Hourly Output: 10.30/0.19 = 54.21

C= Equipment Unit Cost

Total of (1:03)

Hourly output:

Direct Cost of Work Item = A+B+C =		1254.21	Birr/pc
Over head cost :	5%	62.71	"
Profit Cost:	10%	125.42	"
Total Unit Cost :		1442.34	Birr/pc

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**

WORK ITEM: _(13.21) 1/2 " Galvanaized Steel Pipe (GSP)

TOTAL QANTITY OF WORK ITEM: ___ 21 m.

LABOUR HOURLY OUTPUT: 1.85

EQUIPEMENT: Flera + Kaabaleto

RESULT: ____ 35.36 Birr/m

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
1/2" GSP	ml	21	15	315.00	Foreman	1	0.167	5	0.835	Gear	
Union 1/2"	pcs	1	5	5.00	Plumber	1	1	5	5	Machine	1
Elbow 1/2"	"	17	1.5	25.50	Helper	1	1	1.9	1.9		
Tees 1/2"	"	4	2.5	10.00	Chisler	1	1	2.15	2.15		
Nipples 1/2"	"	1	2	2.00	D/L	1	1	1.25	1.25		
Reducer 3/4" - 1/2"	"	1	3	3.00					0		

Flexible pipe (long)	"	5	11	55.00					0		
Fiber	kg	0.01	50	0.50					0		
Synthetic paint	"	0.25	25	6.25					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				422.25	**Total (1:02)**				11.14	**Total (1:03**	

A= Materials Unit Cost 20.10714 Birr/ml.

B= Manpower Unit Cost 6.02 Birr/ml.
Total of (1:02)
Hourly Output: 11.13/1.85 = 6.02

C= Equipment Unit Cost
Total of (1:03)
Hourly output:

Direct Cost of Work Item = A+B+C =		28.29	Birr/m
Over head cost :	10%	2.83	Birr/m
Profit Cost:	15%	4.24	Birr/m
Total Unit Cost :		35.36	Birr/m

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**
WORK ITEM: (13.22) 3/4" Galvanaized Steel Pipe (GSP)
TOTAL QANTITY OF WORK ITEM: 34 ml.

LABOUR HOURLY OUTPUT: 1.85
EQUIPEMENT: Flera + Kaabaleto
RESULT: 31.71 Birr/m

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
3/4" GSP	ml	34	15	510.00	Foreman	1	0.167	5	0.835	Gear	
Union 3/4"	pcs	3	7.5	22.50	Plumber	1	1	5	5	Machine	1
Elbow 3/4"	"	12	2	24.00	Helper	1	1	1.9	1.9		
Tees 3/4"	"	3	4	12.00	Chisler	1	1	2.15	2.15		
Nipples 3/4"	"	1	3	3.00	D/L	1	1	1.25	1.25		
Reducer 1" - 3/4"	"	1	6	6.00					0		
Fiber	kg	0.01	50	0.50					0		
Synthetic paint	"	0.25	25	6.25					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		

Total (1:-01)	584.25	Total (1:02)	11.14	Total (1:03

A= Materials Unit Cost 17.18382 Birr/ml.

B= Manpower Unit Cost _ 6.02 Birr/ml.
Total of (1:02)
Hourly Output: _____ 11.13/1.85 = 6.02

C= Equipment Unit Cost
Total of (1:03)
Hourly output: _____

Direct Cost of Work Item = A+B+C =		25.36 Birr/n
Over head cost :	10%	2.54 Birr/n
Profit Cost:	15%	3.80 Birr/n
Total Unit Cost : _		31.71 Birr/n

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**
WORK ITEM: _ (13.23) 1" Galvanaized Steel Pipe (GSP)
TOTAL QANTITY OF WORK ITEM: __ 49 ml.

LABOUR HOURLY OUTPUT: _ 1.5
EQUIPEMENT: Flera + Kabaleto
RESULT: ___ 39.53 Birr/n

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
1" GSP	ml	49	20	980.00	Foreman	1	0.167	5	0.835	Leaze	
Union 1"	pcs	1	8	8.00	Plumber	1	1	5	5	Machine	1
Elbow1"	"	3	3	9.00	Helper	1	1	1.9	1.9		
Tees 1"	"	1	6	6.00	Chisler	1	1	2.15	2.15		
Nipples 1"	"	1	5	5.00	D/L	1	1	1.25	1.25		
Staffa 1"	"	1	40	40.00					0		
Fiber	kg	0.02	50	1.00					0		
Synthetic paint	"	0.25	25	6.25					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				1055.25	**Total (1:02)**				11.14	**Total (1:03**	

A= Materials Unit Cost 21.53571 Birr/ml.

B= Manpower Unit Cost _ 7.42 Birr/ml.
Total of (1:02)
Hourly Output: _____ 11.13/1.5 = 7.42

C= Equipment Unit Cost
Total of (1:03)
Hourly output: _____

Direct Cost of Work Item = A+B+C = _ 31.63 Birr/n

Over head cost :	10%	3.16	Birr/m
Profit Cost:	15%	4.74	Birr/m
Total Unit Cost : _		39.53	Birr/m

Remark _____

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**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**

WORK ITEM: _ (13.24) 2" Galvanaized Steel Pipe (GSP)

TOTAL QANTITY OF WORK ITEM: _ 50 ml.

LABOUR HOURLY OUTPUT: _ 1.5

EQUIPEMENT: Flera + Kabaleto

RESULT: __ 67.38 Birr/m

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
2" GSP	ml	50	36.67	1833.50	Foreman	1	0.167	5	0.835	Leaze	
Union 2"	pcs	3	18	54.00	Plumber	1	1	5	5	Machine	1
Elbow 2"	"	12	11	132.00	Helper	1	1	1.9	1.9		
Tees 2"	"	2	20	40.00	Chisler	1	1	2.15	2.15		
Nipples 2"	"	7	15.5	108.50	D/L	1	1	1.25	1.25		
Fiber	kg	0.2	50	10.00					0		
Synthetic paint	"	0.5	25	12.50					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				2190.50	**Total (1:02)**				11.14	**Total (1:03**	

A= Materials Unit Cost _ 43.81 Birr/ml.

B= Manpower Unit Cost __ 7.42 Birr/ml.

Total of (1:02)

Hourly Output: _____ 11.13/1.5 = 7.42

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		53.90 Birr/m
Over head cost :	10%	5.39 Birr/m
Profit Cost:	15%	8.08 Birr/m
Total Unit Cost :		67.38 Birr/m

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**
WORK ITEM: (13.25) 3" Galvanaized Steel Pipe (GSP)
TOTAL QANTITY OF WORK ITEM: 100 ml.
LABOUR HOURLY OUTPUT: 1
EQUIPEMENT: Flera + Kabaleto
RESULT: 95.40 Birr/m

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
3" GSP	ml	100	50	5000.00	Foreman	1	0.167	5	0.835	Leaze	
Union 3"	pcs	9	35	315.00	Plumber	1	1	5	5	Machine	1
Elbow 3"	"	5	35	175.00	Helper	1	1	1.9	1.9		
Tees "	"	15	40	600.00	Chisler	1	1	2.15	2.15		
Fiber	kg	0.2	50	10.00	D/L	1	1	1.25	1.25		
Synthetic paint	"	0.75	25	18.75					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				6118.75	**Total (1:02)**				11.14	**Total (1:03**	

A= Materials Unit Cost 61.1875 Birr/ml.

B= Manpower Unit Cost 11.14 Birr/ml.
Total of (1:02)
Hourly Output: 11.13/1.0 = 11.13

C= Equipment Unit Cost
Total of (1:03)
Hourly output:

Direct Cost of Work Item = A+B+C =		76.32 Birr/m
Over head cost :	10%	7.63 Birr/m
Profit Cost:	15%	11.45 Birr/m
Total Unit Cost :		95.40 Birr/m

Remark _____
UF: UTILIZATION FACTOR
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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**
WORK ITEM: (13.26) Gate Valves 1/2"
TOTAL QANTITY OF WORK ITEM: 1 pcs.

LABOUR HOURLY OUTPUT: 1
EQUIPEMENT:
RESULT: 23.75 Birr/p

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
1/2" Gate Valve	pcs	1	14	14.00	Plumber	1	1	5	5		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				14.00	**Total (1:02)**				5.00	**Total (1:03**	

A= Materials Unit Cost 14 Birr/pcs.

B= Manpower Unit Cost 5.00 Birr/pcs.
Total of (1:02)
Hourly Output: 5.00/1 = 5.00

C= Equipment Unit Cost
Total of (1:03)
Hourly output:

Direct Cost of Work Item = A+B+C =			19.00 Birr/p
Over head cost :	10%		1.90 "
Profit Cost:	15%		2.85 "
Total Unit Cost :			23.75 Birr/p

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION** LABOUR HOURLY OUTPUT: 1

WORK ITEM: (13.27) Gate Valves 3/4" EQUIPEMENT: _

TOTAL QANTITY OF WORK ITEM: 1 pcs. RESULT: 27.50 Birr/p

Material Cost (1:01)					Labour (1:02)					Equipment	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
3/4" Gate Valve	pcs	1	17	17.00	Plumber	1	1	5	5		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				17.00	**Total (1:02)**				5.00	**Total (1:03**	

A= Materials Unit Cost 17 Birr/pcs.

B= Manpower Unit Cost _ 5.00 Birr/pcs.

Total of (1:02)

Hourly Output: _____ 5.00/1 = 5.00

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = _ 22.00 Birr/p

Over head cost : 10% 2.20 "

Profit Cost: 15% 3.30 "

Total Unit Cost : 27.50 Birr/p

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION** LABOUR HOURLY OUTPUT: 1

WORK ITEM: _ (13.28) Gate Valves 1" EQUIPEMENT: _

TOTAL QANTITY OF WORK ITEM: 1 pcs. RESULT: 37.50 Birr/p

Material Cost (1:01)	Labour (1:02)	Equipment

Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
1" Gate Valve	pcs	1	25	25.00	Plumber	1	1	5	5		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				25.00	**Total (1:02)**				5.00	**Total (1:03**	

A= Materials Unit Cost 25 Birr/pcs.

B= Manpower Unit Cost 5.00 Birr/pcs.

Total of (1:02)

Hourly Output: 5.00/1 = 5.00

C= Equipment Unit Cost

Total of (1:03)

Hourly output:

Direct Cost of Work Item = A+B+C =		30.00	Birr/p
Over head cost :	10%	3.00	"
Profit Cost:	15%	4.50	"
Total Unit Cost :		37.50	Birr/p

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**

WORK ITEM: _(13.29) Gate Valves 2"

TOTAL QANTITY OF WORK ITEM: 1 pcs.

LABOUR HOURLY OUTPUT: 1.25

EQUIPEMENT:

RESULT: 88.15 Birr/p

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
2" Gate Valve	pcs	1	65	65.00	Plumber	1	1	5	5		
				0.00	Helper	1	1	1.9	1.9		
				0.00					0		
				0.00					0		

				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				65.00	**Total (1:02)**				6.90	**Total (1:03**	

A= Materials Unit Cost __ 65 Birr/pcs.

B= Manpower Unit Cost _ 5.52 Birr/pcs.

Total of (1:02)

Hourly Output: _____ 6.90/1.25 = 5.52

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =_		70.52	Birr/p
Over head cost :	10%	7.05	"
Profit Cost:	15%	10.58	"
Total Unit Cost :		88.15	Birr/p

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: __**SANITARY INSTALLATION**

WORK ITEM: _ (13.30) Gate Valves 3"

TOTAL QANTITY OF WORK ITEM: _ 1 pcs.

LABOUR HOURLY OUTPUT: __ 1.25

EQUIPEMENT:

RESULT: _ 156.90 Birr/p

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
3" Gate Valve	pcs	1	120	120.00	Plumber	1	1	5	5		
				0.00	Helper	1	1	1.9	1.9		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		

				0.00					0		
				0.00					0		
Total (1:-01)				120.00	**Total (1:02)**				6.90	**Total (1:03**	

A= Materials Unit Cost __ 120 Birr/pcs.

B= Manpower Unit Cost 5.52 Birr/pcs.
Total of (1:02)
Hourly Output: _____ 6.90/1.25 = 5.52

C= Equipment Unit Cost
Total of (1:03)
Hourly output: _____

Direct Cost of Work Item = A+B+C =_		125.52	Birr/p
Over head cost :	10%	12.55	"
Profit Cost:	15%	18.83	"
Total Unit Cost : _		156.90	Birr/p

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**
WORK ITEM: _ (13.31) 50 mm. dia. PVC Pipe
TOTAL QANTITY OF WORK ITEM: __ 14 ml.

LABOUR HOURLY OUTPUT: _ 1.26
EQUIPEMENT:
RESULT: _ 43.63 Birr/m

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
O 50 mm PVC pipe	ml	15	8.33	124.95	Foreman	1	0.167	5	0.835		
Elbow 50 mm dia.	pcs	11	10	110.00	Plumber	1	1	5	5		
Tees 50 mm dia.	"	5	20	100.00	Helper	1	1	1.9	1.9		
Reducer 110 - 50 mm dia.	"	1	30	30.00	Chisler	1	1	2.15	2.15		
				0.00	D/L	1	1	1.25	1.25		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		

Total (1:-01)	364.95	**Total (1:02)**	11.14	**Total (1:03**	

A= Materials Unit Cost _ 26.06786 Birr/ml.

B= Manpower Unit Cost 8.84 Birr/pcs.
Total of (1:02)
Hourly Output: _____ 11.14/1.26 = 8.85

C= Equipment Unit Cost
Total of (1:03)
Hourly output: _____

Direct Cost of Work Item = A+B+C =_		34.91	Birr/m
Over head cost : _	10%	3.49	"
Profit Cost:	15%	5.24	"
Total Unit Cost :		43.63	Birr/m

Remark _____
UF: UTILIZATION FACTOR
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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**
WORK ITEM: (13.32) 75 mm. dia. PVC Pipe
TOTAL QANTITY OF WORK ITEM: _____

LABOUR HOURLY OUTPUT: _____
EQUIPEMENT:
RESULT: _ 57.00 Birr/m

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Total (1:-01)					**Total (1:02)**					**Total (1:03)**	

A= Materials Unit Cost _____

B= Manpower Unit Cost _____
Total of (1:02)
Hourly Output: _____
Direct Cost of Work Item = A+B+C =
Over head cost :

C= Equipment Unit Cost
Total of (1:03)
Hourly output: _____

Profit Cost:
Total Unit Cost : 44.00 + 70.00 = 114/2 = 57 Birr/ml

Remark : Taken Average Of Item No. (13.31) And (13.33)
UF: UTILIZATION FACTOR
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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**
WORK ITEM: (13.33) 100 mm. Dia. PVC Pipe
TOTAL QANTITY OF WORK ITEM: _ 6.51 ml.

LABOUR HOURLY OUTPUT: 0.93
EQUIPEMENT:
RESULT: 70.67 Birr/m

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
O 100 mm PVC pipe	ml	6.1	21.33	130.11	Foreman	1	0.167	5	0.835		
Elbow 100 mm dia.	pcs	5	20	100.00	Plumber	1	1	5	5		
Tees 100 mm dia.	"	2	30	60.00	Helper	1	1	1.9	1.9		
				0.00	Chisler	1	1	2.15	2.15		
				0.00	D/L	1	1	1.25	1.25		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				290.11	**Total (1:02)**				11.14	**Total (1:03**	

A= Materials Unit Cost _ 44.56421 Birr/ml.

B= Manpower Unit Cost 11.97 Birr/ml.
Total of (1:02)
Hourly Output: _____ 11.14/0.93 = 11.98

C= Equipment Unit Cost
Total of (1:03)
Hourly output: _____

Direct Cost of Work Item = A+B+C =__ 56.54 Birr/m
Over head cost : 10% 5.65 "
Profit Cost: 15% 8.48 "
Total Unit Cost : 70.67 Birr/m

Remark _____
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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION** LABOUR HOURLY OUTPUT: __ 6.88

WORK ITEM: _ (13.34) 10 cm. dia. Concrete Pipe EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: __ 1 ml. RESULT: 20.32 Birr/m

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
O 10 cm. Cement pipe	ml	1.05	11	11.55	Foreman	1	0.5	5	2.5		
Cement	Qut.	0.011	60	0.66	Plumber	1	1	5	5		
Sand	m^3	0.0014	95	0.13	Helper	1	1	1.9	1.9		
				0.00	D/L	14	1	1.25	17.5		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				12.34	**Total (1:02)**				26.90	**Total (1:0**	

A= Materials Unit Cost _ 12.343 Birr/ml.

B= Manpower Unit Cost __ 3.91 Birr/ml.

Total of (1:02)

Hourly Output: _____ 26.90/6.88 = 3.91

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 16.25 Birr/m

Over head cost : _ 10% 1.63 "

Profit Cost: _____ 15% 2.44 "

Total Unit Cost : _ 20.32 Birr/m

Remark : _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION** LABOUR HOURLY OUTPUT: 6.88

WORK ITEM: (13.35) 15 cm. dia. Concrete Pipe EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml. RESULT: 26.10 Birr/m

Material Cost (1:01)					Labour (1:02)					Equipment	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
O 15 cm. Cement pipe	ml	1.05	15	15.75	Foreman	1	0.5	5	2.5		
Cement	Qut.	0.017	60	1.02	Plumber	1	1	5	5		
Sand	m^3	0.0021	95	0.20	Helper	1	1	1.9	1.9		
				0.00	D/L	14	1	1.25	17.5		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				16.97	**Total (1:02)**				26.90	**Total (1:0**	

A= Materials Unit Cost 16.9695 Birr/ml.

B= Manpower Unit Cost 3.91 Birr/ml.

Total of (1:02)

Hourly Output: 26.90/6.88 = 3.91

C= Equipment Unit Cost

Total of (1:03)

Hourly output:

Direct Cost of Work Item = A+B+C = 20.88 Birr/m

Over head cost : 10% 2.09 "

Profit Cost: 15% 3.13 "

Total Unit Cost : 26.10 Birr/m

Remark :

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION** LABOUR HOURLY OUTPUT: 6.88

WORK ITEM: (13.36) 20 cm. dia. Concrete Pipe EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml. RESULT: 31.81 Birr/m

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
O 20 cm. Cement pipe	ml	1.05	19	19.95	Foreman	1	0.5	5	2.5		
Cement	Qut.	0.022	60	1.32	Plumber	1	1	5	5		
Sand	m^3	0.0028	95	0.27	Helper	1	1	1.9	1.9		
				0.00	D/L	14	1	1.25	17.5		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				21.54	**Total (1:02)**				26.90	**Total (1:0**	

A= Materials Unit Cost _ 21.536 Birr/ml.

B= Manpower Unit Cost __ 3.91 Birr/ml.

Total of (1:02)

Hourly Output: _____ 26.90/6.88 = 3.91

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = _		25.45	Birr/m
Over head cost : __	10%	2.54	"
Profit Cost:	15%	3.82	"
Total Unit Cost : _		31.81	Birr/m

Remark : _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**

WORK ITEM: (13.37) 30 cm. dia. Concrete Pipe

TOTAL QANTITY OF WORK ITEM: __ 1 ml.

LABOUR HOURLY OUTPUT: __ 6.88

EQUIPEMENT:

RESULT: _ 43.30 Birr/m

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.

Dia. 30 cm. Cement pipe	ml	1.05	27	28.35	Foreman	1	0.5	5	2.5		
Cement	Qtl.	0.033	60	1.98	Plumber	1	1	5	5		
Sand	m^3	0.0042	95	0.40	Helper	1	1	1.9	1.9		
				0.00	D/L	14	1	1.25	17.5		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				30.73	**Total (1:02)**				26.90	**Total (1:0**	

A= Materials Unit Cost 30.729 Birr/ml.

B= Manpower Unit Cost 3.91 Birr/ml.
Total of (1:02)
Hourly Output: 26.90/6.88 = 3.91

C= Equipment Unit Cost
Total of (1:03)
Hourly output:

Direct Cost of Work Item = A+B+C =		34.64	Birr/m
Over head cost :	10%	3.46	"
Profit Cost:	15%	5.20	"
Total Unit Cost :		43.30	Birr/m

Remark :

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

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**
WORK ITEM: (13.38) 40 cm. dia. Concrete Pipe
TOTAL QANTITY OF WORK ITEM: 1 ml.

LABOUR HOURLY OUTPUT: 3.13
EQUIPEMENT:
RESULT: 60.65 Birr/m

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
O 40 cm. Cement pipe	ml	1.05	35	36.75	Foreman	1	0.5	5	2.5		
Cement	Qut.	0.044	60	2.64	Plumber	1	1	5	5		
Sand	m^3	0.0056	95	0.53	Helper	1	1	1.9	1.9		
				0.00	D/L	14	1	1.25	17.5		
				0.00					0		
				0.00					0		

				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				39.92	**Total (1:02)**				26.90	**Total (1:0**	

A= Materials Unit Cost 39.922 Birr/ml.

B= Manpower Unit Cost 8.59 Birr/ml.
Total of (1:02)
Hourly Output: _____ 26.90/3.13 = 8.60

C= Equipment Unit Cost
Total of (1:03)
Hourly output: _____

Direct Cost of Work Item = A+B+C = _		48.52	Birr/m
Over head cost : _	10%	4.85	"
Profit Cost: ____	15%	7.28	"
Total Unit Cost :		60.65	Birr/m

Remark : _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**
LABOUR HOURLY OUTPUT: 3.13
WORK ITEM: (13.39) 60 cm. dia. Concrete Pipe
EQUIPEMENT:
TOTAL QANTITY OF WORK ITEM: 1 ml.
RESULT: __ 99.57 Birr/m

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
O 60 cm. Cement pipe	ml	1.05	62	65.10	Foreman	1	0.5	5	2.5		
Cement	Qut.	0.082	60	4.92	Plumber	1	1	5	5		
Sand	m^3	0.0110	95	1.05	Helper	1	1	1.9	1.9		
				0.00	D/L	14	1	1.25	17.5		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		

Total (1:-01)	71.07	Total (1:02)	26.90	Total (1:0

A= Materials Unit Cost 71.065 Birr/ml.

B= Manpower Unit Cost 8.59 Birr/ml.
Total of (1:02)
Hourly Output: 26.90/3.13 = 8.60

C= Equipment Unit Cost
Total of (1:03)
Hourly output:

Direct Cost of Work Item = A+B+C =		79.66 Birr/m
Over head cost :	10%	7.97 "
Profit Cost:	15%	11.95 "
Total Unit Cost :		99.57 Birr/m

Remark :

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**
WORK ITEM: (13.40) 80 cm. dia. Concrete Pipe
TOTAL QANTITY OF WORK ITEM: 1 ml.

LABOUR HOURLY OUTPUT: 3.13
EQUIPEMENT:
RESULT: 163.59 Birr/m

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
O 80 cm. Cement pipe	ml	1.05	110	115.50	Foreman	1	0.5	5	2.5		
Cement	Qut.	0.094	60	5.64	Plumber	1	1	5	5		
Sand	m^3	0.0120	95	1.14	Helper	1	1	1.9	1.9		
				0.00	D/L	14	1	1.25	17.5		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				122.28	Total (1:02)				26.90	Total (1:0	

A= Materials Unit Cost 122.28 Birr/ml.

B= Manpower Unit Cost 8.59 Birr/ml.
Total of (1:02)
Hourly Output: 26.90/3.13 = 8.60

C= Equipment Unit Cost
Total of (1:03)
Hourly output:

Direct Cost of Work Item = A+B+C = 130.87 Birr/m

Over head cost : _	10%	13.09	"
Profit Cost: ___	15%	19.63	"
Total Unit Cost :		163.59	Birr/m

Remark : _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**

WORK ITEM: (13.41) 100 cm. dia. Concrete Pipe

TOTAL QANTITY OF WORK ITEM: 1 ml.

LABOUR HOURLY OUTPUT: 1.25

EQUIPEMENT: Self Propelled Crane

RESULT: _ 270.27 Birr/m

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
O 100 cm. Cement pipe	ml	1.05	150	157.50	Foreman	1	1	5	5	Self propelled	
Cement	Qut.	0.099	60	5.94	Plumber	1	1	5	5	crane with	
Sand	m^3	0.0130	95	1.23	Helper	1	1	1.9	1.9	Operator	1
Red ash	"	0.147	60	8.82	D/L	12	1	1.25	15		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				173.50	**Total (1:02)**				26.90	**Total (1:0**	

A= Materials Unit Cost 173.495 Birr/ml.

B= Manpower Unit Cost 21.52 Birr/ml.

Total of (1:02)

Hourly Output: _____ 26.90/1.25 = 21.52

C= Equipment Unit Cost

Total of (1:03)

Hourly output:

Direct Cost of Work Item = A+B+C = _		235.02	Birr/m
Over head cost :	5%	11.75	"
Profit Cost: ___	10%	23.50	"
Total Unit Cost :		270.27	Birr/m

Remark : _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**
WORK ITEM: (13.42) 120 cm. dia. Concrete Pipe
TOTAL QANTITY OF WORK ITEM: 1 ml.

LABOUR HOURLY OUTPUT: 1.25
EQUIPEMENT: Self Propelled Crane
RESULT: 307.36 Birr/m

Material Cost (1:01)					Labour (1:02)					Equipment
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
O 120 cm. Cement pipe	ml	1.05	180	189.00	Foreman	1	1	5	5	Self propelled	
Cement	Qut.	0.110	60	6.60	Plumber	1	1	5	5	crane with	
Sand	m^3	0.0140	95	1.33	Helper	1	1	1.9	1.9	Operator	1
Red ash	"	0.147	60	8.82	D/L	12	1	1.25	15		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				205.75	**Total (1:02)**				26.90	**Total (1:0**	

A= Materials Unit Cost 205.75 Birr/ml.

B= Manpower Unit Cost 21.52 Birr/ml.
Total of (1:02)
Hourly Output: 26.90/1.25 = 21.52

C= Equipment Unit Cost
Total of (1:03)
Hourly output:

Direct Cost of Work Item = A+B+C = 267.27 Birr/m
Over head cost : 5% 13.36 "
Profit Cost: 10% 26.73 "
Total Unit Cost : 307.36 Birr/m

Remark :

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION** LABOUR HOURLY OUTPUT: 0.188

WORK ITEM: (13.43) 1 m³ cap. Water tank (Black Iron Sheet) EQUIPEMENT: Welding Machine

TOTAL QANTITY OF WORK ITEM: 1 pcs. RESULT: 864.72 Birr/p

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
2000 x 1000 x 2 mm. Black Iron				0.00	Foreman	1	0.25	5	1.25	Welding	
Sheet metal	m²	6.3	84.78	534.11	D/L	6	1	1.25	7.5	Machine with	
Antirust paint	Gal.	0.434	60	26.04					0	wadge	1
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				560.15	**Total (1:02)**				8.75	**Total (1:(	

A= Materials Unit Cost 560.154 Birr/pcs.

B= Manpower Unit Cost 46.54 Birr/pcs.

Total of (1:02)

Hourly Output: 8.75/0.188 = 46.54

C= Equipment Unit Cost

Total of (1:03)

Hourly output:

Direct Cost of Work Item = A+B+C = 786.11 Birr/p

Over head cost : 5% 39.31 "

Profit Cost: 5% 39.31 "

Total Unit Cost : 864.72 Birr/p

Remark :

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION** LABOUR HOURLY OUTPUT: 0.125

WORK ITEM: (13.44) 2 m3 cap. Water tank (Black Iron Sheet) EQUIPEMENT: Welding Machine

TOTAL QANTITY OF WORK ITEM: 1 pcs. RESULT: 1456.58 Birr/p

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
2000 x 1000 x 2 mm. Black Iron				0.00	Foreman	1	0.25	5	1.25	Welding	
Sheet metal	m^2	10.5	84.78	890.19	D/L	6	1	1.25	7.5	Machine with	
Antirust paint	Gal.	0.5	60	30.00					0	wadge	1
40 x40 x 2.5 mm. Angel Iron	kg.	11.66	5.5	64.13					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				984.32	**Total (1:02)**				8.75	**Total (1:(	

A= Materials Unit Cost _ 984.32 Birr/pcs.

B= Manpower Unit Cost 70.00 Birr/pcs.
Total of (1:02)
Hourly Output: _____ 8.75/0.125 = 70

C= Equipment Unit Cost
Total of (1:03)
Hourly output:

Direct Cost of Work Item = A+B+C =		1324.16	Birr/p
Over head cost : _	5%	66.21	"
Profit Cost: __	5%	66.21	"
Total Unit Cost :		1456.58	Birr/p

Remark : _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**
WORK ITEM: _ (13.45) 1 m3 cap. Water tank (Galvanized Sheet Metal)
TOTAL QANTITY OF WORK ITEM: __ 1 pcs. = 6.3m^2

LABOUR HOURLY OUTPUT: 0.188
EQUIPEMENT: Welding Machine
RESULT: _ 1486.46 Birr/p

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
2000 x 1000 x 2 mm. Galvanized				0.00	Foreman	1	0.25	5	1.25	Welding	
Sheet metal	m^2	6.3	173.68	1094.18	D/L	6	1	1.25	7.5	Machine with	

30 x 30 x 2.50 mm. Angel Iron	kg.	5.67	5.5	31.19					0	wadge	1
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				1125.37	**Total (1:02)**				8.75	**Total (1:0**	

A= Materials Unit Cost _ 1125.369 Birr/pcs.

B= Manpower Unit Cost 46.54 Birr/pcs.
Total of (1:02)
Hourly Output: _____ 8.75/0.188 = 46.54

C= Equipment Unit Cost
Total of (1:03)
Hourly output:

Direct Cost of Work Item = A+B+C =			1351.33 Birr/p
Over head cost : __	5%		67.57 "
Profit Cost: ____	5%		67.57 "
Total Unit Cost :			1486.46 Birr/p

Remark : _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**
LABOUR HOURLY OUTPUT: 0.125

WORK ITEM: (13.46) 2 m3 cap. Water tank (Galvanaized Sheet Metal)
EQUIPEMENT: Welding Machine

TOTAL QANTITY OF WORK ITEM: _ 1 pcs.=10.5m²
RESULT: 2450.37 Birr/p

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
2000 x 1000 x 2 mm. Galvanaized				0.00	Foreman	1	0.25	5	1.25	Welding	
Sheet metal	m²	10.5	173.68	1823.64	D/L	6	1	1.25	7.5	Machine with	
40 x40 x 2.5 mm. Angel Iron	kg.	11.66	5.5	64.13					0	wadge	1
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		

				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				1887.77	**Total (1:02)**				8.75	**Total (1:**	

A= Materials Unit Cost 1887.77 Birr/pcs.

B= Manpower Unit Cost 70.00 Birr/pcs.
Total of (1:02)
Hourly Output: 8.75/0.125 = 70

C= Equipment Unit Cost
Total of (1:03)
Hourly output:

Direct Cost of Work Item = A+B+C =		2227.61	Birr/p
Over head cost :	5%	111.38	"
Profit Cost:	5%	111.38	"
Total Unit Cost :		2450.37	Birr/p

Remark :

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **SANITARY INSTALLATION**
WORK ITEM: (13.47) 1 m3 cap. Water tank (Aluminium)
TOTAL QANTITY OF WORK ITEM: 1 pcs.=6.3m²

LABOUR HOURLY OUTPUT: 0.188
EQUIPEMENT: Welding Machine
RESULT: 1593.59 Birr/p

Material Cost (1:01)					Labour (1:02)					Equipment (	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
2000 x 1000 x 2 mm. Aluminium				0.00	Foreman	1	0.25	5	1.25	Welding	
Sheet metal	m²	6.3	196.2	1236.06	D/L	4	1	1.25	5	Machine with	
				0.00					0	wadge	1
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				1236.06	**Total (1:02)**				6.25	**Total (1:**	

A= Materials Unit Cost		1236.06	Birr/pcs.	B= Manpower Unit Cost		33.24 Birr/pcs.	C= Equipment Unit Cost
				Total of (1:02)			Total of (1:03)
				Hourly Output:		6.25/0.188 = 33.25	Hourly output:
				Direct Cost of Work Item = A+B+C =			1448.72 Birr/p
				Over head cost :	5%		72.44 "
				Profit Cost:	5%		72.44 "
				Total Unit Cost :			1593.59 Birr/p

Remark :

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**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

kg/hr.

I.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
	0

0.00 Birr/kg.

I.

I.

kg./hr

I.

(1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
	0
	0
	0

0 Birr/kg.

I.

I.

kg./hr.

I.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

0 Birr/kg.

I.

I.

pcs./hr.

:s.

Cost (1:03)	
Hourly Rental	Hourly Cost
4.53	4.53
	0
	0
	0
	0
	0
	0
	0
	0
	0
	4.53

11.92 Birr/pcs.

4.53/.38=11.9

I.

I.

PCS./hr.

s.

Cost (1:03)	
Hourly Rental	Hourly Cost
4.53	4.53
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
3)	4.53

11.92 Birr/pcs.

4.53/0.38 = 11.90

s.

s.

pcs./hr.

s.

Cost (1:03)	
Hourly Rental	Hourly Cost
4.53	4.53
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	4.53

11.92 Birr/pcs.

4.53/0.38 =11.90

:s.

:s.

PCS./hr.

:s.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00

	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

0.00 Birr/pcs.

:s.

:s.

pcs./hr.

:s.

Cost (1:03)	
Hourly Rental	Hourly Cost
4.53	4.53
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

	0.00
	0.00
	0.00
	0.00
	0.00
)3)	4.53

11.92 Birr/pcs.

4.53/0.38 = 11.90

:s.

:s.

pcs./hr.

:s.

Cost (1:03)	
Hourly Rental	Hourly Cost
4.53	4.53
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

	0.00
	0.00
	0.00
	4.53

11.92 Birr/pcs.

4.53/0.38 = 11.90

:s.

:s.

pcs./hr.

:s.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

0.00 Birr/pcs.

:s.

:s.

pcs./hr.

:s.

Cost (1:03)	
Hourly Rental	Hourly Cost
4.53	4.53
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	4.53

11.92 Birr/pcs.

4.53/0.38 = 11.90

:s.

:s.

pcs./hr.

:s.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

0.00 Birr/pcs.

:s.

:s.

pcs./hr.

:s.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

0.00 Birr/pcs.

:s.

:s.

pcs./hr.

:s.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

0.00 Birr/pcs.

:s.

:s.

pcs./hr.

:s.

Cost (1:03)

Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

0.00 Birr/pcs.

—
:s.

:s.

pcs./hr.

:s.

Cost (1:03)

Hourly Rental	Hourly Cost
4.53	4.53
	0.00
	0.00
	0.00

	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	4.53

5.15 Birr/pcs.

4.53/0.88 = 5.15

:s.

:s.

pcs./hr.

:s.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

	0.00
	0.00
	0.00

0.00 Birr/pcs.

:s.

:s.

pcs./hr.

:s.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

0.00 Birr/pcs.

:s.

:s.

pcs./hr.

:s.

Cost (1:03)	
Hourly Rental	Hourly Cost
4.53	4.53
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	4.53

4.53 Birr/pcs.

4.53/1 = 4.53

:s.

:s.

pcs./hr.

:s.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

0.00 Birr/pcs.

:s.

:s.

pcs./hr.

:s.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

0.00 Birr/pcs.

:s.

:s.

pcs./hr.

:s.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

0.00 Birr/pcs.

:s.

:s.

pcs./hr.

:s.

Cost (1:03)	
Hourly Rental	Hourly Cost

	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

0.00 Birr/pcs.

:s.

:s.

ml./hr.

nl.

Cost (1:03)

Hourly Rental	Hourly Cost
	0.00
4	4.00
	0.00
	0.00
	0.00
	0.00

	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
3)	4.00

2.16 Birr/ml.

4/1.85 = 2.16

nl.
nl.
nl.
nl.

ml./hr.

nl.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
4	4.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

3)	4.00

2.16 Birr/ml.

4/1.85 = 2.16

nl.
nl.
nl.
nl.

ml./hr.

nl.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
4	4.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
3)	4.00

2.67 Birr/ml.

4/1.5 = 2.67

nl.

nl.
nl.
nl.

ml./hr.

nl.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
4	4.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
3)	4.00

2.67 Birr/ml.

4/1.5 = 2.67

nl.
nl.
nl.
nl.

ml./hr.

nl.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
4	4.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
3)	4.00

4.00 Birr/ml.

4/1.0 = 4.00

nl.
nl.
nl.
nl.

pcs./hr.

cs.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
3)	0.00

0.00 Birr/pcs.

ocs.

ocs.

pcs./hr.

cs.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
3)	0.00

0.00 Birr/pcs.

cs.

cs.

pcs./hr.

cs.

Cost (1:03)

Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
3)	0.00

0.00 Birr/pcs.

ɔcs.

ɔcs.

pcs./hr.

cs.

Cost (1:03)

Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00

	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
)	0.00

0.00 Birr/pcs.

)cs.

)cs.

pcs./hr.

cs.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

	0.00
	0.00
)	0.00

0.00 Birr/pcs.

ɔcs.

ɔcs.

ml./hr.

ıl.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

3)	0.00

0.00 Birr/pcs.

al.

al.

al.

Cost (1:03)	
Hourly Rental	Hourly Cost

ml./hr.

ıl.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

0.00 Birr/ml.

ıl.

ıl.

ml./hr.

ıl.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
3)	0.00

0.00 Birr/ml.

ıl.

ıl.

ml./hr.

ıl.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
3)	0.00

0.00 Birr/ml.

ıl.

ıl.

ml./hr.

ıl.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
3)	0.00

0.00 Birr/ml.

ıl.

ıl.

ml./hr.

ıl.

Cost (1:03)	
Hourly Rental	Hourly Cost

	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
3)	0.00

0.00 Birr/ml.

ıl.

ıl.

ml./hr.

ıl.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
3)	0.00

0.00 Birr/ml.

ıl.

ıl.

ml./hr.

ıl.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

3)	0.00

0.00 Birr/ml.

ıl.

ıl.

ml./hr.

ıl.

Cost (1:03)

Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
3)	0.00

0.00 Birr/ml.

ıl.

ıl.

ml./hr.

ıl.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
50	50.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
3)	50.00

40.00 Birr/ml.

50.00/1.25 = 40.00

ıl.

ıl.

ml./hr.

ıl.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
50	50.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
3)	50.00

40.00 Birr/ml.

50.00/1.25 =40.00

ıl.

ıl.

pcs./hr.

cs.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
33.73	33.73
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
)3)	33.73

179.41 Birr/pcs.

33.73/0.188 =179.42

cs.

cs.

pcs./hr.

cs.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
33.73	33.73
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
)3)	33.73

269.84 Birr/pcs.

33.73/0.125=269.84

cs.

cs.

pcs./hr.

cs.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00

33.73	33.73
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
03)	33.73

179.41 Birr/pcs.

33.73/0.188=179.42

cs.

cs.

pcs./hr.

cs.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
33.73	33.73
	0.00
	0.00
	0.00
	0.00
	0.00

	0.00
	0.00
	0.00
	0.00
03)	33.73

269.84 Birr/pcs.

33.73/0.125=269.84

cs.

cs.

pcs./hr.

cs.

Cost (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
33.73	33.73
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
03)	33.73

179.41 Birr/pcs.

33.73/0.188=179.42

cs.

cs.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **EXCAVATION AND EARTH WORK.** LABOUR HOURLY OUTPUT: 0.89

WORK ITEM: (1.1) 20 cm. Clearing on loose & dry soil. EQUIPEMENT: Tool

TOTAL QANTITY OF WORK ITEM: 1 m^2 RESULT: 3.51 Birr/m^2

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
				0	D/L	1	1	2	2	Tool	1
				0	G.Chief	1	0.1	2.5	0.25		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				0	**Total (1:02)**				2.25	**Total (1:03**	

A= Materials Unit Cost 0 Birr/m^2

B= Manpower Unit Cost 2.5281 Birr/m^2

Total of (1:02) 1.44

Hourly Output: 0.89

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 2.81 Birr/m^2

Over head cost : 10% 0.28 "

Profit Cost: 15% 0.42 "

Total Unit Cost : 3.51 Birr/m^2

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **EXCAVATION AND EARTH WORK.** LABOUR HOURLY OUTPUT: 0.53

WORK ITEM: (1.2) 20cm. Clearing on wet & black soil. EQUIPEMENT: Tool

TOTAL QANTITY OF WORK ITEM: 1 m^2 RESULT: 3.77 $Birr/m^2$

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
				0	DL	1	1	1.25	1.25	Tools	1
				0	G.Chief	1	0.1	1.9	0.19		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				0	**Total (1:02)**				1.44	**Total (1:03**	

A= Materials Unit Cost 0 $Birr/m^2$ B= Manpower Unit Cost 2.717 $Birr/m^2$ C= Equipment Unit Cost

Total of (1:02) Total of (1:03)

Hourly Output: Hourly output: _____

Direct Cost of Work Item = A+B+C = 3.02 $Birr/m^2$

Over head cost : 10% 0.30 "

Profit Cost: 15% 0.45 "

Total Unit Cost : 3.77 $Birr/m^2$

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **EXCAVATION AND EARTH WORK.** LABOUR HOURLY OUTPUT: 0.21

WORK ITEM: (1.3) Bulk excav. to a depth not exceeding 150cm loose and dry soil. EQUIPEMENT: Tool

TOTAL QANTITY OF WORK ITEM: 1 m^3 RESULT: 9.52

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
				0	DL	1	1	2	2	Tools	1
				0	G.Chief	1	0.1	2.5	0.25		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				0	**Total (1:02)**				2.25	**Total (1:03**	

A= Materials Unit Cost 0 Birr/m³

B= Manpower Unit Cost 10.714 Birr/m³

Total of (1:02)

Hourly Output:

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		11.90	Birr/m³
Over head cost :	10%	1.19	"
Profit Cost:	15%	1.79	"
Total Unit Cost :		14.88	Birr/m³

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **EXCAVATION AND EARTH WORK.**

WORK ITEM: (1.4) Ditto. but on wet and black soil.

TOTAL QANTITY OF WORK ITEM: 1 m³

LABOUR HOURLY OUTPUT: 0.13

EQUIPEMENT: Tool

RESULT: 51.44 Birr/m³

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
				0	DL	1	1	5	5	Tools	1
				0	G.Chief	1	0.1	1.9	0.19		
				0					0		

				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				0	**Total (1:02)**				5.19	**Total (1:03**	

A= Materials Unit Cost 0 Birr/m³ B= Manpower Unit Cost 39.923 Birr/m³ C= Equipment Unit Cost

Total of (1:02) Total of (1:03)

Hourly Output: Hourly output: _____

Direct Cost of Work Item = A+B+C = 41.15 Birr/m³

Over head cost : 10% 4.12 "

Profit Cost: 15% 6.17 "

Total Unit Cost : 51.44 Birr/m³

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **EXCAVATION AND EARTH WORK.** LABOUR HOURLY OUTPUT: 0.15

WORK ITEM: (1.5) Trench excavation not exceeding 150cm. in loose and dry soil. EQUIPEMENT: Tool

TOTAL QANTITY OF WORK ITEM: 1 m³ RESULT: 13.33 Birr/m³

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
				0	DL	1	1	1.25	1.25	Tools	1
				0	G.Chief	1	0.1	1.9	0.19		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				0	**Total (1:02)**				1.44	**Total (1:03**	

A= Materials Unit Cost 0 Birr/m³ B= Manpower Unit Cost 9.6 Birr/m³ C= Equipment Unit Cost

Total of (1:02) Total of (1:03)

Hourly Output: Hourly output: _____

Direct Cost of Work Item = A+B+C = 10.67 Birr/m³

Over head cost : 10% 1.07 "

Profit Cost: 15% 1.60 "

Total Unit Cost : 13.33 Birr/m³

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **EXCAVATION AND EARTH WORK.** LABOUR HOURLY OUTPUT: 0.09

WORK ITEM: (1.5) Trench excavation not exceeding 150cm. in loose and dry soil. EQUIPEMENT: Tool

TOTAL QANTITY OF WORK ITEM: 1 m³ RESULT: 22.22 Birr/m³

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
				0	DL	1	1	1.25	1.25	Tools	1
				0	G.Chief	1	0.1	1.9	0.19		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				0	**Total (1:02)**				1.44	**Total (1:03**	

A= Materials Unit Cost 0 Birr/m³ B= Manpower Unit Cost 16 Birr/m³ C= Equipment Unit Cost

Total of (1:02) Total of (1:03)

Hourly Output: Hourly output: _____

Direct Cost of Work Item = A+B+C = 17.78 Birr/m³

Over head cost : 10% 1.78 "

Profit Cost: 15% 2.67 "

Total Unit Cost : 22.22 Birr/m³

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **EXCAVATION AND EARTH WORK.** LABOUR HOURLY OUTPUT: 0.08

WORK ITEM: (1.7) Excavation foundation pits to adepth of 150-300cm. In loose soil. EQUIPEMENT: Tool

TOTAL QANTITY OF WORK ITEM: 1 m³ RESULT: 39.06 Birr/m³

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
				0	DL	1	1	2	2	Tools	1
				0	G.Chief	1	0.1	2.5	0.25		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				0	**Total (1:02)**				2.25	**Total (1:03**	

A= Materials Unit Cost 0 Birr/m³

B= Manpower Unit Cost 28.125 Birr/m³

Total of (1:02)

Hourly Output:

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 31.25 Birr/m³

Over head cost : 10% 3.13 "

Profit Cost: 15% 4.69 "

Total Unit Cost : 39.06 Birr/m³

Remark _____

UF: UTILIZATION FACTOR

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**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **EXCAVATION AND EARTH WORK.** LABOUR HOURLY OUTPUT: 0.09

WORK ITEM: (1.8) Excavation foundation pits to adepth not exceeding 150cm.on wet and b EQUIPEMENT: Tool

TOTAL QANTITY OF WORK ITEM: 1 m^3 RESULT: 34.72 Birr/m^3

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
				0	DL	1	1	2	2	Tools	1
				0	G.Chief	1	0.1	2.5	0.25		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				0	**Total (1:02)**				2.25	**Total (1:03**	

A= Materials Unit Cost 0 Birr/m^3 B= Manpower Unit Cost 25 Birr/m^3 C= Equipment Unit Cost

Total of (1:02) Total of (1:03)

Hourly Output: Hourly output:

Direct Cost of Work Item = A+B+C = 27.78 Birr/m^3

Over head cost : 10% 2.78 "

Profit Cost: 15% 4.17 "

Total Unit Cost : 34.72 Birr/m^3

Remark _____

UF: UTILIZATION FACTOR

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

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **EXCAVATION AND EARTH WORK.** LABOUR HOURLY OUTPUT: 0.14

WORK ITEM: (1.9) Ditto. But, on loose soil. EQUIPEMENT: Tool

TOTAL QANTITY OF WORK ITEM: 1 m^3 RESULT: 14.29 Birr/m^3

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
				0	DL	1	1	1.25	1.25	Tools	1
				0	G.Chief	1	0.1	1.9	0.19		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				0	**Total (1:02)**				1.44	**Total (1:03**	

A= Materials Unit Cost 0 Birr/m^3 B= Manpower Unit Cost 10.286 Birr/m^3 C= Equipment Unit Cost

Total of (1:02) Total of (1:03)

Hourly Output: Hourly output: _____

Direct Cost of Work Item = A+B+C = 11.43 Birr/m^3

Over head cost : 10% 1.14 "

Profit Cost: 15% 1.71 "

Total Unit Cost : 14.29 Birr/m^3

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **EXCAVATION AND EARTH WORK.** LABOUR HOURLY OUTPUT: 0.06

WORK ITEM: (1.10) Ditto. but, 150cm. - 300cm. But, on wet clay and black soil. EQUIPEMENT: Tool

TOTAL QANTITY OF WORK ITEM: 1 m^3 RESULT: 33.33 Birr/m^3

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
				0	DL	1	1	1.25	1.25	Tools	1
				0	G.Chief	1	0.1	1.9	0.19		

				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				0	**Total (1:02)**				1.44	**Total (1:03**	

A= Materials Unit Cost 0 Birr/m³ B= Manpower Unit Cost 24 Birr/m³ C= Equipment Unit Cost

Total of (1:02) Total of (1:03)

Hourly Output: Hourly output: _____

Direct Cost of Work Item = A+B+C = 26.67 Birr/m³

Over head cost : 10% 2.67 "

Profit Cost: 15% 4.00 "

Total Unit Cost : 33.33 Birr/m³

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **EXCAVATION AND EARTH WORK.** LABOUR HOURLY OUTPUT: 0.06

WORK ITEM: (1.11) Excavation on soft rock to a depth not exceeding 150cm. EQUIPEMENT: Tool

TOTAL QANTITY OF WORK ITEM: 1 m³ RESULT: 79.30 Birr/m³

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
				0	DL	1	1	3.15	3.15	Tools	2
				0	G.Chief	1	0.1	1.9	0.19		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		

Total (1:-01)	0	Total (1:02)	3.34	Total (1:03

A= Materials Unit Cost 0 Birr/m³ B= Manpower Unit Cost 55.667 Birr/m³ C= Equipment Unit Cost

Total of (1:02) Total of (1:03)

Hourly Output: Hourly output: _____

Direct Cost of Work Item = A+B+C = 61.00 Birr/m³

Over head cost : 15% 9.15 "

Profit Cost: 15% 9.15 "

Total Unit Cost : 79.30 Birr/m³

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **EXCAVATION AND EARTH WORK.** LABOUR HOURLY OUTPUT: 0.07

WORK ITEM: (1.12) Ditto. But, on hard rock. EQUIPEMENT: Tool

TOTAL QANTITY OF WORK ITEM: 1 m³ RESULT: 185.89 Birr/m³

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
				0	foreman	1	0.067	5	0.34	tool	8
				0	DL	4	1	1.25	5		
				0	helper	2	1	1.9	3.8		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				0	Total (1:02)				9.135	Total (1:03	

A= Materials Unit Cost 0 Birr/m³ B= Manpower Unit Cost 130.43 Birr/m³ C= Equipment Unit Cost

Total of (1:02) Total of (1:03)

Hourly Output: Hourly output: _____

Direct Cost of Work Item = A+B+C = 148.72 Birr/m³

Over head cost : 10% 14.87 "

Profit Cost:	15%	22.31	"
Total Unit Cost :		185.89	Birr/m³

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **EXCAVATION AND EARTH WORK.** LABOUR HOURLY OUTPUT: 0.15

WORK ITEM: (1.13) Back fill excavated materials from the site. EQUIPEMENT: Tool

TOTAL QANTITY OF WORK ITEM: 1 m³ RESULT: 21.80 Birr/m³

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
				0	foreman	1	0.033	6.25	0.21	tool	1
				0	DL	1	1	2	2		
				0	G.CHIEF	1	0.1	2.5	0.25		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				0	**Total (1:02)**				2.46	**Total (1:03**	

A= Materials Unit Cost 0 Birr/m³

B= Manpower Unit Cost 16 Birr/m³

Total of (1:02)

Hourly Output:

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		17.44	Birr/m³
Over head cost :	10%	1.74	"
Profit Cost:	15%	2.62	"
Total Unit Cost :		21.80	Birr/m³

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **EXCAVATION AND EARTH WORK.** LABOUR HOURLY OUTPUT: 0.14

WORK ITEM: (1.14) Back fill selected excavated mats. from out side the site. EQUIPEMENT: Tool

TOTAL QANTITY OF WORK ITEM: 1 m^3 RESULT: 77.81 Birr/m^3

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
selected material	m3	1.05	45	47.25	foreman	1	0.1	5	0.50	tool	1
				0	DL	1	1	1.25	1.25		
				0	G.CHIEF	1	0.1	1.9	0.19		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				47.25	**Total (1:02)**				1.94	**Total (1:03**	

A= Materials Unit Cost 47.25 Birr/m^3

B= Manpower Unit Cost 13.86 Birr/m^3

Total of (1:02)

Hourly Output:

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 62.25 Birr/m^3

Over head cost : 10% 6.23 "

Profit Cost: 15% 9.34 "

Total Unit Cost : 77.81 Birr/m^3

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **EXCAVATION AND EARTH WORK.** LABOUR HOURLY OUTPUT: **24**

WORK ITEM: (1.15) Cart away surplus excavated mats. 3km. from the site. EQUIPEMENT: Tool

TOTAL QANTITY OF WORK ITEM: 1 m^3 RESULT: **39.19 Birr/m**

Material Cost (1:01)	Labour Cost (1:02)	Equipmer

Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
				0	operator	1	1	4.38	4.38	loader	1
				0	driver	4	4	3.75	60.00	dump truck	4
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				0	**Total (1:02)**				64.38	**Total (1:03**	

A= Materials Unit Cost 0 Birr/m³

B= Manpower Unit Cost 2.6823 Birr/m³

Total of (1:02)

Hourly Output:

C= Equipment Unit Cost

Total of (1:03)

Hourly output:

Direct Cost of Work Item = A+B+C =		31.35	Birr/m³
Over head cost :	10%	3.13	"
Profit Cost:	15%	4.70	"
Total Unit Cost :		**39.19**	**Birr/m³**

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **EXCAVATION AND EARTH WORK.**

WORK ITEM: (1.15) Cart away surplus excavated mats. 1km. from the site.

TOTAL QANTITY OF WORK ITEM: 1 m³

LABOUR HOURLY OUTPUT: **72**

EQUIPEMENT: Tool

RESULT: **13.06 Birr/m³**

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
				0	operator	1	1	4.38	4.38	loader	1
				0	driver	4	4	3.75	60.00	dump truck	4

				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				0	**Total (1:02)**				64.38	**Total (1:03**	

A= Materials Unit Cost 0 Birr/m^3

B= Manpower Unit Cost 0.8941 Birr/m^3

Total of (1:02)

Hourly Output:

C= Equipment Unit Cost

Total of (1:03)

Hourly output:

Direct Cost of Work Item = A+B+C =		10.45	Birr/m^3
Over head cost :	10%	1.04	"
Profit Cost:	15%	1.57	"
Total Unit Cost :		**13.06**	**Birr/m**

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **EXCAVATION AND EARTH WORK.**

WORK ITEM: (1.16) 25cm. thick basaltic hard core.

TOTAL QANTITY OF WORK ITEM: 1 m^2

LABOUR HOURLY OUTPUT: 2

EQUIPEMENT: Tool

RESULT: 42.82 Birr/m^2

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
basaltic stone	m^2	0.28	100	28	foreman	1	0.25	9.25	2.31	tools	3
				0	mason	1	1	15	15.00		
				0	DL	4	1	3.15	12.6		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		

Total (1:-01)	28	Total (1:02)	29.9125	Total (1:03

A= Materials Unit Cost 28 Birr/m²

B= Manpower Unit Cost 4.7 Birr/m²
Total of (1:02)
Hourly Output:

C= Equipment Unit Cost
Total of (1:03)
Hourly output: _____

Direct Cost of Work Item = A+B+C = 32.94 Birr/m²
Over head cost : 15% 4.94 "
Profit Cost: 15% 4.94 "
Total Unit Cost : 42.82 Birr/m²

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **PAINTING.**
LABOUR HOURLY OUTPUT: 1.88
WORK ITEM: (12.1) Three coats of plastic paint to wall.
EQUIPEMENT: Tool
TOTAL QANTITY OF WORK ITEM: 1 m²
RESULT: 8.90 Birr/m²

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
plastic paint	lit	0.25	15.6	3.9	foreman	1	0.2	5	1.00	tools	1
stucco	kg	0.05	1.8	0.09	painter	1	1	2.5	2.50		
animal glue	kg	0.013	20	0.26	DL	1	1	1.25	1.25		
brush	pcs	0.01	22	0.22					0		
sand paper	pcs	0.01	1.5	0.015					0		
gypsum	kg	0.03	0.6	0.018					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				4.503	**Total (1:02)**				4.75	**Total (1:03**	

A= Materials Unit Cost 4.503 Birr/m²

B= Manpower Unit Cost 2.53 Birr/m²
Total of (1:02)
Hourly Output:

C= Equipment Unit Cost
Total of (1:03)
Hourly output: _____

Direct Cost of Work Item = A+B+C = 7.12 Birr/m²
Over head cost : 10% 0.71 "

Profit Cost:	15%	1.07	"
Total Unit Cost :		8.90	Birr/m²

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **PAINTING.** LABOUR HOURLY OUTPUT: 3.76

WORK ITEM: (12.2) Two coats of plastic paint to wall. EQUIPEMENT: Tool

TOTAL QANTITY OF WORK ITEM: 1 m² RESULT: 5.89 Birr/m²

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
plastic paint	lit	0.18	15.6	2.808	foreman	1	0.2	5	1.00	tools	1
stucco	kg	0.05	1.8	0.09	painter	1	1	2.5	2.50		
animal glue	kg	0.013	20	0.26	DL	1	1	1.25	1.25		
brush	pcs	0.01	22	0.22					0		
sand paper	pcs	0.01	1.5	0.015					0		
gypsum	kg	0.03	0.6	0.018					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				3.411	**Total (1:02)**				4.75	**Total (1:03**	

A= Materials Unit Cost 3.411 Birr/m²

B= Manpower Unit Cost 1.26 Birr/m²

Total of (1:02)

Hourly Output:

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		4.71	Birr/m²
Over head cost :	10%	0.47	"
Profit Cost:	15%	0.71	"
Total Unit Cost :		5.89	Birr/m²

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **PAINTING.** LABOUR HOURLY OUTPUT: 1.5

WORK ITEM: (12.3) Three coats of plastic paint to ceilling. EQUIPEMENT: Tool

TOTAL QANTITY OF WORK ITEM: 1 m^2 RESULT: 9.83 Birr/m^2

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
plastic paint	lit	0.23	15.6	3.59	foreman	1	0.2	9.25	1.85	tools	1
stucco	kg	0.1	1.8	0.18	painter	1	1	15	15.00		
animal glue	kg	0.013	20	0.26	DL	1	1	3.15	3.15		
brush	pcs	0.01	22	0.22					0		
sand paper	pcs	0.01	1.5	0.015					0		
gypsum	kg	0.04	0.6	0.024					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				4.287	**Total (1:02)**				20	**Total (1:03**	

A= Materials Unit Cost 4.287 Birr/m^2

B= Manpower Unit Cost 3.17 Birr/m^2

Total of (1:02) 4.75

Hourly Output: 1.5

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 7.56 Birr/m^2

Over head cost : 15% 1.13 "

Profit Cost: 15% 1.13 "

Total Unit Cost : 9.83 Birr/m^2

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **PAINTING.** LABOUR HOURLY OUTPUT: 1.3

WORK ITEM: (12.4) Three coats of synthetic paint to metal surface. EQUIPEMENT: Tool

TOTAL QANTITY OF WORK ITEM: 1 m^2 RESULT: 12.45 Birr/m^2

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
anti-rust	lit	0.04	15.6	0.62	Foreman	1	0.2	5	1.00		
thinner	lit	0.035	4	0.14	painter	1	1	2.5	2.50		
synthetic paint	kg	0.22	24.18	5.32	DL	1	1	1.25	1.25		
brush	pcs	0.01	22	0.22					0		
									0		
									0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				6.30	**Total (1:02)**				4.75	**Total (1:03**	

A= Materials Unit Cost 6.30 Birr/m^2 B= Manpower Unit Cost 3.65 Birr/m^2 C= Equipment Unit Cost

Total of (1:02) 4.75 Total of (1:03)

Hourly Output: 1.3 Hourly output: _____

Direct Cost of Work Item = A+B+C = 9.96 Birr/m^2

Over head cost : 10% 1.00 "

Profit Cost: 15% 1.49 "

Total Unit Cost : 12.45 Birr/m^2

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **PAINTING.** LABOUR HOURLY OUTPUT: 1.25

WORK ITEM: (12.5) Two coats of varnish paint to wooden surface. EQUIPEMENT: Tool

TOTAL QANTITY OF WORK ITEM: 1 m^2 RESULT: 12.82 Birr/m^2

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
varnish paint	lit	0.18	27.04	4.87	foreman	1	0.2	5	1.00	tools	1

thinner	lit	0.05	4	0.2	painter	1	1	2.5	2.50		
stucco	kg	0.57	1.8	1.03	DL	1	1	1.25	1.25		
brush	pcs	0.01	22	0.22					0		
sand paper	pcs	0.01	1.5	0.015					0		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				6.33	**Total (1:02)**				4.75		**Total (1:03**

A= Materials Unit Cost 6.3282 Birr/m²

B= Manpower Unit Cost 3.8 Birr/m²

Total of (1:02) 4.75

Hourly Output: 1.25

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 10.26 Birr/m²

Over head cost : 10% 1.03 "

Profit Cost: 15% 1.54 "

Total Unit Cost : 12.82 Birr/m²

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **PAINTING.**

WORK ITEM: (12.6) Two coats of anti-rust paint.

TOTAL QANTITY OF WORK ITEM: 1 m²

LABOUR HOURLY OUTPUT: 0.85

EQUIPEMENT: Tool

RESULT: 11.39 Birr/m²

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
anti-rust	lit	0.2	15.6	3.12	foreman	1	0.2	5	1.00	tools	1
thinner	lit	0.05	4	0.2	painter	1	1	2.5	2.50		
brush	pcs	0.01	1.5	0.02	DL	1	1	1.25	1.25		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		

				0					0		
Total (1:-01)				3.34	**Total (1:02)**				4.75	**Total (1:03**	

A= Materials Unit Cost 3.335 Birr/m²

B= Manpower Unit Cost 5.59 Birr/m²

Total of (1:02) 4.75

Hourly Output: 0.85

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 9.11 Birr/m²

Over head cost : 10% 0.91 "

Profit Cost: 15% 1.37 "

Total Unit Cost : 11.39 Birr/m²

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **PAINTING.** LABOUR HOURLY OUTPUT: 5.64

WORK ITEM: (12.7) One coat of white washing paint. EQUIPEMENT: Tool

TOTAL QANTITY OF WORK ITEM: 1 m² RESULT: 3.79 Birr/m²

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
lime	kg	0.12	0.39	0.05	foreman	1	0.2	5	1.00	tools	1
stucco	kg	0.06	1.8	0.11	painter	1	1	2.5	2.50		
animal glue	kg	0.1	20	2	DL	1	1	1.25	1.25		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				2.16	**Total (1:02)**				4.75	**Total (1:03**	

A= Materials Unit Cost 2.16 Birr/m²

B= Manpower Unit Cost 0.84 Birr/m²

Total of (1:02) 4.75

Hourly Output: 5.64

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 3.03 Birr/m²

Over head cost :	10%	0.30	"
Profit Cost:	15%	0.45	"
Total Unit Cost :		3.79	Birr/m^2

Remark _____

UF: UTILIZATION FACTOR

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**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

m²/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
0.25	0.25
	0
	0
	0
	0
	0
	0
	0
	0
)	0.25

0.28 Birr/m²

_____

m²/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
0.16	0.16
	0
	0
	0
	0
	0
	0
	0
	0
)	0.16

0.30 Birr/m²

m³/hr.

Birr/m³

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
0.25	0.25
	0
	0
	0
	0
	0
	0
	0
	0
)	0.25

1.19 Birr/m^3

_____

m^3/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
0.16	0.16
	0
	0

	0
	0
	0
	0
	0
	0
)	0.16

1.23 Birr/m^3

m^3/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
0.16	0.16
	0
	0
	0
	0
	0
	0
	0
	0
)	0.16

1.07 Birr/m³

m³/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
0.16	0.16
	0
	0
	0
	0
	0
	0
	0
	0
)	0.16

1.78 Birr/m³

m³/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
0.25	0.25
	0
	0
	0
	0
	0
	0
	0
	0
)	0.25

3.13 Birr/m³

m³/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
0.25	0.25
	0
	0
	0
	0
	0
	0
	0
	0
)	0.25

2.78 Birr/m³

___

m³/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
0.16	0.16
	0
	0
	0
	0
	0
	0
	0
	0
)	0.16

1.14 Birr/m^3

___

m^3/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
0.16	0.16
	0

	0
	0
	0
	0
	0
	0
	0
)	0.16

2.67 Birr/m^3

m^3/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
0.16	0.32
	0
	0
	0
	0
	0
	0
	0
	0

)	0.32

5.33 Birr/m³

m³/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
0.16	1.28
	0
	0
	0
	0
	0
	0
	0
	0
)	1.28

18.29 Birr/m³

$m^3/hr.$

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
0.16	0.16
	0
	0
	0
	0
	0
	0
	0
	0
)	0.16

1.07 Birr/m^3

m³/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
0.16	0.16
	0
	0
	0
	0
	0
	0
	0
	0
)	0.16

1.14 Birr/m³

m³/hr.

ɜ

ıt Cost (1:03)

Hourly Rental	Hourly Cost
168.00	168.00
130.00	520.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
)	688.00

28.67 Birr/m³

³

m³/hr.

³

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
168.00	168.00
130.00	520.00

	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
)	688.00

9.56 Birr/m^3

ɜ

m^2/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
0.16	0.48
	0
	0
	0
	0
	0
	0
	0

)	0.48

0.24 Birr/m²

_____

m²/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
0.16	0.16
	0
	0
	0
	0
	0
	0
	0
)	0.16

0.09 Birr/m²

_____

m^2/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
0.16	0.16
	0
	0
	0
	0
	0
	0
	0
)	0.16

0.04 Birr/m^2

m²/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
0.16	0.16
	0
	0
	0
	0
	0
	0
	0
)	0.16

0.11 Birr/m²

m²/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
	0
	0
)	0

0.00 Birr/m^2

_____

m^2/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
0.16	0.16

	0
	0
	0
	0
	0
	0
	0
	0
)	0.16

0.13 Birr/m^2

m^2/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
0.16	0.16
	0
	0
	0
	0
	0
	0
	0

	0
)	0.16

0.19 Birr/m²

m²/hr.

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
0.16	0.16
	0
	0
	0
	0
	0
	0
	0
	0
)	0.16

0.03 Birr/m²

ANALYSIS SHEET FOR DIRECT &

PROJECT: **ROOFING WORKS**

WORK ITEM: Steel Truss & Purlin With RHS

TOTAL QANTITY OF WORK ITEM: 1 kg.

Material Cost (1:01)						
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.
RHS Different Size	kg.	1.05	10.65	11.18	Foreman	1
Anti rust	lit	0.02	20	0.40	Carpenter1	1
					Welder	1
					Helper	2
Total (1:-01)				11.58		**Total (**

A= Materials Unit Cost 11.58 Birr/kg.

B= Manpower Unit Cost

Total of (1:02)

Hourly Output: _____

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT &

PROJECT: **ROOFING WORKS**

WORK ITEM: Plate

TOTAL QANTITY OF WORK ITEM: 1 pc

Material Cost (1:01)						
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.
Plates	pc	21.8	199.3	4345	Foreman	1
					Welder	1
					Helper	2
					Carpenter	1

Total (1:-01)				4344.74		**Total (**

A= Materials Unit Cost 4344.74 Bir/pc

B= Manpower Unit Cost

Total of (1:02)

Hourly Output: _____

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT &

PROJECT: **ROOFING WORKS**

WORK ITEM: Bolt

TOTAL QANTITY OF WORK ITEM: 1 pc

Material Cost (1:01)						
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.
Bolts	pc	1	1.7	2	Foreman	1
					Welder	1
					Helper	2
Total (1:-01)				1.70		**Total (**

A= Materials Unit Cost 1.70 Bir/rpc

B= Manpower Unit Cost

Total of (1:02)

Hourly Output: _____

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT &

PROJECT: **ROOFING WORKS**
WORK ITEM: Angle iron
TOTAL QANTITY OF WORK ITEM: 1 pc

Material Cost (1:01)						
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.
Angle iron	pc	1.05	4.72	5	Foreman	1
				0.00	Carpenter1	1
				0.00	Welder	1
				0.00	D/L	10
				0.00		
				0.00		
				0.00		
				0.00		
				0.00		
				0.00		
				0.00		
Total (1:-01)				4.96		**Total (**

A= Materials Unit Cost 4.96 Bir/rpc

B= Manpower Unit Cost
Total of (1:02)
Hourly Output: _____

Remark _____
UF: UTILIZATION FACTOR
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ANALYSIS SHEET FOR DIRE

PROJECT: **CARPENTRY & JOINERY**
WORK ITEM 10mm. thick chipwood Ceiling.
TOTAL QANTITY OF WORK ITEM: 1 m^2

Material Cost (1:01)					Labour (1:02)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.
Chip wood Diam.10mm	m²	1.05	38.32	40.236	Foreman	0.33
					Carpenter II	1
					Helper	1
Total (1:-01)				**40.236**		**Total**

A= Material unit cost **40.24** Birr/m²

B=Manpower Unit Cost

Total of (1:02)

Hourly Output

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

Overhead Cost :

Profit Cost:

Total Unit Cost :

Remark _____

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ANALYSIS SHEET FOR DIRE

PROJECT: ***METAL WORK***

WORK ITEM: Fully metal doors of 38LTZ without grill 90 x210cm 1.89

TOTAL QUANTITY OF WORK ITEM: 1 m²

Material Cost (1:01)						
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Trade	No.
MAKING						
L Tubular section	ml	6	8.00	48	Welder	1
Z " "	ml	6	8.00	48	Helper	1
Sheet metal (2mm thick)	m²	1.98	65.00	128.7	Forman	1
Cylinderical lock	pc	1	85.00	85.000	D/L	1
Hinges	pcs	3	12.00	36		
Screw for hinges	pcs	15	0.60	9		
Electrode (3.2 mm)	pcs	10	0.30	3		
Anchor (iron mongery)	pcs	4	2.25	9		
Anti - rust	gal	0.04	60.00	2.4		
Tinner	lit	0.02	5.00	0.1		
FIXING				369.2		
					Forman	1
					CarpenterII	1

					Helper	2
					Chiseler	1
Total (1:-01)						**Total**

A= Materials Unit Cost 369.2 Birr/pc

B=Manpower Unit Cost

Total of (1:02)

Hourly Output

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

Overhead Cos

Profit Cost:

Total Unit Cos

Remark _____

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**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRI

PROJECT: **EXCAVATION AND EARTH WORK.**

WORK ITEM: (1.14) Back fill selected excavated mats. from out side the site.

TOTAL QANTITY OF WORK ITEM: 1 m^3

Material Cost (1:01)					La	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.
				0	operator	1
				0	driver	4
				0		
				0		
				0	foreman	1
				0	DL	1
				0	G.CHIEF	1
				0		
				0		
Total (1:-01)				0		**Total**

A= Materials Unit Cost 0 Birr/m^3

B= Manpower Unit Cost

Total of (1:02)

Hourly Output:

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

Over head cos

Profit Cost:

Total Unit Cos

Remark _____

UF: UTILIZATION FACTOR

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**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

INDIRECT UNIT COSTS

LABOUR HOURLY OUTPUT: 10 kg./hr.

EQUIPEMENT: Welding Mashine

RESULT: 19.64 Birr/kg.

Labour (1:02)			Equipment Cost (1:03)			
UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.	Hourly Rental	Hourly Cost
0.25	7	1.75	Welding M.	1	8.5	8.50
1	2.88	2.88	Cutter	1	5	5.00
1	2.5	2.5	Grinder	1	7	7.00
1	1	2				
1: 02)		9.13	Total (1:03)			20.50

0.91 Birr/kg. C= Equipment Unit Cost 2.05 Birr/kg.

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		14.55	Birr/kg.
Over head cost :	20%	2.91	"
Profit Cost:	15%	2.18	"
Total Unit Cost :		19.64	Birr/kg.

INDIRECT UNIT COSTS

LABOUR HOURLY OUTPUT: 25 pcs./hr.

EQUIPEMENT: Welding Mashine

RESULT: 5867.23 Bir/rpc

Labour (1:02)			Equipment Cost (1:03)			
UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.	Hourly Rental	Hourly Cost
0.33	5	1.65	Welding M.	1	8.5	8.50
0.5	3.75	1.875	Cutter	1	5	5.00
1	2	4	Drill . M	1	10	10.00
1	2.88	2.88				

1: 02)		10.41		**Total (1:03)**		23.50

0.42 Bir/rpc C= Equipment Unit Cost 0.94 Bir/rpc

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		4346.10	Bir/rpc
Over head cost :	20%	869.22	"
Profit Cost:	15%	651.91	"
Total Unit Cost :		5867.23	Bir/rpc

INDIRECT UNIT COSTS

LABOUR HOURLY OUTPUT: 60 pcs./hr.

EQUIPEMENT:

RESULT: 2.32 Bir/rpc

Labour (1:02)			Equipment Cost (1:03)			
UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.	Hourly Rental	Hourly Cost
0.33	5	1.65	Tools	1	2	2.00
0.5	3.75	1.875				
1	2	4				
1: 02)		7.53		**Total (1:03)**		2.00

0.13 Bir/rpc C= Equipment Unit Cost 0.03 Bir/rpc

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		1.86	Bir/rpc
Over head cost :	10%	0.19	"
Profit Cost:	15%	0.28	"
Total Unit Cost :		2.32	Bir/rpc

INDIRECT UNIT COSTS

LABOUR HOURLY OUTPUT: 40 kg./hr.

EQUIPEMENT:

RESULT: 7.54 Bir/rpc

Labour (1:02)			Equipment Cost (1:03)			
UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.	Hourly Rental	Hourly Cost
0.5	5	2.5	Welding M.	1	7.5	7.50
1	3.75	3.75	Cutter	1	5	5.00
0.5	3.75	1.875	Drill . M	1	10	10.00
1	1.25	12.5				0.00
		0				0.00
		0				0.00
		0				0.00
		0				0.00
		0				0.00
		0				0.00
1: 02)		20.63		**Total (1:03)**		22.50

0.52 Bir/rpc

C= Equipment Unit Cost 0.56 Bir/rpc

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		6.03	Bir/rpc
Over head cost :	10%	0.60	"
Profit Cost:	15%	0.91	"
Total Unit Cost :		7.54	Bir/rpc

CT & INDIRECT UNIT COSTS

LABOUR HOURLY OUTPUT: 0.65 m^2/hr

EQUIPEMENT:

RESULT **50.30** Birr/m^2

Equipment Cost (1:03)						
UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.	Hourly Rental	Hourly Cost
1	0.83	0.27				
1	3.75	3.75				
1	1.88	1.88				
(1:02)		5.90		**Total (1:03)**		0

9.0829231 Birr/m² C= Equipment Unit Cost 0 Birr/m²

Total of (1:03)

Hourly output: _____

40.24 Birr/m²

10% 4.02 "

15% 6.04 "

50.30 Birr/m²

CT & INDIRECT UNIT COSTS

LABOUR HOURLY OUTPUT: 0.5 pc/hr 0.7

m2 EQUIPEMENT: Welding & Grinding machine m2/hr.

RESULT: 268.95 Br./m²

Labour (1:02)			Equipment Cost (1:03)			
UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.	Hourly Rental	Hourly Cost
1	3.75	3.75	Weld. Mach.	1	3	3
1	1.9	1.9				0
0.167	5	0.835				0
1	1.25	1.25				0
		0				0
		0				0
		0				0
		0				0
		0				0
		0				0
		7.7				3
0.167	5	0.835				0
1	4.4	4.4				0

1	1.9	3.8				0
1	2.15	2.15				0
		11.185				0
(1:02)			**Total (1:03)**			

15.5 **16.0** Br./pc C= Equipment Unit Cost **6.00** Br./pc

Total of (1:03)

Hourly output:

406.6 Birr/pc

st: 10% 40.66 "

15% 61.00 "

st : 508.31 " 268.95 Br./m²

ECT & INDIRECT UNIT COSTS

LABOUR HOURLY OUTPUT: 72 m³/hr. 0.15 m³/hr.

EQUIPEMENT: Tool

RESULT: 30.17 Birr/m³

abour Cost (1:02)			Equipment Cost (1:03)			
UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.	Hourly Rental	Hourly Cost
1	3.50	3.50	loader	1	168.00	168.00
4	3.00	48.00	dump truck	4	130.00	520.00
		51.50				0
		0.72				0
0.1	5	0.50				0
1	1.25	1.25				0
0.1	1.9	0.19				0
		1.94				0
		12.93				0
(1:02)		**13.65**	**Total (1:03)**			688

13.65 Birr/m³ C= Equipment Unit Cost 9.56 Birr/m³

Total of (1:03)

Hourly output: _____

23.20 Birr/m³

st : 15% 3.48 "

15% 3.48 "

t : 30.17 Birr/m³

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS**
WORK ITEM: russ & Purlin With RHS
TOTAL QANTITY OF WORK ITEM: 1 kg.

LABOUR HOURLY OUTPUT: 50
EQUIPEMENT: Welding Mashine
RESULT: 15.49 Birr/kg.

Material Cost (1:01)					Labour (1:02)					Equipment	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
RHS Different Size	kg.	1.05	10.65	11	Foreman	1	0.75	5	3.75	Welding M.	1
Anti rust	lit	0.02	20	0.40	Carpenter1	1	1	3.75	3.75	Cutter	1
					Welder	1	0.5	3.75	1.875	Grinder	1
					D/L	10	1	1.25	12.5		
Total (1:-01)				11.58	**Total (1: 02)**				21.88		**Total (1:03)**

A= Materials Unit Cost 11.58 Birr/kg.

B= Manpower Unit Cost 0.44 Birr/kg.
Total of (1:02)
Hourly Output: _____

C= Equipment Unit Cost
Total of (1:03)
Hourly output: _____

Direct Cost of Work Item = A+B+C =		12.39 Birr/kg.
Over head cost :	10%	1.24 "
Profit Cost:	15%	1.86 "
Total Unit Cost :		15.49 Birr/kg.

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS**
WORK ITEM: Plate
TOTAL QANTITY OF WORK ITEM: 1 pc

LABOUR HOURLY OUTPUT: 60
EQUIPEMENT: Welding Mashine
RESULT: 3.95 Bir/rpc

Material Cost (1:01)					Labour (1:02)					Equipment	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Plates	pc	1.05	151.88	159	Foreman	1	0.33	5	1.65	Welding M.	1
					Welder	1	0.5	3.75	1.875	Cutter	1
					Helper	2	1	2	4	Drill . M	1
Total (1:-01)				159.47	**Total (1: 02)**				7.53		**Total (1:03)**

A= Materials Unit Cost 2.66 Bir/rpc

B= Manpower Unit Cost 0.13 Bir/rpc
Total of (1:02)
Hourly Output: _____

C= Equipment Unit Cost
Total of (1:03)
Hourly output: _____

Direct Cost of Work Item = A+B+C =		3.16 Bir/rpc
Over head cost :	10%	0.32 "
Profit Cost:	15%	0.47 "
Total Unit Cost :		3.95 Bir/rpc

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS**
WORK ITEM: Bolt
TOTAL QANTITY OF WORK ITEM: 1 pc

LABOUR HOURLY OUTPUT: 60
EQUIPEMENT:
RESULT: 2.32 Bir/rpc

Material Cost (1:01)					Labour (1:02)					Equipment	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Bolts	pc	1	1.7	2	Foreman	1	0.33	5	1.65	Tools	1
					Welder	1	0.5	3.75	1.875		
					Helper	2	1	2	4		
Total (1:-01)				1.70	**Total (1: 02)**				7.53		**Total (1:03)**

A= Materials Unit Cost 1.70 Bir/rpc

B= Manpower Unit Cost 0.13 Bir/rpc
Total of (1:02)
Hourly Output: _____

C= Equipment Unit Cost
Total of (1:03)
Hourly output: _____

Direct Cost of Work Item = A+B+C =		1.86 Bir/rpc
Over head cost :	10%	0.19 "
Profit Cost:	15%	0.28 "
Total Unit Cost :		2.32 Bir/rpc

Remark _____
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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS**
WORK ITEM: Angle iron
TOTAL QANTITY OF WORK ITEM: 1 pc

LABOUR HOURLY OUTPUT: 40
EQUIPEMENT:
RESULT: 7.54 Bir/rpc

Material Cost (1:01)					Labour (1:02)					Equipment	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Angle iron	pc	1.05	4.72	5	Foreman	1	0.5	5	2.5	Welding M.	1
				0.00	Carpenter1	1	1	3.75	3.75	Cutter	1
				0.00	Welder	1	0.5	3.75	1.875	Drill . M	1
				0.00	D/L	10	1	1.25	12.5		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				4.96	**Total (1: 02)**				20.63		**Total (1:03)**

A= Materials Unit Cost 4.96 Bir/rpc

B= Manpower Unit Cost 0.52 Bir/rpc
Total of (1:02)
Hourly Output: _____

C= Equipment Unit Cost
Total of (1:03)
Hourly output: _____

Direct Cost of Work Item = A+B+C =		6.03 Bir/rpc
Over head cost :	10%	0.60 "
Profit Cost:	15%	0.91 "
Total Unit Cost :		7.54 Bir/rpc

Remark _____
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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **CARPENTRY & JOINERY**
WORK ITEM 10mm. thick chipwood Ceiling.
TOTAL QANTITY OF WORK ITEM: 1 m^2

LABOUR HOURLY OUTPUT: 0.65
EQUIPEMENT:
RESULT **50.30** Birr/m^2

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Chip wood Diam.10mm	m^2	1.05	38.32	40.236	Foreman	0.33	1	0.83	0.27		
					Carpenter II	1	1	3.75	3.75		
					Helper	1	1	1.88	1.88		
Total (1:-01)				**40.236**	**Total (1:02)**				5.90		**Total (1:03)**

A= Material unit cost **40.24** Birr/m^2

B=Manpower Unit Cost **9.0829231** Birr/m^2
Total of (1:02)
Hourly Output

C= Equipment Unit Cost
Total of (1:03)
Hourly output: _____

Direct Cost of work item = A+B+C =		**40.24**	Birr/m^2
Overhead Cost :	10%	4.02	"
Profit Cost:	15%	6.04	"
Total Unit Cost :		**50.30**	Birr/m^2

Remark _____
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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: ***METAL WORK*** LABOUR HOURLY OUTPUT: 0.5

WORK ITEM: Fully metal doors of 38LTZ without grill 90 x210cm 1.89 m2 EQUIPEMENT: Welding & Grinding machine

TOTAL QUANTITY OF WORK ITEM: 1 m^2 RESULT: 268.95 Br./m^2

Material Cost (1:01)					Labour (1:02)					Equipm	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Trade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
MAKING											
L Tubular section	ml	6	8.00	48	Welder	1	1	3.75	3.75	Weld. Mach.	1
Z " "	ml	6	8.00	48	Helper	1	1	1.9	1.9		
Sheet metal (2mm thick)	m^2	1.98	65.00	128.7	Forman	1	0.167	5	0.835		
Cylinderical lock	pc	1	85.00	85.000	D/L	1	1	1.25	1.25		
Hinges	pcs	3	12.00	36					0		
Screw for hinges	pcs	15	0.60	9					0		
Electrode (3.2 mm)	pcs	10	0.30	3					0		
Anchor (iron mongery)	pcs	4	2.25	9					0		
Anti - rust	gal	0.04	60.00	2.4					0		
Tinner	lit	0.02	5.00	0.1					0		
FIXING				369.2					7.7		
					Forman	1	0.167	5	0.835		
					CarpenterII	1	1	4.4	4.4		
					Helper	2	1	1.9	3.8		
					Chiseler	1	1	2.15	2.15		
									11.185		
Total (1:-01)					**Total (1:02)**					**Total (1:03)**	

A= Materials Unit Cost 369.2 Birr/pc

B=Manpower Unit Cost **15.5** **16.0** Br./pc

Total of (1:02)

Hourly Output

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

Overhead Cost: 10%

C= Equipment Unit Cost

Total of (1:03)

Hourly output:

406.6 Birr/pc

40.66 "

Profit Cost:	15%	61.00	"
Total Unit Cost :		508.31	"

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **EXCAVATION AND EARTH WORK.**

WORK ITEM: (1.14) Back fill selected excavated mats. from out side the site.

TOTAL QANTITY OF WORK ITEM: 1 m^3

LABOUR HOURLY OUTPUT: 72

EQUIPEMENT: Tool

RESULT: 30.17 $Birr/m^3$

Material Cost (1:01)					Labour Cost (1:02)					Equipment	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
				0	operator	1	1	3.50	3.50	loader	1
				0	driver	4	4	3.00	48.00	dump truck	4
				0					51.50		
				0					**0.72**		
				0	foreman	1	0.1	5	0.50		
				0	DL	1	1	1.25	1.25		
				0	G.CHIEF	1	0.1	1.9	0.19		
				0					1.94		
				0					12.93		
Total (1:-01)				0	**Total (1:02)**				**13.65**		**Total (1:03)**

A= Materials Unit Cost 0 $Birr/m^3$

B= Manpower Unit Cost 13.65 $Birr/m^3$

Total of (1:02)

Hourly Output:

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 23.20 $Birr/m^3$

Over head cost :	15%	3.48	"
Profit Cost:	15%	3.48	"
Total Unit Cost :		30.17	$Birr/m^3$

Remark _____

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kg./hr.

Cost (1:03)	
Hourly Rental	Hourly Cost
7.5	7.50
5	5.00
6	6.00
	18.50

0.37 Birr/kg.

pcs./hr.

Cost (1:03)	
Hourly Rental	Hourly Cost
7.5	7.50
5	5.00
10	10.00
	22.50

0.38 Bir/rpc

pcs./hr.

Cost (1:03)	
Hourly Rental	Hourly Cost
2	2.00
	2.00

0.03 Bir/rpc

kg./hr.

Cost (1:03)	
Hourly Rental	Hourly Cost
7.5	7.50
5	5.00
10	10.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	22.50

0.56 Bir/rpc

m^2/hr

Hourly Rental	Hourly Cost
	0

0 Birr/m^2

pc/hr 0.7

m2/hr.

ıent Cost (1:03)	
Hourly Rental	Hourly Cost
3	3
	0
	0
	0
	0
	0
	0
	0
	0
	0
	3
	0
	0
	0
	0
	0

6.00 Br./pc

268.95 Br./m^2

m^3/hr. 0.15 m^3/hr.

Cost (1:03)	
Hourly Rental	Hourly Cost
168.00	168.00
130.00	520.00
	0
	0
	0
	0
	0
	0
	0
	688

9.56 Birr/m^3

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS** LABOUR HOURLY OUTPUT: 2.8

WORK ITEM: (7.21) Copping Development Zize 33 cm. EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml. RESULT: 24.45 Birr/ml.

Material Cost (1:01)					Labour (1:02)					Equipment Co	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
G28 Sheet Metal Copping				0	Foreman	1	0.167	5	0.84		
Dev. Zize 33 cm.	ml.	1.05	16	16.8	Carpenter1	1	1	3.75	3.75		
				0	Helper	1	1	1.9	1.90		
				0	D/L	1	1	1.25	1.25		
									0.00		
									0.00		
									0.00		
									0.00		
									0.00		
									0.00		
Total (1:-01)				16.8	**Total (1: 02)**				7.74	**Total (1:03)**	

A= Materials Unit Cost 16.80 Birr/ml.

B= Manpower Unit Cost 2.76 Birr/ml.

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 19.56 Birr/ml.

O Over head cost : 10% 1.96 "

Pro Profit Cost: 15% 2.93 "

Tota Total Unit Cost : 24.45 Birr/ml.

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FORM WORKS**
WORK ITEM: (5.1) For Foundation Footing & Column.
TOTAL QANTITY OF WORK ITEM: 1 m^2

LABOUR HOURLY OUTPUT: 0.6
EQUIPEMENT:
RESULT: 67.42 Birr/m^2

Material Cost (1:01)					Labour (1:02)					Equipment Co	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
2.5cm thick timber	M^2	1.05	35	36.75	Foreman	1	0.167	5	0.83		
40 x 50 cm. battens	M	0.32	12	3.84	Carpenter	1	1	3.75	3.75		
Nails	Kg	0.05	8	0.4	Helper	1	1	1.9	1.90		
Mould Oil	Lit.	0.015	4	0.06	D/L	1	1	1.25	1.25		
									0.00		
									0.00		
									0.00		
									0.00		
									0.00		
									0.00		
Total (1:-01)				41.05	**Total (1:02)**				7.73	**Total (1:03)**	

A= Materials Unit Cost 41.05 Birr/m^2

B= Manpower Unit Cost 12.89 Birr/m^2
Total of (1:02)
Hourly Output: _____

C=Equipment Unit Cost
Total of (1:03)
Hourly output: _____

Direct Cost of Work Item = A+B+C = 53.94 Birr/m^2
Over he Over head cost : 10% 5.39 Birr/m^2
Profit cos Profit Cost: 15% 8.09 Birr/m^2
Total unit Total Unit Cost : 67.42 Birr/m^2

Remark _____
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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FORM WORK**
WORK ITEM: _ (5.2) For Grade Beam.
TOTAL QUANTITY OF WORK ITEM : 1 m^2

LABOUR HOURLY OUTPUT: 0.5
EQUIPEMENT:
RESULT: 69.26 Birr/m^2

Material Cost (1:01)	Labour (1:02)	Equipment Co

Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
2.5cm thick timber	M²	1.05	35	36.75	Foreman	1	0.167	5	0.84		
50 x 70 cm battens	M	0.11	7.5	0.825	Carpenter	1	1	3.75	3.75		
Strut 0 60 mm	M	0.1	1.2	0.12	Helper	1	1	1.9	1.90		
Nails	Kg	0.25	8	2	D/L	1	1	1.25	1.25		
Mould Oil	Lit.	0.06	4	0.24					0.00		
									0.00		
									0.00		
									0.00		
									0.00		
									0.00		
Total (1:-01)				39.94	**Total (1:02)**				7.74	**Total (1:03)**	

A= Materials Unit Cost 39.935 Birr/m²

B= Manpower Unit Cost 15.47 Birr/m²

Total of (1:02)

Hourly Output:

C=Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 55.41 Birr/m²

O Over head cost : 10% 5.54 Birr/m²

Pro Profit Cost: 15% 8.31 Birr/m²

Tota Total Unit Cost : __ 69.26 Birr/m²

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FORM WORK**

WORK ITEM: (5.3) For Elevation Column.

TOTAL QUANTITY OF WORK ITEM : _ 1 m²

LABOUR HOURLY OUTPUT: __ 0.5

EQUIPEMENT:

RESULT: 73.19 Birr/m²

Material Cost (1:01)					Labour (1:02)					Equipment Co	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
2.5cm thick timber	M²	1.05	35	36.75	Foreman	1	0.167	5	0.84		
50 x 70 cm battens	M	0.46	7.5	3.45	Carpenter	1	1	3.75	3.75		

Strut 60 mm. dia.	M	0.2	1.2	0.24	Helper	1	1	1.9	1.90		
Nails	Kg	0.3	8	2.4	D/L	1	1	1.25	1.25		
Mould Oil	Lit.	0.06	4	0.24					0.00		
				0					0.00		
									0.00		
									0.00		
									0.00		
									0.00		
Total (1:-01)				43.08	**Total (1:02)**				7.74	**Total (1:03)**	

A= Materials Unit Cost 43.08 Birr/m²

B= Manpower Unit Cost 15.47 Birr/m²

Total of (1:02)

Hourly Output:

C=Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =			58.55 Birr/m²
O	Over head cost : __	10%	5.86 Birr/m²
Pro	Profit Cost:	15%	8.78 Birr/m²
Tota	Total Unit Cost : _		73.19 Birr/m²

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FORM WORK**

WORK ITEM: (5.4) For Suspended slab & shear wall.

TOTAL QUANTITY OF WORK ITEM : 1 m²

LABOUR HOURLY OUTPUT: 1

EQUIPEMENT:

RESULT 68.18 Birr/m²

Material Cost (1:01)					Labour (1:02)					Equipment Co	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
2.5cm thick timber	M²	1.05	35	36.75	Foreman	1	0.167	5.00	0.84		
50 x 70 cm battens	M	0.84	7.5	6.3	Carpenter	1	1	3.75	3.75		
50 x 70 cm battens	M	0.1	10	1	Helper	1	1	1.9	1.90		
Strut 0 60 mm	M	0.1	1.2	0.12	D/L	1	1	1.25	1.25		
Nails	Kg	0.3	8	2.4					0.00		
Mould Oil	Lit.	0.06	4	0.24					0.00		

				0					0.00		
				0					0.00		
				0					0.00		
									0.00		
Total (1:-01)				46.81	**Total (1:02)**				7.74	**Total (1:03)**	

A= Materials Unit Cost 46.81 Birr/m²

B= Manpower Unit Cost 7.74 Birr/m²

Total of (1:02)

Hourly Output:

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

O Over head cost : _ 10%

Pro Profit Cost: 15%

Tota Total Unit Cost :

C=Equipment Unit Cost

Total of (1:03)

Hourly output: _____

54.55 Birr/m²

5.45 Birr/m²

8.18 Birr/m²

68.18 Birr/m²

Remark _____

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS**

WORK ITEM: (7.22) Flashing Development Size 19 cm.

TOTAL QANTITY OF WORK ITEM: 1 m

LABOUR HOURLY OUTPUT: _ 2.8

EQUIPEMENT:

RESULT: _____ 22.13 Birr/m.

Material Cost (1:01)					Labour (1:02)					Equipment Co	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
G28 Sheet Metal Flasing				0	Foreman	1	0.167	5	0.84		
Dev. Size 19 cm.	ml.	1.05	14	14.7	Carpenter	1	1	3.75	3.75		
Nails	kg	0.03	8	0.24	Helper	1	1	1.9	1.90		
				0	D/L	1	1	1.25	1.25		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
									0.00		
Total (1:-01)				14.94	**Total (1:02)**				7.74	**Total (1:03)**	

A= Materials Unit Cost 14.94 Birr/m

B= Manpower Unit Cost _ 2.76 Birr/m

Total of (1:02)

Hourly Output 7.73/2.8 = 2.75

C=Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =			17.70 Birr/m.
Over Head :		10%	1.77 Birr/m.
Pro Profit Cost:		15%	2.66 Birr/m.
To Total Unit Cost :			22.13 Birr/m.

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS**

LABOUR HOURLY OUTPUT: 3.4

WORK ITEM: (7.17) Down Pipe Development Size 33 cm.

EQUIPMENT:

TOTAL QUANTITY OF WORK ITEM: 1 m.

RESULT: 24.97 Birr/m.

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
G28 Sheet Metal Down				0	Foreman	1	0.167	5	0.84		
Pipe Dev. Size 33 cm.	ml.	1.05	14	14.7	Carpenter	1	1	3.75	3.75		
Staffa For Down Pipe	pcs.	2	1.5	3	Helper	1	1	1.9	1.90		
				0	D/L	1	1	1.25	1.25		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
									0.00		
Total (1:-01)				17.70	**Total (1:02)**				7.74	**Total (1:03)**	

A= Materials Unit Cost__ 17.7 Birr/m

B= Manpower Unit Cost 2.28 Birr/m

Total of (1:02)

Hourly Output: 7.73/3.4

C=Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 19.98 Birr/m.

O	Over head cost : _	10%	2.00	Birr/m.
Pro	Profit Cost: _	15%	3.00	Birr/m.
Tota	Total Unit Cost :		24.97	Birr/m.

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS** LABOUR HOURLY OUTPUT: 3.4

WORK ITEM: (7.18) Down Pipe Development Size 40 cm. EQUIPMENT:

TOTAL QUANTITY OF WORK ITEM: 1 m RESULT: 28.91 Birr/m.

Material Cost (1:01)					Labour (1:02)					Equipment Co	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
G28 Sheet Metal Down				0	Foreman	1	0.167	5	0.84		
Pipe Dev. Size 40 cm.	ml.	1.05	17	17.85	Carpenter	1	1	3.75	3.75		
Staffa For Down Pipe	pcs.	2	1.5	3	Helper	1	1	1.9	1.90		
				0	D/L	1	1	1.25	1.25		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
Total (1:-01)				20.85	**Total (1:02)**				7.74	**Total (1:03)**	

A= Materials Unit Cost_ 20.85 Birr/m

B= Manpower Unit Cost 2.28 Birr/m

Total of (1:02)

Hourly Output: 7.73/3.4

C=Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 23.13 Birr/m.

O	Over head cost :	10%	2.31	Birr/m.
Pro	Profit Cost:	15%	3.47	Birr/m.
Tota	Total Unit Cost :		28.91	Birr/m.

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS** LABOUR HOURLY OUTPUT: 3.4
WORK ITEM: (7.19) Down Pipe Development Size 50 cm. EQUIPMENT:
TOTAL QUANTITY OF WORK ITEM: _ 1 m RESULT: _ 34.81 Birr/m.

Material Cost (1:01)					Labour (1:02)					Equipment Co	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
G28 Sheet Metal Down				0	Foreman	1	0.167	5	0.84		
Pipe Dev. Size 50 cm.	ml.	1.05	21.5	22.575	Carpenter	1	1	3.75	3.75		
Staffa For Down Pipe	pcs.	2	1.5	3	Helper	1	1	1.9	1.90		
				0	D/L	1	1	1.25	1.25		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
Total (1:-01)				25.58	**Total (1:02)**				7.74	**Total (1:03)**	

A= Materials Unit Cost_ 25.575 birr/m.

B= Manpower Unit Cost 2.28 Birr/m
Total of (1:02)
Hourly Output: 7.73/3.4

C=Equipment Unit Cost
Total of (1:03)
Hourly output:

Direct Cost of Work Item = A+B+C =_ 27.85 Birr/m.
O Over head cost : _ 10% 2.79 Birr/m.
Pro Profit Cost: _ 15% 4.18 Birr/m.
Tota Total Unit Cost : 34.81 Birr/m.

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS** LABOUR HOURLY OUTPUT: 3.4

WORK ITEM: (7.20) Down Pipe Development Size 60 cm. EQUIPMENT:

TOTAL QUANTITY OF WORK ITEM: 1 m RESULT: 40.06 Birr/m.

Material Cost (1:01)					Labour (1:02)					Equipment Co	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
G28 Sheet Metal Down				0	Foreman	1	0.167	5	0.84		
Pipe Dev. Size 50 cm.	ml.	1.05	25.5	26.78	Carpenter	1	1	3.75	3.75		
Staffa For Down Pipe	pcs.	2	1.5	3	Helper	1	1	1.9	1.90		
				0	D/L	1	1	1.25	1.25		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
Total (1:-01)				29.78	**Total (1:02)**				7.74	**Total (1:03)**	

A= Materials Unit Cost 29.775 birr/m.

B= Manpower Unit Cost 2.28 Birr/m

Total of (1:02)

Hourly Output: 7.73/3.4

C=Equipment Unit Cost

Total of (1:03)

Hourly output:

Direct Cost of Work Item = A+B+C = 32.05 Birr/m.

O Over head cost : 10% 3.21 Birr/m.

Pro Profit Cost: 15% 4.81 Birr/m.

Tota Total Unit Cost : 40.06 Birr/m.

Remark

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS** LABOUR HOURLY OUTPUT: 2.6

WORK ITEM: (7.12) Gutter Development Size 33 cm. EQUIPEMENT:

TOTAL QUANTITY OF WORK ITEM: 1 m RESULT: _ 25.84 Birr/m.

Material Cost (1:01)					Labour (1:02)					Equipment Co	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
G28 Sheet Metal Gutter				0	Foreman	1	0.167	5	0.84		
Dev. Size 33 cm.	m	1.05	14	14.7	Carpenter	1	1	3.75	3.75		
Staffa For Gutter	pcs.	2	1.5	3	Helper	1	1	1.9	1.90		
				0	D/L	1	1	1.25	1.25		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
Total (1:-01)				17.70	**Total (1:02)**				7.74	**Total (1:03)**	

A= Materials Unit Cost 17.7 birr/m. B= Manpower Unit Cost 2.98 Birr/m C=Equipment Unit Cost

Total of (1:02) Total of (1:03)

Hourly Output: 7.73/2.6 Hourly output: _____

Direct Cost of Work Item = A+B+C = 20.68 Birr/m.

O Over head cost : 10% 2.07 Birr/m.

Pro Profit Cost: 15% 3.10 Birr/m.

Tota Total Unit Cost : 25.84 Birr/m.

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS** LABOUR HOURLY OUTPUT: 2.6

WORK ITEM: (7.13) Gutter Development Size 40 cm. EQUIPEMENT:
TOTAL QANTITY OF WORK ITEM: 1 m RESULT: 29.78 Birr/m.

Material Cost (1:01)					Labour (1:02)					Equipment Co	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
G28 Sheet Metal Gutter				0	Foreman	1	0.167	5	0.84		
Dev. Size40 cm.	m	1.05	17	17.85	Carpenter	1	1	3.75	3.75		
Staffa For Gutter	pcs.	2	1.5	3	Helper	1	1	1.9	1.90		
				0	D/L	1	1	1.25	1.25		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
Total (1:-01)				20.85	**Total (1:02)**				7.74	**Total (1:03)**	

A= Materials Unit Cost 20.85 birr/m. B= Manpower Unit Cost 2.98 Birr/m C=Equipment Unit Cost
Total of (1:02) Total of (1:03)
Hourly Output: 7.73/2.6 Hourly output:
Direct Cost of Work Item = A+B+C = 23.83 Birr/m.
O Over head cost : 10% 2.38 Birr/m.
Pro Profit Cost: 15% 3.57 Birr/m.
Tota Total Unit Cost 29.78 Birr/m.

Remark _____
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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS** LABOUR HOURLY OUTPUT: 2.6
WORK ITEM: (7.14) Gutter Development Size 50 cm. EQUIPEMENT:
TOTAL QANTITY OF WORK ITEM: 1 m RESULT: 35.69 Birr/m.

Material Cost (1:01)	Labour (1:02)	Equipment Co

Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
G28 Sheet Metal Gutter				0.00	Foreman	1	0.167	5	0.84		
Dev. Size 50 cm.	m	1.05	21.5	22.58	Carpenter	1	1	3.75	3.75		
Staffa For Gutter	pcs.	2	1.5	3	Helper	1	1	1.9	1.90		
				0	D/L	1	1	1.25	1.25		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
Total (1:-01)				25.58	**Total (1:02)**				7.74	**Total (1:03)**	

A= Materials Unit Cost_ 25.575 birr/m.

B= Manpower Unit Cost 2.98 Birr/m

Total of (1:02)

Hourly Output: 7.73/2.6

C=Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 28.55 Birr/m.

O Over head cost : 10% 2.86 Birr/m.

Pro Profit Cost: _ 15% 4.28 Birr/m.

Tota Total Unit Cost : 35.69 Birr/m.

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS**

WORK ITEM: (7.15) Gutter Development Size 60 cm.

TOTAL QANTITY OF WORK ITEM: 1 m

LABOUR HOURLY OUTPUT: 2.6

EQUIPEMENT:

RESULT: 48.43 Birr/m.

Material Cost (1:01)					Labour (1:02)					Equipment Co	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
G28 Sheet Metal Gutter				0.00	Foreman	1	0.167	6.25	1.04		

Dev. Size 60 cm.	m	1.05	30	31.50	Carpenter	1	1	5	5.00		
Staffa For Gutter	pcs.	2	1.5	3.00	Helper	1	1	3	3.00		
				0.00	D/L	1	1	2	2.00		
				0.00					0.00		
				0.00					0.00		
				0.00					0.00		
				0.00					0.00		
				0.00					0.00		
				0.00					0.00		
Total (1:-01)				34.50	**Total (1:02)**				11.04	**Total (1:03)**	

A= Materials Unit Cost_ 34.5 birr/m.

B= Manpower Unit Cost 4.25 Birr/m

Total of (1:02)

Hourly Output: 7.73/2.6

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =			38.75 Birr/m.
O	Over head cost : _	10%	3.87 Birr/m.
Pro	Profit Cost:	15%	5.81 Birr/m.
Tota	Total Unit Cost :		48.43 Birr/m.

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS**

WORK ITEM: (7.16) Gutter Development Size 100 cm.

TOTAL QANTITY OF WORK ITEM: 1 ml.

LABOUR HOURLY OUTPUT: 2.6

EQUIPEMENT:

RESULT: 63.25 Birr/m.

Material Cost (1:01)					Labour (1:02)					Equipment Co	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
G28 Sheet Metal Gutter				0.00	Foreman	1	0.167	5	0.84		
Dev. Size100 cm.	m	1.05	42.5	44.63	Carpenter	1	1	3.75	3.75		
Staffa For Gutter	pcs.	2	1.5	3.00	Helper	1	1	1.9	1.90		
				0.00	D/L	1	1	1.25	1.25		
				0.00					0.00		

				0.00					0.00		
				0.00					0.00		
				0.00					0.00		
				0.00					0.00		
				0.00					0.00		
Total (1:-01)				47.63	**Total (1:02)**				7.74	**Total (1:03)**	

A= Materials Unit Cost_ 47.625 birr/m.

B= Manpower Unit Cost 2.98 Birr/m

Total of (1:02)

Hourly Output: 7.73/2.6

Direct Cost of Work Item = A+B+C =_ 50.60 Birr/m.

O Over head cost : _ 10% 5.06 Birr/m.

Pro Profit Cost: _ 15% 7.59 Birr/m.

Tota Total Unit Cost : 63.25 Birr/m.

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS**

WORK ITEM: (7.23) 15 cm. Wide Kerrero Facia Board

TOTAL QANTITY OF WORK ITEM: 1 ml.

LABOUR HOURLY OUTPUT: _ 1.5

EQUIPEMENT:

RESULT: 27.85 Birr/m.

Material Cost (1:01)					Labour (1:02)					Equipment Co	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
15 cm. Wide Faciaboard	ml.	1.1	16.25	17.88	Carpenter1	1	1	3.75	3.75		
Nails	kg.	0.03	8	0.24	D/L	2	1	1.25	2.50		
				0.00					0.00		
				0.00					0.00		
				0.00					0.00		
				0.00					0.00		
				0.00					0.00		
				0.00					0.00		
				0.00					0.00		

				0.00					0.00		
Total (1:-01)				18.12	**Total (1:02)**				6.25	**Total (1:03)**	

A= Materials Unit Cost 18.12 birr/m. B= Manpower Unit Cost 4.17 Birr/m C= Equipment Unit Cost

Total of (1:02) Total of (1:03)

Hourly Output: 13.2/0.48 Hourly output: _____

Direct Cost of Work Item = A+B+C = 22.28 Birr/m.

O Over head cost : 10% 2.23 Birr/m.

Pro Profit Cost: 15% 3.34 Birr/m.

Tota Total Unit Cost : 27.85 Birr/m.

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS** LABOUR HOURLY OUTPUT: 1.5

WORK ITEM: (7.24) 20 cm. Wide Kerrero Facia Board EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml. RESULT: 34.73 Birr/m.

Material Cost (1:01)					Labour (1:02)					Equipment Co	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
20 cm. Wide Faciaboard	ml.	1.1	21.25	23.38	Carpenter1	1	1	3.75	3.75		
Nails	kg.	0.03	8	0.24	D/L	2	1	1.25	2.50		
				0.00					0.00		
				0.00					0.00		
				0.00					0.00		
				0.00					0.00		
				0.00					0.00		
				0.00					0.00		
				0.00					0.00		
				0.00					0.00		
Total (1:01)				23.62	**Total (1:02)**				6.25	**Total (1:03)**	

A= Materials Unit Cost 23.62 birr/m. B= Manpower Unit Cost 4.17 Birr/m C= Equipment Unit Cost

	Total of (1:02)			Total of (1:03)
	Hourly Output: 10.88/7			Hourly output:
	Direct Cost of Work Item = A+B+C =		27.78	Birr/m.
O	Over head cost :	10%	2.78	Birr/m.
Pro	Profit Cost:	15%	4.17	Birr/m.
Tota	Total Unit Cost :		34.73	Birr/m.

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS**

LABOUR HOURLY OUTPUT: 3.5

WORK ITEM: (7.1) G32 CIS Roofing (Including Truss & Purlins)

EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 108 m2 = 9 Trusses =127 ml. Purlin

RESULT: 59.37 Birr/m²

Material Cost (1:01)					Labour (1:02)					Equipment Co	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
G32 Corugated iron sheet	m²	108	24.43	2638.44	Fore Man	1	0.167	5	0.84		
Roofing Nails	kg.	12	10	120	Carpenter1	1	1	3.75	3.75		
Plastic Washer	pkt.	5	1	5	Helper	1	1	1.9	1.90		
Ridge Cover	m.	13	10	130	D/L	1	1	1.25	1.25		
				2893.44					7.73		
Upper Chord	ml.	83	1.75	145.25	Fore Man	1	0.25	5	1.25		
Lower chord	ml.	78	1.75	136.5	Carpenter2	1	1	4.4	4.40		
Vertical & Diagonal Members	ml.	79	1.2	94.8	Carpenter1	1	1	3.75	3.75		
6 & 8 cm. Nails	kg.	15	8	120	Helper	2	1	1.9	3.80		
Fixing Bands	kg.	16	4	64					13.20		
				560.55	Fore Man	1	0.167	5	0.84		
5 X 7 cm. Zigba Purlin	ml.	127	7.5	952.5	Carpenter2	1	1	4.4	4.40		
8 cm. Nails	kg.	5	8	40	Helper	1	1	1.9	1.90		
				992.5	D/L	3	1	1.25	3.75		
									10.89		
Total (1:-01)				4446.49	**Total (1:02)**					**Total (1:03)**	

A= Materials Unit Cost	41.17	Birr/m²	B= Manpower Unit Cost	2.21	2.28	1.83	6.32	C= Equipment Unit Cost

Direct Cost of Work Item = A+B+C =		47.49	Birr/m²
Over head cost :	10%	4.75	Birr/m²
Profit Cost:	15%	7.12	Birr/m²
Total Unit Cost :		59.37	Birr/m²

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS**
WORK ITEM: (7.2) G30 CIS Roofing (Including Truss & Purlins)
TOTAL QANTITY OF WORK ITEM: 108 m2 = 9 Trusses =127 ml. Purlin

LABOUR HOURLY OUTPUT: 3.5
EQUIPEMENT:
RESULT: 25.09 Birr/m²

Material Cost (1:01)					Labour (1:02)					Equipment Co	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
G30 Corugated iron sheet	m²	108	28.41	3068.28	Fore Man	1	0.167	5	0.84		
Roofing Nails	kg.	12	10	120	Carpenter1	1	1	3.75	3.75		
Plastic Washer	pkt.	5	1	5	Helper	1	1	1.9	1.90		
Ridge Cover	m.	13	10	130	D/L	1	1	1.25	1.25		
				3323.28					7.73		
Upper Chord	ml.	83	1.75	145.25	Fore Man	1	0.25	5	1.25		
Lower chord	ml.	78	1.75	136.5	Carpenter2	1	1	4.4	4.40		
Vertical & Diagonal Members	ml.	79	1.2	94.8	Carpenter1	1	1	3.75	3.75		
6 & 8 cm. Nails	kg.	15	8	120	Helper	2	1	1.9	3.80		
Fixing Bands	kg.	16	4	64					13.20		
				560.55	Fore Man	1	0.167	5	0.84		
5 X 7 cm. Zigba Purlin	ml.	127	7.5	952.5	Carpenter2	1	1	4.4	4.40		
8 cm. Nails	kg.	5	8	40	Helper	1	1	1.9	1.90		
				992.5	D/L	3	1	1.25	3.75		
									10.89		
Total (1:-01)				992.5	**Total (1:02)**					**Total (1:03)**	

A= Materials Unit Cost	9.19	Birr/m²	B= Manpower Unit Cost	2.21	2.28	1.83	10.89	C= Equipment Unit Cost

Direct Cost of Work Item = A+B+C =		20.07	Birr/m²
Over head cost :	10%	2.01	Birr/m²
Profit Cost:	15%	3.01	Birr/m²
Total Unit Cost :		25.09	Birr/m²

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS** LABOUR HOURLY OUTPUT: 3.5

WORK ITEM: (7.3) G28 CIS Roofing (Including Truss & Purlins) EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 108 m2 = 9 Trusses =127 ml. Purlin RESULT: 23.44 Birr/m²

Material Cost (1:01)					Labour (1:02)					Equipment Co	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
G28 Corugated iron sheet	m²	108	40	4320	Fore Man	1	0.167	6.25	1.04		
Roofing Nails	kg.	12	10	120	Carpenter1	1	1	5	5.00		
Plastic Washer	pkt.	5	1	5	Helper	1	1	3	3.00		
Ridge Cover	m.	13	10	130	D/L	1	1	2	2.00		
				4575					11.04		
Upper Chord	ml.	83	1.75	145.25	Fore Man	1	0.25	6.25	1.56		
Lower chord	ml.	78	1.75	136.5	Carpenter2	1	1	5	5.00		
Vertical & Diagonal Members	ml.	79	1.2	94.8	Carpenter1	1	1	3	3.00		
6 & 8 cm. Nails	kg.	15	8	120	Helper	2	1	2	4.00		
Fixing Bands	kg.	16	4	64					13.56		
				560.55	Fore Man	1	0.167	6.25	1.04		
5 X 7 cm. Zigba Purlin	ml.	127	7.5	952.5	Carpenter2	1	1	5	5.00		
8 cm. Nails	kg.	5	8	40	Helper	1	1	3	3.00		
				992.5	D/L	3	1	2	6.00		
									15.04		
Total (1:-01)				6128.05	**Total (1:02)**					**Total (1:03)**	

A= Materials Unit Cost	5.19	Birr/m²	B= Manpower Unit Cost	3.155	2.35	2.53	13.56	C= Equipment Unit Cost

Direct Cost of Work Item = A+B+C =		18.75	Birr/m²
Over head cost :	10%	1.88	Birr/m²
Profit Cost:	15%	2.81	Birr/m²
Total Unit Cost :		23.44	Birr/m²

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS**

WORK ITEM: (7.7) 10 cm. dia. Upper & Lower Chords Eucaliptus Wood.

TOTAL QANTITY OF WORK ITEM: 17.89 ml. = 1 Trusse

LABOUR HOURLY OUTPUT: 8.59

EQUIPEMENT:

RESULT: 5.37 Birr/ml.

Material Cost (1:01)					Labour (1:02)					Equipment Co	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
O 10 cm. Upper Chord	ml.	9.22	2.3	21.21	Foreman	1	0.25	5	1.25		
O 10 cm. Lower Chord	"	8.67	2.3	19.94	Carpenter2	1	1	4.4	4.4		
10 - 12 cm. Nails	kg.	1.11	8	8.88	Helper	2	1	1.9	3.8		
Fixing Bands	"	1.78	4	7.12					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				57.15	**Total (1: 02)**				9.45	**Total (1:03)**	

A= Materials Unit Cost 3.19 Birr/ml.

B= Manpower Unit Cost 1.10 Birr/ml.

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		4.29	Birr/ml.
O Over head cost :	10%	0.43	"
Pro Profit Cost:	15%	0.64	"
Tota Total Unit Cost :		5.37	Birr/ml.

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS**
WORK ITEM: (7.4) G32 C I S Roofing (Without Truss & Purlin)
TOTAL QANTITY OF WORK ITEM: 108 M^2

LABOUR HOURLY OUTPUT: 3.5
EQUIPEMENT:
RESULT: 42.30 Birr/m^2

Material Cost (1:01)					Labour (1:02)					Equipment Co	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
G32 CIS	m^2	108.00	24.43	2638.44	Foreman	1	0.167	9.12	1.52304		
Roofing nails.	kg.	12	10	120.00	Carpentr1	1	1	15	15		
Plastic Washer.	pkt.	5	1	5.00	Helper	1	1	1.9	1.9		
Ridge cover.	ml.	13	10	130.00	D/L	1	1	6.25	6.25		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				2893.44	**Total (1: 02)**				24.67	**Total (1:03)**	

A= Materials Unit Cost 26.79 Birr/m^2

B= Manpower Unit Cost 7.04944 Birr/m^2
Total of (1:02)
Hourly Output: _____

C= Equipment Unit Cost
Total of (1:03)
Hourly output: _____

Direct Cost of Work Item = A+B+C =			33.84 Birr/m^2
O	Over head cost :	10%	3.38 "
Pro	Profit Cost:	15%	5.08 "
Tota	Total Unit Cost :		42.30 Birr/m^2

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS** LABOUR HOURLY OUTPUT: 3.5

WORK ITEM: (7.5) G30 C I S Roofing (Without Truss & Purlin) EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 108 M² RESULT: 41.23 Birr/m²

Material Cost (1:01)					Labour (1:02)					Equipment Co	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
G30 CIS	m²	108.00	28.41	3068.28	Foreman	1	0.167	5	0.835		
Roofing nails.	kg.	12	10	120.00	Carpentr1	1	1	3.75	3.75		
Plastic Washer.	pkt.	5	1	5.00	Helper	1	1	1.9	1.9		
Ridge cover.	ml.	13	10	130.00	D/L	1	1	1.25	1.25		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				3323.28	**Total (1: 02)**				7.74	**Total (1:03)**	

A= Materials Unit Cost 30.77 Birr/m²

B= Manpower Unit Cost 2.21 Birr/m²

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =			32.98 Birr/m²
O	Over head cost :	10%	3.30 "
Pro	Profit Cost:	15%	4.95 "
Tota	Total Unit Cost :		41.23 Birr/m²

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS** LABOUR HOURLY OUTPUT: 3.5

WORK ITEM: (7.6) G28 C I S Roofing (Without Truss & Purlin) EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 108 M² RESULT: 52.59 Birr/m²

Material Cost (1:01)					Labour (1:02)					Equipment Co	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
G28 CIS	m²	108.00	37.5	4050.00	Foreman	1	0.167	5	0.835		
Roofing nails.	kg.	12	10	120.00	Carpentr1	1	1	3.75	3.75		
Plastic Washer.	pkt.	5	1	5.00	Helper	1	1	1.9	1.9		
Ridge cover.	ml.	13	10	130.00	D/L	1	1	1.25	1.25		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				4305.00	**Total (1: 02)**				7.74	**Total (1:03)**	

A= Materials Unit Cost 39.86 Birr/m²

B= Manpower Unit Cost 2.21 Birr/m²

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 42.07 Birr/m²

O Over head cost : 10% 4.21 "

Pro Profit Cost: 15% 6.31 "

Tota Total Unit Cost : 52.59 Birr/m²

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS** LABOUR HOURLY OUTPUT: 8.59

WORK ITEM: (7.8) 6 cm. dia. Vertical & Diagonal Members of a Truss EQUIPEMENT:
TOTAL QANTITY OF WORK ITEM: 8.78 ml. = 1 Trusse RESULT: 3.52 Birr/ml.

Material Cost (1:01)					Labour (1:02)					Equipment Co	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
O 6 cm. Eucaliptus Wood	ml.	8.78	1.5	13.17	Foreman	1	0.25	5	1.25		
6 - 8 cm. Nails	kg.	0.56	8	4.48	Carpenter1	1	1	3.75	3.75		
				0.00	Helper	1	1	1.9	1.9		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				17.65	**Total (1: 02)**				6.90	**Total (1:03)**	

A= Materials Unit Cost 2.01 Birr/ml.

B= Manpower Unit Cost 0.80 Birr/ml.
Total of (1:02)
Hourly Output: _____

C= Equipment Unit Cost
Total of (1:03)
Hourly output: _____

Direct Cost of Work Item = A+B+C = 2.81 Birr/ml.
O Over head cost : 10% 0.28 "
Pro Profit Cost: 15% 0.42 "
Tota Total Unit Cost : 3.52 Birr/ml.

Remark _____
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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS** LABOUR HOURLY OUTPUT: 7
WORK ITEM: (7.9) 5 X 7 cm. Tid Wood Roof Purlin EQUIPEMENT:
TOTAL QANTITY OF WORK ITEM: 14.11 ml. = 1 Trusse RESULT: 11.72 Birr/ml.

Material Cost (1:01)	Labour (1:02)	Equipment Co

Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
5 X 7 cm. Tid Purlin	ml.	14.11	7.5	105.82	Foreman	1	0.167	5	0.835		
6 - 8 cm. Nails	kg.	0.56	8	4.48	Carpenter2	1	1	4.4	4.4		
				0.00	Helper	1	1	1.9	1.9		
				0.00	D/L	3	1	1.25	3.75		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				110.30	**Total (1: 02)**				10.89	**Total (1:03)**	

A= Materials Unit Cost 7.82 Birr/ml.

B= Manpower Unit Cost 1.56 Birr/ml.

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		9.37	Birr/ml.
O	Over head cost :	10%	0.94 "
Pro	Profit Cost:	15%	1.41 "
Tota	Total Unit Cost :		11.72 Birr/ml.

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS**

LABOUR HOURLY OUTPUT: 2

WORK ITEM: (7.10) EGA 300 & 4mm. Thick Roof cover

EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 760 m^2

RESULT: 58.49 Birr/m^2

Material Cost (1:01)					Labour (1:02)					Equipment Co	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
EGA 300 & 4mm. Thick	kg.	2900	11	31900.00	Foreman	1	0.167	5	0.835		

				0.00	Carpenter2	1	1	4.4	4.4		
				0.00	Helper	1	1	1.9	1.9		
				0.00	D/L	2	1	1.25	2.5		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				31900.00	**Total (1: 02)**				9.64	**Total (1:03)**	

A= Materials Unit Cost 41.97 Birr/m²

B= Manpower Unit Cost 4.82 Birr/m²

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

41.97+4.8	Direct Cost of Work Item = A+B+C =		46.79 Birr/m²
O	Over head cost :	10%	4.68 "
Pro	Profit Cost:	15%	7.02 "
Tota	Total Unit Cost :		58.49 Birr/m²

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **ROOFING WORKS**

WORK ITEM: (7.11) Steel Truss & Purlin With RHS

TOTAL QANTITY OF WORK ITEM: 9294 kg.

LABOUR HOURLY OUTPUT: 50

EQUIPEMENT: Welding Mashine

RESULT: 15.03 Birr/kg.

Material Cost (1:01)					Labour (1:02)					Equipment Co	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
RHS Different sizes	kg.	9115	11	100265	Foreman	1	0.75	5	3.75	Welding M.	1
Angel Airon	"	179	6.5	1163.50	Carpenter1	1	1	3.75	3.75		
				0.00	Welder	1	0.5	3.75	1.875		
				0.00	D/L	10	1	1.25	12.5		
				0.00					0		

				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				101428.50	**Total (1: 02)**				21.88	**Total (1:03)**	

A= Materials Unit Cost 10.91 Birr/kg.

B= Manpower Unit Cost 0.44 Birr/kg.

C= Equipment Unit Cost

Total of (1:02)

Hourly Output: _____

Total of (1:03)

Hourly output: _____

41.97+4.8 Direct Cost of Work Item = A+B+C = 12.03 Birr/kg.

O Over head cost : 10% 1.20 "

Pro Profit Cost: 15% 1.80 "

Tota Total Unit Cost : 15.03 Birr/kg.

Remark _____

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ml./hr.

st (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0

0 Birr/ml.

m²/hr.

st (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
	0
	0
	0
	0

0 Birr/m²

___

m²/hr.

st (1:03)

Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
	0
	0
	0
	0

0 Birr/m^2

—

m^2/hr.

st (1:03)

Hourly Rental	Hourly Cost
	0
	0

	0
	0
	0
	0
	0.00

0 Birr/m²

—

M²/hr

st (1:03)

Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0

	0
	0
	0
	0
	0.00

0 Birr/m²

—

m/hr.

st (1:03)

Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
	0
	0
	0
	0.00

0 Birr/m

m/hr

Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
	0
	0
	0
	0.00

0 Birr/m

m/hr

st (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
	0
	0
	0
	0.00

0 Birr/m

—

m

st (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
	0
	0
	0
	0.00

0 Birr/m

m/hr

st (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
	0
	0
	0

0 Birr/m

m/hr

st (1:03)

Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

0 Birr/m

—

m/hr

st (1:03)

Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
	0
	0
	0.00

0 Birr/m

—

m/hr

st (1:03)

Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
	0
	0
	0
	0.00

0 Birr/m

—

m./hr.

st (1:03)

Hourly Rental	Hourly Cost
	0.00

	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

0 Birr/m

—

m./hr.

st (1:03)

Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00

	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

0 Birr/m

ml./hr.

st (1:03)

Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

	0.00
	0.00

0 Birr/m

—

ml./hr.

st (1:03)

Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

0 Birr/m

—

0.48	7
0.083	1.176

st (1:03)

Hourly Rental	Hourly Cost

0.48	7
0.083	1.176

st (1:03)	
Hourly Rental	Hourly Cost

0.48	7
0.083	1.176

st (1:03)

Hourly Rental	Hourly Cost

ml./hr.

st (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

___

m^2/hr.

st (1:03)

Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

0

m²/hr.

st (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

0

___

m²/hr.

st (1:03)	
Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

0

___

ml./hr.

st (1:03)

Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

___

ml./hr.

st (1:03)

Hourly Rental	Hourly Cost
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

___

m^2/hr.

st (1:03)

Hourly Rental	Hourly Cost
	0.00

	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00

kg./hr.

st (1:03)	
Hourly Rental	Hourly Cost
33.73	33.73
	0.00
	0.00
	0.00
	0.00

	0.00
	0.00
	0.00
	0.00
	0.00
	33.73

0.67 Birr/kg.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: _**GLAZING WORKS**
LABOUR HOURLY OUTPUT: 1.55
WORK ITEM: (10.1) Fixing 3mm clear glass .
EQUIPEMENT:
TOTAL QANTITY OF WORK ITEM: 1 m^2
RESULT: 96.45 Birr/m^2

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
3mm clear glass	m^2	1.1	65	71.5	Foreman	1	0.167	5	0.835		
Putty	kg	0.4	5.7	2.28	Glazer	1	1	3.15	3.15		
				0	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
				0					0		
				0					0		
	Total (1:01)			73.78	**Total (1:02)**				5.24	**Total (1:03**	

A= Materials Unit Cost 73.78 Birr/m^2

B= Manpower Unit Cost 3.38 Birr/m^2
Total of (1:02) 5.23
Hourly Output: _____ 1.55

C= Equipment Unit Cost
Total of (1:03)
Hourly output: _____

Direct Cost of Work Item = A+B+C = 77.16 Birr/m^2
Over head cost : _ 10% 7.72 "
Profit Cost: 15% 11.57 "
Total Unit Cost : _ 96.45 Birr/m^2

Remark _____
UF: UTILIZATION FACTOR
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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **GLAZING WORKS**
LABOUR HOURLY OUTPUT: 1.55
WORK ITEM: (10.2) Fixing 4mm clear glass.
EQUIPEMENT:
TOTAL QANTITY OF WORK ITEM: 1 m^2
RESULT: 123.95 Birr/m^2

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
4 mm. clear glass	m^2	1.1	85	93.5	Foreman	1	0.167	5	0.835		
Putty	kg	0.4	5.7	2.28	Glazer	1	1	3.15	3.15		
				0	DL	1	1	1.25	1.25		
				0							
				0							
				0							
				0							
	Total (1:01)			95.78	**Total (1:02)**				5.235	**Total (1:03**	

A= Materials Unit Cost 95.78 Birr/m^2

B= Manpower Unit Cost 3.38 Birr/m^2

Total of (1:02) 5.23

Hourly Output: _____ 1.55

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 99.16 Birr/m^2

Over head cost : 10% 9.92 "

Profit Cost: 15% 14.87 "

Total Unit Cost : _ 123.95 Birr/m^2

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **GLAZING WORKS**

WORK ITEM: _ (10.3) Fixing 5mm. figured glass.

TOTAL QANTITY OF WORK ITEM: 1 m^2

LABOUR HOURLY OUTPUT: 1.55

EQUIPEMENT:

RESULT: _ 151.45 Birr/m^2

Material Cost (1:01)	Labour Cost (1:02)	Equipmer

Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
5mm figured glass	m^2	1.1	105	115.5	Foreman	1	0.167	5	0.835		
Putty	kg.	0.4	5.7	2.28	Glazer	1	1	3.15	3.15		
				0	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
				0					0		
				0					0		
	Total (1:01)			117.78	**Total (1:02)**				5.235	**Total (1:03**	

A= Materials Unit Cost 117.78 Birr/m^2

B= Manpower Unit Cost 3.38 Birr/m^2

Total of (1:02) 5.23

Hourly Output: _____ 1.55

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 121.16 Birr/m^2

Over head cost : _ 10% 12.12 "

Profit Cost: 15% 18.17 "

Total Unit Cost : 151.45 Birr/m^2

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: _ **GLAZING WORKS**

WORK ITEM: _ (10.4) Fixing 4 mm. Frosted glass.

TOTAL QANTITY OF WORK ITEM: 1 m^2

LABOUR HOURLY OUTPUT: 1.55

EQUIPEMENT:

RESULT: 158.32 Birr/m^2

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.

4mm frosted glass	m^2	1.1	110	121	Foreman	1	0.167	5	0.835		
Putty	kg	0.4	5.7	2.28	Glazer	1	1	3.15	3.15		
				0	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
				0					0		
				0					0		
	Total (1:01)			123.28	**Total (1:02)**				5.235	**Total (1:03**	

A= Materials Unit Cost 123.28 Birr/m^2

B= Manpower Unit Cost 3.38 Birr/m^2

Total of (1:02) 5.23

Hourly Output: _____ 1.55

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 126.66 Birr/m^2

Over head cost : _ 10% 12.67 "

Profit Cost: 15% 19.00 "

Total Unit Cost : _ 158.32 Birr/m^2

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: _ **GLAZING WORKS**

WORK ITEM: _ (10.5) Fixing 4mm. Tinted glass.

TOTAL QANTITY OF WORK ITEM: 1 m^2

LABOUR HOURLY OUTPUT: 1.55

EQUIPEMENT:

RESULT : 419.57 Birr/m^2

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
5mm Tinted glass	m2	1.1	300	330	Foreman	1	0.167	5	0.835		
Putty	kg	0.4	5.7	2.28	Glazer	1	1	3.15	3.15		
				0	D/L	1	1	1.25	1.25		
				0					0		

				0					0		
				0					0		
				0					0		
	Total (1:01)			332.28	**Total (1:02)**				5.24	**Total (1:03**	

A= Materials Unit Cost 332.28 Birr/m^2

B= Manpower Unit Cost 3.38 Birr/m^2

Total of (1:02) 5.23

Hourly Output: 1.55

C= Equipment Unit Cost

Total of (1:03)

Hourly output:

Direct Cost of Work Item = A+B+C = 335.66 Birr/m^2

Over head cost : 10% 33.57 "

Profit Cost: 15% 50.35 "

Total Unit Cost : 419.57 Birr/m^2

Remark

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **_GLAZING WORKS**

WORK ITEM: (10.6) Fixing 5mm. security glass.

TOTAL QANTITY OF WORK ITEM: 1 m^2

LABOUR HOURLY OUTPUT: 1.55

EQUIPEMENT:

RESULT : 488.32 Birr/m^2

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
5mm security glass	m^2	1.1	350	385	Foreman	1	0.167	5	0.835		
Putty	kg.	0.4	5.7	2.28	Glazer	1	1	3.15	3.15		
				0	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
				0					0		
				0					0		
	Total (1:01)			387.28	**Total (1:02)**				5.24	**Total (1:03**	

A= Materials Unit Cost	387.28	Birr/m²	B= Manpower Unit Cost		3.38	Birr/m²	C= Equipment Unit Cost	
			Total of (1:02)		5.23		Total of (1:03)	
			Hourly Output:		1.55		Hourly output:	
			Direct Cost of Work Item = A+B+C =				390.66	Birr/m²
			Over head cost :	10%			39.07	"
			Profit Cost:	15%			58.60	"
			Total Unit Cost :				488.32	Birr/m²

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 0.5

WORK ITEM: (11.1) 3 Coats of cement plastering (1:3) EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 m² RESULT : 209.80 Birr/m²

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
cement	qt.	0.14	360	50.4	Foreman	1	0.167	6.25	1.04		
sand	m³	0.036	480	17.28	Plasterer	1	1	25	25		
water	m³	0.0065	10	0.065	Chilser	1	1	12.5	12.5		
				0	D/L	2	1	7.5	15		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
	Total (1:01)			67.75	**Total (1:02)**				53.54	**Total (1:03**	

A= Materials Unit Cost	67.745	Birr/m²	B= Manpower Unit Cost		107.09	Birr/m²	C= Equipment Unit Cost	

	Total of (1:02)			Total of (1:03)
	Hourly Output:			Hourly output:
Direct Cost of Work Item = A+B+C =			174.83	Birr/m²
	Over head cost :	10%	17.48	"
	Profit Cost:	10%	17.48	"
	Total Unit Cost :		209.80	Birr/m²

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 0.67

WORK ITEM: (11.2) 2 Coats of cement plastering to soffit celling. EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 m² RESULT : 20.47 Birr/m²

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
cement	qt.	0.076	60	4.56	Foreman	1	0.167	5	0.84		
sand	m³	0.0186	95	1.767	Plasterer	1	1	2.5	2.5		
water	m³	0.0007	0.75	0.001	Chilser	1	1	2.15	2.15		
				0	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
				0					0		
				0					0		
	Total (1:01)			6.33	**Total (1:02)**				6.74	**Total (1:03**	

A= Materials Unit Cost 6.33 Birr/m² B= Manpower Unit Cost 10.05 Birr/m² C= Equipment Unit Cost

	Total of (1:02)			Total of (1:03)
	Hourly Output:			Hourly output:
Direct Cost of Work Item = A+B+C =			16.38	Birr/m²
	Over head cost :	10%	1.64	"
	Profit Cost:	15%	2.46	"

Total Unit Cost : _ 20.47 Birr/m²

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 0.6

WORK ITEM : 2 Coats of cement plastering to exposed beams and columns. EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 m² RESULT : 66.55 Birr/m²

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
cement	qt.	0.097	280	27.16	Foreman	1	0.167	6.25	1.04		
sand	m³	0.024	138	3.312	Plasterer	1	1	5	5		
water	m³	0.0045	0.75	0.003	Chilser	1	1	4	4		
				0	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
				0					0		
				0					0		
	Total (1:01)			30.48	**Total (1:02)**				11.29	**Total (1:03**	

A= Materials Unit Cost 30.48 Birr/m²

B= Manpower Unit Cost 18.82 Birr/m²

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 49.30 Birr/m²

Over head cost : _ 10% 4.93 "

Profit Cost: 25% 12.32 "

Total Unit Cost : _ 66.55 Birr/m²

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 2.5

WORK ITEM: (11.4) 1 coat (final coat) cement rendering. EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 m^2 RESULT : 45.12 Birr/m^2

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
cement	qt.	0.048	360	17.28	Foreman	1	0.25	5	1.25	Tools	1
sand	m^3	0.012	480	5.76	Plasterer	1	1	25	25		
water	m^3	0.002	10	0.020	helper	1	1	1.9	1.9		
				0					0		
				0					0		
				0					0		
				0					0		
	Total (1:01)			23.06	**Total (1:02)**				28.15	**Total (1:03**	

A= Materials Unit Cost 23.06 Birr/m^2

B= Manpower Unit Cost 11.26 Birr/m^2

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 36.10 Birr/m^2

Over head cost : _ 10% 3.61 "

Profit Cost: 15% 5.41 "

Total Unit Cost : _ 45.12 Birr/m^2

Remark 3.Coats of rendering (3+4) 111.67

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 0.81

WORK ITEM: (11.5) Cement pointing to brick wall surface (1:3). EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 m^2 RESULT : 69.39 Birr/m^2

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
cement	qt.	0.0013	360	0.468	Foreman	1	0.167	5	0.84		
sand	m^3	0.003	480	1.44	Plasterer	1	1	25	25		
water	m^3	0.01	10	0.100	Chilser	1	1	7.5	7.5		
				0	D/L	1	1	10	10		
				0					0		
				0					0		
				0					0		
	Total (1:01)			2.01	**Total (1:02)**				43.34		**Total (1:03**

A= Materials Unit Cost 2.01 Birr/m^2

B= Manpower Unit Cost 53.50 Birr/m^2

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 55.51 Birr/m^2

Over head cost : _ 10% 5.55 "

Profit Cost: 15% 8.33 "

Total Unit Cost : _ 69.39 Birr/m^2

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 1.63

WORK ITEM: (11.6) Cement pointing to H.C.B.wall surface (1:3). EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 m^2 RESULT : 6.69 Birr/m^2

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
cement	qt.	0.009	110	0.99	Foreman	1	0.167	5	0.84		
sand	m^3	0.002	110	0.22	Plasterer	1	1	2.5	2.5		
water	m^3	0.01	0.75	0.008	Chilser	1	1	2.15	2.15		
				0	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				1.22	**Total (1:02)**				6.74	**Total (1:03**	

A= Materials Unit Cost 1.22 Birr/m^2

B= Manpower Unit Cost 4.13 Birr/m^2

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		5.35 Birr/m^2
Over head cost : _	10%	0.53 "
Profit Cost:	15%	0.80 "
Total Unit Cost : _		6.69 Birr/m^2

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 1

WORK ITEM: (11.7) Recessed pointing to dressed masonry wall surface. EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 m^2 RESULT : 10.54 Birr/m^2

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.

cement	qt.	0.0024	100	0.24	Foreman	1	0.167	5	0.84		
sand	m^3	0.006	138	0.828	Plasterer	1	1	2.5	2.5		
water	m^3	0.01	0.75	0.008	Chilser	1	1	2.15	2.15		
				0	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				1.08	**Total (1:02)**				6.74	**Total (1:03**	

A= Materials Unit Cost 1.08 Birr/m^2

B= Manpower Unit Cost 6.74 Birr/m^2

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =	7.81	Birr/m^2
Over head cost : _	10%	0.78 "
Profit Cost:	25%	1.95 "
Total Unit Cost : _		10.54 Birr/m^2

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.**

WORK ITEM: (11.8) 3cm. Thick cement screed flooring (1:3).

TOTAL QANTITY OF WORK ITEM: 1 m^2

LABOUR HOURLY OUTPUT: 2.38

EQUIPEMENT:

RESULT : 38.61 Birr/m^2

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
cement	qt.	0.168	100	16.8	Foreman	1	0.167	6.25	1.04		
sand	m^3	0.041	138	5.658	Plasterer	2	1	5	10		
water	m^3	0.01	0.75	0.008	D/L	2	1	2	4		
cement grout	qt.	0.021	100	2.1					0		
				0					0		

				0					0		
				0					0		
Total (1:01)				24.57	**Total (1:02)**				15.04	**Total (1:03**	

A= Materials Unit Cost 24.57 Birr/m²

B= Manpower Unit Cost 6.32 Birr/m²

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		30.89 Birr/m²
Over head cost : _	10%	3.09 "
Profit Cost:	15%	4.63 "
Total Unit Cost : _		38.61 Birr/m²

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.**

WORK ITEM: (11.9) 5cm. Thick cement screed flooring (1:3).

TOTAL QANTITY OF WORK ITEM: 1 m²

LABOUR HOURLY OUTPUT: 1.43

EQUIPEMENT:

RESULT : 116.76 Birr/m²

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
cement	qt.	0.28	250	70	Foreman	1	0.167	6.25	1.04		
sand	m³	0.068	138	9.384	Plasterer	2	1	5	10		
water	m³	0.01	0.75	0.008	D/L	2	1	2	4		
cement grout	qt.	0.035	100	3.5					0		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				82.89	**Total (1:02)**				15.04	**Total (1:03**	

A= Materials Unit Cost	82.89 Birr/m²	B= Manpower Unit Cost		10.52 Birr/m²	C= Equipment Unit Cost
		Total of (1:02)			Total of (1:03)
		Hourly Output: _____			Hourly output: _____
		Direct Cost of Work Item = A+B+C =			93.41 Birr/m²
			Over head cost : _	10%	9.34 "
			Profit Cost:	15%	14.01 "
			Total Unit Cost : _		116.76 Birr/m²

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 1.25

WORK ITEM: (11.10) 20 x 20cm. cement tile flooring(1:3). EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 m² RESULT : 71.41 Birr/m²

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
cement	qt.	0.168	110	18.48	Foreman	1	0.25	5	1.25		
sand	m³	0.041	110	4.51	mason ii	1	1	3.75	3.75		
water	m³	0.008	0.75	0.006	D/L	1	1	1.25	1.25		
cement grout	qt.	0.014	60	0.84	helper	1	1	1.9	1.9		
20 x 20 cm. cement tile	no	1.05	25.5	26.775					0		
									0		
				0					0		
				0					0		
Total (1:01)				50.61	**Total (1:02)**				8.15	**Total (1:03**	

A= Materials Unit Cost	50.61 Birr/m²	B= Manpower Unit Cost		6.52 Birr/m²	C= Equipment Unit Cost
		Total of (1:02)			Total of (1:03)
		Hourly Output: _____			Hourly output: _____
		Direct Cost of Work Item = A+B+C =			57.13 Birr/m²

Over head cost : _	10%	5.71	"
Profit Cost:	15%	8.57	"
Total Unit Cost : _		71.41	Birr/m²

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 1.25

WORK ITEM: (11.11) 20 x 20cm. terrazzo tile flooring(1:3). EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 m² RESULT : 106.26 Birr/m²

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
cement	qt.	0.168	118	19.824	Foreman	1	0.25	5	1.25		
sand	m³	0.041	120	4.92	mason ii	1	1	3.75	3.75		
water	m³	0.008	0.75	0.006	D/L	1	1	1.25	1.25		
cement grout	qt.	0.014	110	1.54	helper	1	1	1.9	1.9		
20 x 20 cm. terrazzo tile	no	25.5	2	51					0		
polish	lit	0.1	12	1.20					0		
				0					0		
				0					0		
Total (1:01)				78.49	**Total (1:02)**				8.15		**Total (1:03**

A= Materials Unit Cost 78.49 Birr/m² B= Manpower Unit Cost 6.52 Birr/m² C= Equipment Unit Cost

Total of (1:02) Total of (1:03)

Hourly Output: _____ Hourly output: _____

Direct Cost of Work Item = A+B+C =		85.01	Birr/m²
Over head cost : _	10%	8.50	"
Profit Cost:	15%	12.75	"
Total Unit Cost : _		106.26	Birr/m²

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 1.25
WORK ITEM: (11.12) 2cm. thick granolythic tile flooring (1:3). EQUIPEMENT:
TOTAL QANTITY OF WORK ITEM: 1 m^2 RESULT : 75.35 Birr/m^2

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
cement	qt.	0.168	60	10.08	Foreman	1	0.25	5	1.25		
sand	m^3	0.041	95	3.895	mason ii	1	1	3.75	3.75		
water	m^3	0.008	0.75	0.006	D/L	1	1	1.25	1.25		
cement grout	qt.	0.014	60	0.84	helper	1	1	1.9	1.9		
granolythic tile	no	1.02	37	37.74					0		
polish	lit	0.1	12	1.20					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				53.76	**Total (1:02)**				8.15		**Total (1:03**

A= Materials Unit Cost 53.76 Birr/m^2 B= Manpower Unit Cost 6.52 Birr/m^2 C= Equipment Unit Cost
Total of (1:02) Total of (1:03)
Hourly Output: _____ Hourly output: _____
Direct Cost of Work Item = A+B+C = 60.28 Birr/m^2
Over head cost : _ 10% 6.03 "
Profit Cost: 15% 9.04 "
Total Unit Cost : _ 75.35 Birr/m^2

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 0.88

WORK ITEM: (11.13) 2cm thick Harar marble flooring (1:3). EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 m^2 RESULT : 267.11 Birr/m^2

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
cement	qt.	0.097	60	5.82	Foreman	1	1	5	5.00	grinder	1
sand	m^3	0.024	95	2.28	tiler	1	1	3.75	3.75		
water	m^3	0.005	0.75	0.004	D/L	1	1	1.25	1.25		
cement grout	qt.	0.014	60	0.84	helper	2	1	1.9	3.8		
2 cm. thick harar marble	no	1.02	180	183.6					0		
polish	lit	0.1	12	1.20					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				193.74	**Total (1:02)**				13.80	**Total (1:03**	

A= Materials Unit Cost 193.74 Birr/m^2

B= Manpower Unit Cost 15.68 Birr/m^2

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 213.69 Birr/m^2

Over head cost : _ 10% 21.37 "

Profit Cost: 15% 32.05 "

Total Unit Cost : _ 267.11 Birr/m^2

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 0.88

WORK ITEM: (11.14) 2cm thick white marble flooring (1:3). EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 m^2 RESULT : 685.52 Birr/m^2

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
cement	qt.	0.097	130	12.61	Foreman	1	1	5	5.00	grinder	1
sand	m^3	0.024	130	3.12	tiler	1	1	3.75	3.75		
water	m^3	0.005	0.75	0.004	D/L	1	1	1.25	1.25		
cement grout	qt.	0.014	110	1.54	helper	2	1	1.9	3.8		
2cm.thick white marble flooring.	no	1.02	500	510					0		
polish	lit	0.1	12	1.20					0		
				0					0		
				0					0		
Total (1:01)				528.47	**Total (1:02)**				13.80	**Total (1:03**	

A= Materials Unit Cost 528.47 Birr/m^2

B= Manpower Unit Cost 15.68 Birr/m^2

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 548.42 Birr/m^2

Over head cost : _ 10% 54.84 "

Profit Cost: 15% 82.26 "

Total Unit Cost : _ 685.52 Birr/m^2

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 0.88

WORK ITEM: (11.15) Marbel Chips Flooring. EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 m^2 RESULT : 105.00 Birr/m^2

Material Cost (1:01)	Labour Cost (1:02)	Equipmer

Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
				0	Foreman				0		
				0	tiler				0		
				0	D/L				0		
				0	helper				0		
				0					0		
				0					0		
				0					0		
Total (1:01)				0.00	**Total (1:02)**				0.00	**Total (1:03**	

A= Materials Unit Cost 0.00 Birr/m²

B= Manpower Unit Cost 0.00 Birr/m²

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		0.00	Birr/m²
Over head cost : _	10%	0.00	"
Profit Cost:	15%	0.00	"
Total Unit Cost : _		105.00	Birr/m²

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.**

WORK ITEM: (11.16) Ceramic tile flooring (1:3).

TOTAL QANTITY OF WORK ITEM: 1 m²

LABOUR HOURLY OUTPUT: 1

EQUIPEMENT:

RESULT : 148.38 Birr/m²

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
cement	qt.	0.101	200	20.2	Foreman	1	0.17	5	0.85		

sand	m^3	0.025	130	3.25	tiler	1	1	3.75	3.75		
water	m^3	0.005	0.75	0.004	D/L	1	1	1.25	1.25		
cement grout	qt.	0.014	200	2.8	helper	2	1	1.9	3.8		
7mm thick ceramic tile	m^2	1.02	80	81.6					0		
polish	lit	0.1	12	1.20					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				109.05	**Total (1:02)**				9.65	**Total (1:03**	

A= Materials Unit Cost 109.05 Birr/m^2

B= Manpower Unit Cost 9.65 Birr/m^2

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =	118.70	Birr/m^2
Over head cost : _	10%	11.87 "
Profit Cost:	15%	17.81 "
Total Unit Cost : _		148.38 Birr/m^2

Remark _____

UF: UTILIZATION FACTOR

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**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.**

WORK ITEM: (11.17) 2mm. thick PVC flooring. (Ethiopia)

TOTAL QANTITY OF WORK ITEM: 1 m^2

LABOUR HOURLY OUTPUT: 3.45

EQUIPEMENT:

RESULT : 78.55 Birr/m^2

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
PVC tile	m^2	1.02	39	39.78	Foreman	1	0.17	5	0.85		
adhesive glue	gal	0.11	180	19.8	tiler	1	1	3.75	3.75		
polish	lit	0.1	12	1.20	D/L	2	1	1.25	2.5		
				0					0		
				0					0		
				0					0		

				0					0		
Total (1:01)				60.78	**Total (1:02)**				7.10	**Total (1:03**	

A= Materials Unit Cost 60.78 Birr/m²

B= Manpower Unit Cost 2.06 Birr/m²

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		62.84 Birr/m²
Over head cost : _	10%	6.28 "
Profit Cost:	15%	9.43 "
Total Unit Cost : _		78.55 Birr/m²

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.**

WORK ITEM: (11.18) 2mm. thick PVC flooring. (Italy)

TOTAL QANTITY OF WORK ITEM: 1 m²

LABOUR HOURLY OUTPUT: 3.45

EQUIPEMENT:

RESULT : 112.59 Birr/m²

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
PVC tile	m²	1.02	68	69.36	Foreman	1	0.17	5	0.85		
adhesive glue	gal	0.11	98	10.78	tiler	1	1	3.75	3.75		
polish	lit	0.1	12	1.20	D/L	2	1	1.25	2.5		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				81.34	**Total (1:02)**				7.10	**Total (1:03**	

A= Materials Unit Cost 81.34 Birr/m²

B= Manpower Unit Cost 2.06 Birr/m²

Total of (1:02)

C= Equipment Unit Cost

Total of (1:03)

Hourly Output: _____		Hourly output:	_____
Direct Cost of Work Item = A+B+C =		83.40	Birr/m²
Over head cost : _	10%	8.34	"
Profit Cost:	25%	20.85	"
Total Unit Cost : _		112.59	Birr/m²

Remark _____

UF: UTILIZATION FACTOR

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**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 3.45

WORK ITEM: (11.19) 2mm. thick PVC flooring. (England) EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 m² RESULT : 163.10 Birr/m²

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
PVC tile	m²	1.02	95	96.9	Foreman	1	0.17	6.25	1.06		
adhesive glue	gal	0.11	180	19.8	tiler	1	1	5	5		
polish	lit	0.1	12	1.20	D/L	2	1	2	4		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				117.90	**Total (1:02)**				10.06	**Total (1:03**	

A= Materials Unit Cost 117.90 Birr/m² B= Manpower Unit Cost 2.92 Birr/m² C= Equipment Unit Cost

Total of (1:02) Total of (1:03)

Hourly Output: _____		Hourly output:	_____
Direct Cost of Work Item = A+B+C =		120.82	Birr/m²
Over head cost : _	10%	12.08	"
Profit Cost:	25%	30.20	"

Total Unit Cost : _ 163.10 Birr/m²

Remark _____

UF: UTILIZATION FACTOR

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**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 3.45

WORK ITEM: (11.20) 2mm. thick PVC flooring. (China.) EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 m² RESULT : 83.85 Birr/m²

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
PVC tile	m²	1.02	52	53.04	Foreman	1	0.17	5	0.85		
adhesive glue	gal	0.11	98	10.78	tiler	1	1	3.75	3.75		
polish	lit	0.1	12	1.20	D/L	2	1	1.25	2.5		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				65.02	**Total (1:02)**				7.10	**Total (1:03**	

A= Materials Unit Cost 65.02 Birr/m²

B= Manpower Unit Cost 2.06 Birr/m²

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 67.08 Birr/m²

Over head cost : _ 10% 6.71 "

Profit Cost: 15% 10.06 "

Total Unit Cost : _ 83.85 Birr/m²

Remark _____

UF: UTILIZATION FACTOR

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**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 2.5

WORK ITEM: (11.21) Parque flooring with all accessories . EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 m^2 RESULT : 145.18 Birr/m^2

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
parque	m^2	1.03	110	113.3	Foreman	1	0.17	5	0.85		
				0	carpenter	1	1	3.75	3.75		
				0	D/L	2	1	1.25	2.5		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				113.30	**Total (1:02)**				7.10	**Total (1:03**	

A= Materials Unit Cost 113.30 Birr/m^2

B= Manpower Unit Cost 2.84 Birr/m^2

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 116.14 Birr/m^2

Over head cost : _ 10% 11.61 "

Profit Cost: 15% 17.42 "

Total Unit Cost : _ 145.18 Birr/m^2

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 2.5

WORK ITEM: (11.22) 10cm. High cement tile skirting (1:3). EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml RESULT : 10.64 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
cement tile	ml	5.3	0.52	2.756	Foreman	1	0.25	5	1.25	grinder	1
polish	lit	0.05	12	0.60	masonii	1	1	3.75	3.75		
cement	q	0.005	60	0.300	helper l	1	1	1.9	1.9		
sand	m^3	0.001	95	0.095	D/L	1	1	1.25	1.25		
water	m^3	0.001	0.75	0.001					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				3.75	**Total (1:02)**				8.15		**Total (1:03**

A= Materials Unit Cost 3.75 Birr/ml

B= Manpower Unit Cost 3.26 Birr/ml

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 8.51 Birr/ml

Over head cost : _ 10% 0.85 "

Profit Cost: 15% 1.28 "

Total Unit Cost : _ 10.64 Birr/ml

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 2.5

WORK ITEM: (11.23) 10cm. High terrazzo tile skirting (1:3). EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml RESULT : 13.49 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
terrazzo tile	ml	5.3	0.9	4.77	Foreman	1	0.25	5	1.25	grinder	1
polish	lit	0.05	12	0.60	masonii	1	1	3.75	3.75		
cement	q	0.005	110	0.550	helper I	1	1	1.9	1.9		
sand	m^3	0.001	110	0.11	D/L	1	1	1.25	1.25		
water	m^3	0.001	0.75	0.001					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				6.03	**Total (1:02)**				8.15	**Total (1:03**	

A= Materials Unit Cost 6.03 Birr/ml

B= Manpower Unit Cost 3.26 Birr/ml

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 10.79 Birr/ml

Over head cost : _ 10% 1.08 "

Profit Cost: 15% 1.62 "

Total Unit Cost : _ 13.49 Birr/ml

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 2.5

WORK ITEM: (11.24) 10cm. High Granolythic tile skirting (1:3). EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml RESULT : 11.91 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
granolythic tile	ml	1.02	3.7	3.774	Foreman	1	0.25	5	1.25	grinder	1
polish	lit	0.05	12	0.60	masonii	1	1	3.75	3.75		
cement	q	0.005	60	0.300	helper I	1	1	1.9	1.9		
sand	m^3	0.001	95	0.095	D/L	1	1	1.25	1.25		
water	m^3	0.001	0.75	0.001					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				4.77	**Total (1:02)**				8.15	**Total (1:03**	

A= Materials Unit Cost 4.77 Birr/ml

B= Manpower Unit Cost 3.26 Birr/ml

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =			9.53 Birr/ml
Over head cost : _		10%	0.95 "
Profit Cost:		15%	1.43 "
Total Unit Cost : _			11.91 Birr/ml

Remark _____

UF: UTILIZATION FACTOR

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

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.**

WORK ITEM: (11.25) 15 x 75mm. Marble skirting (1: 3).

TOTAL QANTITY OF WORK ITEM: 1 ml

LABOUR HOURLY OUTPUT: 2.5

EQUIPEMENT:

RESULT : 32.66 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.

marble slate	ml	1.05	20	21	Foreman	1	0.25	5	1.25	grinder	1
polish	lit	0.003	12	0.04	masonii	1	1	3.75	3.75		
cement	qt	0.004	60	0.240	helper I	1	1	1.9	1.9		
sand	m^3	0.001	95	0.095	D/L	1	1	1.25	1.25		
water	m^3	0.001	0.75	0.001					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				21.37	**Total (1:02)**				8.15	**Total (1:03**	

A= Materials Unit Cost 21.37 Birr/ml

B= Manpower Unit Cost 3.26 Birr/ml

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		26.13 Birr/ml
Over head cost : _	10%	2.61 "
Profit Cost:	15%	3.92 "
Total Unit Cost : _		32.66 Birr/ml

Remark _____

UF: UTILIZATION FACTOR

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

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.**

WORK ITEM: (11.26) 15 x 100 mm. Marble skirting (1: 3).

TOTAL QANTITY OF WORK ITEM: 1 ml

LABOUR HOURLY OUTPUT: 2.5

EQUIPEMENT:

RESULT : 43.16 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
marble slate	ml	1.05	28	29.4	Foreman	1	0.25	5	1.25	grinder	1
polish	lit	0.003	12	0.04	masonii	1	1	3.75	3.75		
cement	qt	0.004	60	0.240	helper I	1	1	1.9	1.9		
sand	m^3	0.001	95	0.095	D/L	1	1	1.25	1.25		
water	m^3	0.001	0.75	0.001					0		

				0					0		
				0					0		
Total (1:01)				29.77	**Total (1:02)**				8.15		**Total (1:03**

A= Materials Unit Cost 29.77 Birr/ml B= Manpower Unit Cost 3.26 Birr/ml C= Equipment Unit Cost

Total of (1:02) Total of (1:03)

Hourly Output: _____ Hourly output: _____

Direct Cost of Work Item = A+B+C = 34.53 Birr/ml

Over head cost : _ 10% 3.45 "

Profit Cost: 15% 5.18 "

Total Unit Cost : _ 43.16 Birr/ml

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 2.5

WORK ITEM: (11.27) ceramic tile skirting (1:3). EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml RESULT : 46.54 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
ceramic tile skirting	pc	7.24	4.14	29.97	Foreman	1	0.25	5	1.25	grinder	1
cement	qt	0.04	60	2.40	masonii	1	1	3.75	3.75		
sand	m^3	0.001	95	0.095	helper I	1	1	1.9	1.9		
water	m^3	0.002	0.75	0.002	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
				0					0		
Total (1:01)				32.47	**Total (1:02)**				8.15		**Total (1:03**

A= Materials Unit Cost 32.47 Birr/ml B= Manpower Unit Cost 3.26 Birr/ml C= Equipment Unit Cost

	Total of (1:02)		Total of (1:03)
	Hourly Output: _____		Hourly output: _____
Direct Cost of Work Item = A+B+C =			37.23 Birr/ml
	Over head cost : _	10%	3.72 "
	Profit Cost:	15%	5.58 "
	Total Unit Cost : _		46.54 Birr/ml

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 2

WORK ITEM: (11.28) 8cm.high PVC tile skirting.(ETHIOPIA) EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml RESULT : 12.56 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
2mm pvc skirting	ml	1.02	3.68	3.75	Foreman	1	0.83	5	4.15		
adhesive glue	gal	0.009	180	1.62	tiler	1	1	3.75	3.75		
polishing	lit	0.008	12	0.096	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				5.47	**Total (1:02)**				9.15		**Total (1:03**

A= Materials Unit Cost	5.47 Birr/ml	B= Manpower Unit Cost	4.57 Birr/ml	C= Equipment Unit Cost
		Total of (1:02)		Total of (1:03)
		Hourly Output: _____		Hourly output: _____
		Direct Cost of Work Item = A+B+C =		10.04 Birr/ml
		Over head cost : _	10%	1.00 "
		Profit Cost:	15%	1.51 "

Total Unit Cost : _ 12.56 Birr/ml

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 2

WORK ITEM: (11.29) 8cm. high PVC tile skirting.(ITALY) EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml RESULT : 13.83 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
2mm pvc skirting	ml	1.02	5.4	5.51	Foreman	1	0.83	5	4.15		
adhesive glue	gal	0.009	98	0.88	tiler	1	1	3.75	3.75		
polishing	lit	0.008	12	0.096	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				6.49	**Total (1:02)**				9.15	**Total (1:03**	

A= Materials Unit Cost 6.49 Birr/ml

B= Manpower Unit Cost 4.57 Birr/ml

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 11.06 Birr/ml

Over head cost : _ 10% 1.11 "

Profit Cost: 15% 1.66 "

Total Unit Cost : _ 13.83 Birr/ml

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 2

WORK ITEM: (11.30) 8cm. high PVC tile skirting.(ENGLAND) EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml RESULT : 17.26 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
2mm pvc skirting	ml	1.02	5.6	5.71	Foreman	1	0.83	6.25	5.19		
adhesive glue	gal	0.009	98	0.88	tiler	1	1	5	5		
polishing	lit	0.008	12	0.096	D/L	1	1	2	2		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				6.69	**Total (1:02)**				12.19	**Total (1:03**	

A= Materials Unit Cost 6.69 Birr/ml

B= Manpower Unit Cost 6.09 Birr/ml

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 12.78 Birr/ml

Over head cost : _ 10% 1.28 "

Profit Cost: 25% 3.20 "

Total Unit Cost : _ 17.26 Birr/ml

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 2

WORK ITEM: (11.31) 8cm. high PVC tile skirting.(CHINA) EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml RESULT : 12.25 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
2mm pvc skirting	ml	1.02	4.16	4.24	Foreman	1	0.83	5	4.15		
adhesive glue	gal	0.009	98	0.88	tiler	1	1	3.75	3.75		
polishing	lit	0.008	12	0.096	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				5.22	**Total (1:02)**				9.15	**Total (1:03**	

A= Materials Unit Cost 5.22 Birr/ml

B= Manpower Unit Cost 4.57 Birr/ml

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 9.80 Birr/ml

Over head cost : _ 10% 0.98 "

Profit Cost: 15% 1.47 "

Total Unit Cost : _ 12.25 Birr/ml

Remark _____

UF: UTILIZATION FACTOR

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**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 3

WORK ITEM: (11.32) 10cm. high wooden skirting. EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml RESULT : 14.04 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
timber	ml	1.1	8	8.80	Foreman	1	0.25	5	1.25		
nail(=4cm)	kg	0.0165	8	0.13	carpenterii	1	1	4.4	4.4		
				0	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				8.93	**Total (1:02)**				6.90	**Total (1:03**	

A= Materials Unit Cost 8.93 Birr/ml

B= Manpower Unit Cost 2.30 Birr/ml

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 11.23 Birr/ml

Over head cost : _ 10% 1.12 "

Profit Cost: 15% 1.68 "

Total Unit Cost : _ 14.04 Birr/ml

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 1.88

WORK ITEM: (11.33) 30mm. thick terrazo window cill (1:3) on HCB. EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml RESULT : 29.38 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
terrazzo window cill for HCB	m^2	0.204	70	14.28	Foreman	1	0.83	5	4.15	grinder	1
cement	qt	0.02	60	1.20	masonii	1	1	3.75	3.75		
sand	m^3	0.005	95	0.48	D/L	2	1	1.25	2.5		
water	m^3	0.01	0.75	0.008					0		
cement grout	qt	0.0003	60	0.018					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				15.98	**Total (1:02)**				10.40		**Total (1:03**

A= Materials Unit Cost 15.98 Birr/ml

B= Manpower Unit Cost 5.53 Birr/ml

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 23.50 Birr/ml

Over head cost : _ 10% 2.35 "

Profit Cost: 15% 3.53 "

Total Unit Cost : _ 29.38 Birr/ml

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 1.88

WORK ITEM: (11.34) 30mm. thick terrazo window cill (1:3) on brick. EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml RESULT : 32.70 Birr/ml

Material Cost (1:01)	Labour Cost (1:02)	Equipmer

Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
terrazzo window cill for BRICK.	m^2	0.242	70	16.94	Foreman	1	0.83	5	4.15	grinder	1
cement	qt	0.02	60	1.20	masonii	1	1	3.75	3.75		
sand	m^3	0.005	95	0.48	D/L	2	1	1.25	2.5		
water	m^3	0.01	0.75	0.008					0		
cement grout	qt	0.0003	60	0.018					0		
				0					0		
				0					0		
Total (1:01)				18.64	**Total (1:02)**				10.40	**Total (1:03**	

A= Materials Unit Cost 18.64 Birr/ml

B= Manpower Unit Cost 5.53 Birr/ml

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 26.16 Birr/ml

Over head cost : _ 10% 2.62 "

Profit Cost: 15% 3.92 "

Total Unit Cost : _ 32.70 Birr/ml

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.**

WORK ITEM: (11.35) 30mm. thick terrazo window cill (1:3) on stone.

TOTAL QANTITY OF WORK ITEM: 1 ml

LABOUR HOURLY OUTPUT: 1.88

EQUIPEMENT:

RESULT : 42.68 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
terrazzo window cill for stone	m^2	0.356	70	24.92	Foreman	1	0.83	5	4.15	grinder	1

cement	qt	0.02	60	1.20	masonii	1	1	3.75	3.75		
sand	m^3	0.005	95	0.48	D/L	2	1	1.25	2.5		
water	m^3	0.01	0.75	0.008					0		
cement grout	qt	0.0003	60	0.018					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				26.62	**Total (1:02)**				10.40	**Total (1:03**	

A= Materials Unit Cost 26.62 Birr/ml

B= Manpower Unit Cost 5.53 Birr/ml

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 34.14 Birr/ml

Over head cost : _ 10% 3.41 "

Profit Cost: 15% 5.12 "

Total Unit Cost : _ 42.68 Birr/ml

Remark _____

UF: UTILIZATION FACTOR

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**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 1.88

WORK ITEM: (11.36) 30mm. thick Granite window cill (1:3) on HCB. EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml RESULT : 118.63 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
granite window cill for HCB	m^2	0.204	420	85.68	Foreman	1	0.83	5	4.15	grinder	1
cement	qt	0.02	60	1.20	masonii	1	1	3.75	3.75		
sand	m^3	0.005	95	0.48	D/L	2	1	1.25	2.5		
water	m^3	0.01	0.75	0.008					0		
cement grout	qt	0.0003	60	0.018					0		
				0					0		

				0					0		
Total (1:01)				87.38	**Total (1:02)**				10.40	**Total (1:03**	

A= Materials Unit Cost 87.38 Birr/ml B= Manpower Unit Cost 5.53 Birr/ml C= Equipment Unit Cost

Total of (1:02) Total of (1:03)

Hourly Output: _____ Hourly output: _____

Direct Cost of Work Item = A+B+C = 94.90 Birr/ml

Over head cost : _ 10% 9.49 "

Profit Cost: 15% 14.24 "

Total Unit Cost : _ 118.63 Birr/ml

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 1.88

WORK ITEM: (11.37) 30mm. thick Granite window cill (1:3) on brick. EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml RESULT : 138.58 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
granite window cill for brick	m^2	0.242	420	101.64	Foreman	1	0.83	5	4.15	grinder	1
cement	qt	0.02	60	1.20	masonii	1	1	3.75	3.75		
sand	m^3	0.005	95	0.48	D/L	2	1	1.25	2.5		
water	m^3	0.01	0.75	0.008					0		
cement grout	qt	0.0003	60	0.018					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				103.34	**Total (1:02)**				10.40	**Total (1:03**	

A= Materials Unit Cost 103.34 Birr/ml B= Manpower Unit Cost 5.53 Birr/ml C= Equipment Unit Cost

	Total of (1:02)		Total of (1:03)
	Hourly Output: _____		Hourly output: _____
Direct Cost of Work Item = A+B+C =			110.86 Birr/ml
	Over head cost : _	10%	11.09 "
	Profit Cost:	15%	16.63 "
	Total Unit Cost : _		138.58 Birr/ml

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 1.88

WORK ITEM: (11.38) 30mm. thick Granite window cill (1:3) on stone. EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml RESULT : 191.08 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
granite window cill for stone.	m^2	0.342	420	143.64	Foreman	1	0.83	5	4.15	grinder	1
cement	qt	0.02	60	1.20	masonii	1	1	3.75	3.75		
sand	m^3	0.005	95	0.48	D/L	2	1	1.25	2.5		
water	m^3	0.01	0.75	0.008					0		
cement grout	qt	0.0003	60	0.018					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				145.34	**Total (1:02)**				10.40	**Total (1:03**	

A= Materials Unit Cost 145.34 Birr/ml B= Manpower Unit Cost 5.53 Birr/ml C= Equipment Unit Cost

	Total of (1:02)		Total of (1:03)
	Hourly Output: _____		Hourly output: _____
Direct Cost of Work Item = A+B+C =			152.86 Birr/ml
	Over head cost : _	10%	15.29 "
	Profit Cost:	15%	22.93 "

Total Unit Cost : _ 191.08 Birr/ml

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 1.88

WORK ITEM: (11.39) 30mm. thick white marble window cill (1:3)on HCB. EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml RESULT : 103.33 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
white marble cill for HCB	m^2	0.204	360	73.44	Foreman	1	0.83	5	4.15	grinder	1
cement	qt	0.02	60	1.20	masonii	1	1	3.75	3.75		
sand	m^3	0.005	95	0.48	D/L	2	1	1.25	2.5		
water	m^3	0.01	0.75	0.008					0		
cement grout	qt	0.0003	60	0.018					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				75.14	**Total (1:02)**				10.40	**Total (1:03**	

A= Materials Unit Cost 75.14 Birr/ml

B= Manpower Unit Cost 5.53 Birr/ml

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 82.66 Birr/ml

Over head cost : _ 10% 8.27 "

Profit Cost: 15% 12.40 "

Total Unit Cost : _ 103.33 Birr/ml

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 1.88

WORK ITEM: (11.40) 30mm.thick white marble window cill (1:3) on Brick. EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml RESULT : 119.08 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
white marble cill for brick	m^2	0.239	360	86.04	Foreman	1	0.83	5	4.15	grinder	1
cement	qt	0.02	60	1.20	masonii	1	1	3.75	3.75		
sand	m^3	0.005	95	0.48	D/L	2	1	1.25	2.5		
water	m^3	0.01	0.75	0.008					0		
cement grout	qt	0.0003	60	0.018					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				87.74	**Total (1:02)**				10.40	**Total (1:03**	

A= Materials Unit Cost 87.74 Birr/ml

B= Manpower Unit Cost 5.53 Birr/ml

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 95.26 Birr/ml

Over head cost : _ 10% 9.53 "

Profit Cost: 15% 14.29 "

Total Unit Cost : _ 119.08 Birr/ml

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 1.88

WORK ITEM: (11.41) 30mm. thick white marble window cill (1:3) on Stone. EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml RESULT : 165.88 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
white marble cill for stone.	m^2	0.343	360	123.48	Foreman	1	0.83	5	4.15	grinder	1
cement	qt	0.02	60	1.20	masonii	1	1	3.75	3.75		
sand	m^3	0.005	95	0.48	D/L	2	1	1.25	2.5		
water	m^3	0.01	0.75	0.008					0		
cement grout	qt	0.0003	60	0.018					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				125.18	**Total (1:02)**				10.40	**Total (1:03**	

A= Materials Unit Cost 125.18 Birr/ml

B= Manpower Unit Cost 5.53 Birr/ml

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 132.70 Birr/ml

Over head cost : _ 10% 13.27 "

Profit Cost: 15% 19.91 "

Total Unit Cost : _ 165.88 Birr/ml

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 1.88

WORK ITEM: (11.42) 30mm. thick HARAR marble window cill (1:3)on HCB . EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml RESULT : 80.38 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
harar marble cill for HCB	m^2	0.204	270	55.08	Foreman	1	0.83	5	4.15	grinder	1
cement	qt	0.02	60	1.20	masonii	1	1	3.75	3.75		
sand	m^3	0.005	95	0.48	D/L	2	1	1.25	2.5		
water	m^3	0.01	0.75	0.008					0		
cement grout	qt	0.0003	60	0.018					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				56.78	**Total (1:02)**				10.40		**Total (1:03**

A= Materials Unit Cost 56.78 Birr/ml

B= Manpower Unit Cost 5.53 Birr/ml

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =			64.30 Birr/ml
Over head cost : _	10%		6.43 "
Profit Cost:	15%		9.65 "
Total Unit Cost : _			80.38 Birr/ml

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.**

WORK ITEM: (11.43) 30mm. thick HARAR marble window cill (1:3)on Brick .

TOTAL QANTITY OF WORK ITEM: 1 ml

LABOUR HOURLY OUTPUT: 1.88

EQUIPEMENT:

RESULT : 92.19 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.

harar marble cill for brick.	m^2	0.239	270	64.53	Foreman	1	0.83	5	4.15	grinder	1
cement	qt	0.02	60	1.20	masonii	1	1	3.75	3.75		
sand	m^3	0.005	95	0.48	D/L	2	1	1.25	2.5		
water	m^3	0.01	0.75	0.008					0		
cement grout	qt	0.0003	60	0.018					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				66.23	**Total (1:02)**				10.40	**Total (1:03**	

A= Materials Unit Cost 66.23 Birr/ml

B= Manpower Unit Cost 5.53 Birr/ml

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =			73.75 Birr/ml
Over head cost : _		10%	7.38 "
Profit Cost:		15%	11.06 "
Total Unit Cost : _			92.19 Birr/ml

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.**

WORK ITEM: (11.44) 30mm. thick HARAR marble window cill (1:3)on Stone .

TOTAL QANTITY OF WORK ITEM: 1 ml

LABOUR HOURLY OUTPUT: 1.88

EQUIPEMENT:

RESULT : 127.63 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipment Cost	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
harar marble cill for stone.	m^2	0.344	270	92.88	Foreman	1	0.83	5	4.15	grinder	1
cement	qt	0.02	60	1.20	masonii	1	1	3.75	3.75		
sand	m^3	0.005	95	0.48	D/L	2	1	1.25	2.5		
water	m^3	0.01	0.75	0.008					0		
cement grout	qt	0.0003	60	0.018					0		

				0					0		
				0					0		
				0					0		
Total (1:01)				94.58	**Total (1:02)**				10.40	**Total (1:03**	

A= Materials Unit Cost 94.58 Birr/ml

B= Manpower Unit Cost 5.53 Birr/ml

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 102.10 Birr/ml

Over head cost : _ 10% 10.21 "

Profit Cost: 15% 15.32 "

Total Unit Cost : _ 127.63 Birr/ml

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 1.88

WORK ITEM: (11.45) 30mm.thick granolythic window cill (1:3) on HCB . EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml RESULT : 56.15 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
granolythic cill for HCB.	m^2	0.204	175	35.70	Foreman	1	0.83	5	4.15	grinder	1
cement	qt	0.02	60	1.20	masonii	1	1	3.75	3.75		
sand	m^3	0.005	95	0.48	D/L	2	1	1.25	2.5		
water	m^3	0.01	0.75	0.008					0		
cement grout	qt	0.0003	60	0.018					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				37.40	**Total (1:02)**				10.40	**Total (1:03**	

A= Materials Unit Cost	37.40 Birr/ml	B= Manpower Unit Cost		5.53 Birr/ml	C= Equipment Unit Cost
		Total of (1:02)			Total of (1:03)
		Hourly Output: _____			Hourly output: _____
		Direct Cost of Work Item = A+B+C =			44.92 Birr/ml
			Over head cost : _	10%	4.49 "
			Profit Cost:	15%	6.74 "
			Total Unit Cost : _		56.15 Birr/ml

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 1.88

WORK ITEM: (11.46) 30mm.thick granolythic window cill (1:3) on Brick . EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml RESULT : 87.22 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
granolythic cill for stone.	m^2	0.346	175	60.55	Foreman	1	0.83	5	4.15	grinder	1
cement	qt	0.02	60	1.20	masonii	1	1	3.75	3.75		
sand	m^3	0.005	95	0.48	D/L	2	1	1.25	2.5		
water	m^3	0.01	0.75	0.008					0		
cement grout	qt	0.0003	60	0.018					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				62.25	**Total (1:02)**				10.40	**Total (1:03**	

A= Materials Unit Cost	62.25 Birr/ml	B= Manpower Unit Cost		5.53 Birr/ml	C= Equipment Unit Cost
		Total of (1:02)			Total of (1:03)
		Hourly Output: _____			Hourly output: _____
		Direct Cost of Work Item = A+B+C =			69.78 Birr/ml
			Over head cost : _	10%	6.98 "

Profit Cost:	15%	10.47	"
Total Unit Cost : _		87.22	Birr/ml

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 0.88

WORK ITEM: (11.47) 30mm. thick granite marble threads.(1:3) EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml RESULT : 183.98 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
30mm granite marble	m^2	0.306	420	128.52	Foreman	1	0.83	5	4.15	grinder	1
cement	qt	0.03	60	1.80	masonii	1	1	3.75	3.75		
sand	m^3	0.008	95	0.76	D/L	2	1	1.25	2.5		
water	m^3	0.01	0.75	0.008					0		
cement grout	qt	0.0003	60	0.018					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				131.11	**Total (1:02)**				10.40	**Total (1:03**	

A= Materials Unit Cost 131.11 Birr/ml B= Manpower Unit Cost 11.82 Birr/ml C= Equipment Unit Cost

Total of (1:02) Total of (1:03)

Hourly Output: _____ Hourly output: _____

Direct Cost of Work Item = A+B+C =		147.19	Birr/ml
Over head cost : _	10%	14.72	"
Profit Cost:	15%	22.08	"
Total Unit Cost : _		183.98	Birr/ml

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 0.88

WORK ITEM: (11.48) 30mm. thick white marble threads.(1:3) EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml RESULT : 161.03 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
30mm white marble	m^2	0.306	360	110.16	Foreman	1	0.83	5	4.15	grinder	1
cement	qt	0.03	60	1.80	masonii	1	1	3.75	3.75		
sand	m^3	0.008	95	0.76	D/L	2	1	1.25	2.5		
water	m^3	0.01	0.75	0.008					0		
cement grout	qt	0.0003	60	0.018					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				112.75	**Total (1:02)**				10.40	**Total (1:03**	

A= Materials Unit Cost 112.75 Birr/ml

B= Manpower Unit Cost 11.82 Birr/ml

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 128.83 Birr/ml

Over head cost : _ 10% 12.88 "

Profit Cost: 15% 19.32 "

Total Unit Cost : _ 161.03 Birr/ml

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 0.88

WORK ITEM: (11.49) 30mm. thick harar marble threads.(1:3) EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml RESULT : 126.61 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
30mm harar marble	m^2	0.306	270	82.62	Foreman	1	0.83	5	4.15	grinder	1
cement	qt	0.03	60	1.80	masonii	1	1	3.75	3.75		
sand	m^3	0.008	95	0.76	D/L	2	1	1.25	2.5		
water	m^3	0.01	0.75	0.008					0		
cement grout	qt	0.0003	60	0.018					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				85.21	**Total (1:02)**				10.40	**Total (1:03**	

A= Materials Unit Cost 85.21 Birr/ml

B= Manpower Unit Cost 11.82 Birr/ml

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 101.29 Birr/ml

Over head cost : _ 10% 10.13 "

Profit Cost: 15% 15.19 "

Total Unit Cost : _ 126.61 Birr/ml

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 0.88

WORK ITEM: (11.50) 30mm. thick Granolythic marble threads.(1:3) EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml RESULT : 90.27 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
30mm granolythic marble	m^2	0.306	175	53.55	Foreman	1	0.83	5	4.15	grinder	1
cement	qt	0.03	60	1.80	masonii	1	1	3.75	3.75		
sand	m^3	0.008	95	0.76	D/L	2	1	1.25	2.5		
water	m^3	0.01	0.75	0.008					0		
cement grout	qt	0.0003	60	0.018					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				56.14	**Total (1:02)**				10.40	**Total (1:03**	

A= Materials Unit Cost 56.14 Birr/ml

B= Manpower Unit Cost 11.82 Birr/ml

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 72.22 Birr/ml

Over head cost : _ 10% 7.22 "

Profit Cost: 15% 10.83 "

Total Unit Cost : _ 90.27 Birr/ml

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 1.13

WORK ITEM: (11.51) 20mm. thick Granite marble riser. (1:3). EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 ml RESULT : 107.06 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
granite marble	m^2	0.204	350	71.40	Foreman	1	0.83	5	4.15	grinder	1
cement	qt	0.02	60	1.20	masonii	1	1	3.75	3.75		
sand	m^3	0.0053	95	0.50	D/L	2	1	1.25	2.5		
water	m^3	0.01	0.75	0.008					0		
cement grout	qt	0.0003	60	0.018					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				73.13	**Total (1:02)**				10.40		**Total (1:03**

A= Materials Unit Cost 73.13 Birr/ml

B= Manpower Unit Cost 9.20 Birr/ml

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 85.65 Birr/ml

Over head cost : _ 10% 8.57 "

Profit Cost: 15% 12.85 "

Total Unit Cost : _ 107.06 Birr/ml

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.**

WORK ITEM: (11.52) 20mm. thick white marble riser. (1:3).

TOTAL QANTITY OF WORK ITEM: 1 ml

LABOUR HOURLY OUTPUT: 1.13

EQUIPEMENT:

RESULT : 94.31 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.

white marble	m^2	0.204	300	61.20	Foreman	1	0.83	5	4.15	grinder	1
cement	qt	0.02	60	1.20	masonii	1	1	3.75	3.75		
sand	m^3	0.0053	95	0.50	D/L	2	1	1.25	2.5		
water	m^3	0.01	0.75	0.008					0		
cement grout	qt	0.0003	60	0.018					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				62.93	**Total (1:02)**				10.40	**Total (1:03**	

A= Materials Unit Cost 62.93 Birr/ml

B= Manpower Unit Cost 9.20 Birr/ml

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 75.45 Birr/ml

Over head cost : _ 10% 7.55 "

Profit Cost: 15% 11.32 "

Total Unit Cost : _ 94.31 Birr/ml

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.**

WORK ITEM: (11.53) 20mm. thick Harar marble riser. (1:3).

TOTAL QANTITY OF WORK ITEM: 1 ml

LABOUR HOURLY OUTPUT: 1.13

EQUIPEMENT:

RESULT : 63.71 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
harar marble	m^2	0.204	180	36.72	Foreman	1	0.83	5	4.15	grinder	1
cement	qt	0.02	60	1.20	masonii	1	1	3.75	3.75		
sand	m^3	0.0053	95	0.50	D/L	2	1	1.25	2.5		
water	m^3	0.01	0.75	0.008					0		
cement grout	qt	0.0003	60	0.018					0		

				0					0		
				0					0		
				0					0		
Total (1:01)				38.45	**Total (1:02)**				10.40	**Total (1:03**	

A= Materials Unit Cost 38.45 Birr/ml

B= Manpower Unit Cost 9.20 Birr/ml

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 50.97 Birr/ml

Over head cost : _ 10% 5.10 "

Profit Cost: 15% 7.65 "

Total Unit Cost : _ 63.71 Birr/ml

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.**

WORK ITEM: (11.54) 20mm. thick Granolythic marble riser. (1:3).

TOTAL QANTITY OF WORK ITEM: 1 ml

LABOUR HOURLY OUTPUT: 1.13

EQUIPEMENT:

RESULT : 47.56 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
granolythic marble	m^2	0.204	116.67	23.80	Foreman	1	0.83	5	4.15	grinder	1
cement	qt	0.02	60	1.20	masonii	1	1	3.75	3.75		
sand	m^3	0.0053	95	0.50	D/L	2	1	1.25	2.5		
water	m^3	0.01	0.75	0.008					0		
cement grout	qt	0.0003	60	0.018					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				25.53	**Total (1:02)**				10.40	**Total (1:03**	

A= Materials Unit Cost	25.53 Birr/ml	B= Manpower Unit Cost		9.20 Birr/ml	C= Equipment Unit Cost
		Total of (1:02)			Total of (1:03)
		Hourly Output: _____			Hourly output: _____
		Direct Cost of Work Item = A+B+C =			38.05 Birr/ml
			Over head cost : _	10%	3.81 "
			Profit Cost:	15%	5.71 "
			Total Unit Cost : _		47.56 Birr/ml

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.**

WORK ITEM: (11.55) 20mm. thick Granite marble trechholds. (1:3).

TOTAL QANTITY OF WORK ITEM: 1 ml

LABOUR HOURLY OUTPUT: 0.88

EQUIPEMENT:

RESULT : 116.34 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
granite marble (w=20cm)	m^2	0.204	350	71.40	Foreman	1	1	5	5.00	grinder	1

cement	qt	0.02	60	1.20	tiler	1	1	3.75	3.75		
sand	m^3	0.0053	95	0.50	helper	2	1	1.9	3.8		
water	m^3	0.01	0.75	0.008	D/L	1	1	1.25	1.25		
cement grout	qt	0.0003	60	0.018					0		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				73.13	**Total (1:02)**				13.80	**Total (1:03**	

A= Materials Unit Cost 73.13 Birr/ml

B= Manpower Unit Cost 15.68 Birr/ml

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 93.07 Birr/ml

Over head cost : _ 10% 9.31 "

Profit Cost: 15% 13.96 "

Total Unit Cost : _ 116.34 Birr/ml

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.**

WORK ITEM: (11.56) 20mm. thick white marble trechholds. (1:3).

TOTAL QANTITY OF WORK ITEM: 1 ml

LABOUR HOURLY OUTPUT: 0.88

EQUIPEMENT:

RESULT : 103.59 Birr/ml

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
white marble (w=20cm)	m^2	0.204	300	61.20	Foreman	1	1	5	5.00	grinder	1
cement	qt	0.02	60	1.20	tiler	1	1	3.75	3.75		
sand	m^3	0.0053	95	0.50	helper	2	1	1.9	3.8		
water	m^3	0.01	0.75	0.008	D/L	1	1	1.25	1.25		
cement grout	qt	0.0003	60	0.018					0		

				0					0		
				0					0		
				0					0		
Total (1:01)				62.93	**Total (1:02)**				13.80	**Total (1:03**	

A= Materials Unit Cost 62.93 Birr/ml

B= Manpower Unit Cost 15.68 Birr/ml

Total of (1:02)

Hourly Output: _____

Direct Cost of Work Item = A+B+C = 82.87 Birr/ml

Over head cost : _ 10% 8.29 "

Profit Cost: 15% 12.43 "

Total Unit Cost : _ 103.59 Birr/ml

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.**

WORK ITEM: (11.57) 15x15 cm. Ceramic wall tile.(1:3).

TOTAL QANTITY OF WORK ITEM: 1 m^2

LABOUR HOURLY OUTPUT: 0.75

EQUIPEMENT:

RESULT : 124.94 Birr/m^2

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
15x15 ceramic tile	pc	47.25	1.4	66.15	Foreman	1	0.25	6.25	1.56	grinder	2
cement	qt	0.065	100	6.50	tiler	1	1	5	5		
sand	m^3	0.01	128	1.28	D/L	2	1	2	4		
water	m^3	0.01	0.75	0.008					0		
cement grout	qt	0.014	138	1.932					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				75.87	**Total (1:02)**				10.56	**Total (1:03**	

A= Materials Unit Cost	75.87 Birr/m²	B= Manpower Unit Cost	14.08 Birr/m²	C= Equipment Unit Cost	
		Total of (1:02)		Total of (1:03)	
		Hourly Output: _____		Hourly output: _____	
		Direct Cost of Work Item = A+B+C =		99.95	Birr/m²
		Over head cost : _	10%	10.00	"
		Profit Cost:	15%	14.99	"
		Total Unit Cost : _		124.94	Birr/m²

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 0.98

WORK ITEM: (11.58) 20x20 cm. Ceramic wall tile.(1:3). EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 m² RESULT : 126.75 Birr/m²

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
20 x 20 cm. ceramic tile	pc	25.5	3	76.50	Foreman	1	0.25	5	1.25	grinder	2
cement	qt	0.065	120	7.80	tiler	1	1	3.75	3.75		
sand	m³	0.01	95	0.95	D/L	2	1	1.25	2.5		
water	m³	0.01	0.75	0.008					0		
cement grout	qt	0.014	60	0.840					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				86.10	**Total (1:02)**				7.50	**Total (1:03**	

A= Materials Unit Cost	86.10 Birr/m²	B= Manpower Unit Cost	7.65 Birr/m²	C= Equipment Unit Cost	
		Total of (1:02)		Total of (1:03)	
		Hourly Output: _____		Hourly output: _____	
		Direct Cost of Work Item = A+B+C =		101.40	Birr/m²

Over head cost : _	10%	10.14	"	
Profit Cost:	15%	15.21	"	
Total Unit Cost : _		126.75	Birr/m²	

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 0.98

WORK ITEM: (11.59) Supply and fix mosaic tile. EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 m² RESULT : 221.27 Birr/m²

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
mosaic tile	m²	1.02	140	142.80	Foreman	1	0.25	6.25	1.56	grinder	2
cement	qt	0.065	200	13.00	tiler	1	1	5	5		
sand	m³	0.01	138	1.38	D/L	2	1	2	4		
water	m³	0.01	0.75	0.008					0		
cement grout	qt	0.014	100	1.400					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				158.59	**Total (1:02)**				10.56	**Total (1:03**	

A= Materials Unit Cost 158.59 Birr/m² B= Manpower Unit Cost 10.78 Birr/m² C= Equipment Unit Cost

Total of (1:02) Total of (1:03)

Hourly Output: _____ Hourly output: _____

Direct Cost of Work Item = A+B+C =		177.02	Birr/m²
Over head cost : _	10%	17.70	"
Profit Cost:	15%	26.55	"
Total Unit Cost : _		221.27	Birr/m²

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.**
WORK ITEM: (11.60) Addis decore wall finishing.
TOTAL QANTITY OF WORK ITEM: 1 m^2

LABOUR HOURLY OUTPUT: 1.5
EQUIPEMENT:
RESULT : 50.33 Birr/m^2

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Addis decore wall paper.	m^2	1.03	30	30.90	Foreman	1	0.25	5	1.25		
Adhesive glue	gal	0.053	98	5.19	tiler	1	1	3.75	3.75		
				0	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				36.09	**Total (1:02)**				6.25	**Total (1:03**	

A= Materials Unit Cost 36.09 Birr/m^2

B= Manpower Unit Cost 4.17 Birr/m^2
Total of (1:02)
Hourly Output: _____

C= Equipment Unit Cost
Total of (1:03)
Hourly output: _____

Direct Cost of Work Item = A+B+C = 40.26 Birr/m^2
Over head cost : _ 10% 4.03 "
Profit Cost: 15% 6.04 "
Total Unit Cost : _ 50.33 Birr/m^2

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 1.5

WORK ITEM: (11.61) Addis decore plastic wall paper. EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 m^2 RESULT : 11.70 Birr/m^2

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Addis decore wall paper.	m^2	1.03		0.00	Foreman	1	0.25	5	1.25		
Adhesive glue	gal	0.053	98	5.19	tiler	1	1	3.75	3.75		
				0	D/L	1	1	1.25	1.25		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				5.19	**Total (1:02)**				6.25	**Total (1:03**	

A= Materials Unit Cost 5.19 Birr/m^2

B= Manpower Unit Cost 4.17 Birr/m^2

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C = 9.36 Birr/m^2

Over head cost : _ 10% 0.94 "

Profit Cost: 15% 1.40 "

Total Unit Cost : _ 11.70 Birr/m^2

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 0.69

WORK ITEM: (11.62) 2cm. thick Granite wall marble (1:2) . EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 m^2 RESULT : 480.54 Birr/m^2

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
granite marble	m^2	1.02	350	357.00	Foreman	1	0.25	5	1.25	grinder	2
cement	qt	0.065	60	3.90	tiler	1	1	3.75	3.75		
sand	m^3	0.01	95	0.950	D/L	2	1	1.25	2.5		
cement	qt	0.014	60	0.840					0		
water	m^3	0.003	0.75	0.002					0		
				0					0		
				0					0		
Total (1:01)				362.69	**Total (1:02)**				7.50		**Total (1:03**

A= Materials Unit Cost 362.69 Birr/m^2

B= Manpower Unit Cost 10.87 Birr/m^2

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		384.43	Birr/m^2
Over head cost : _	10%	38.44	"
Profit Cost:	15%	57.66	"
Total Unit Cost : _		480.54	Birr/m^2

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 0.69

WORK ITEM: (11.63) 2cm. thick Harar wall marble (1:2). EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 m^2 RESULT : 263.79 Birr/m^2

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
harar marble	m^2	1.02	180	183.60	Foreman	1	0.25	5	1.25	grinder	2
cement	qt	0.065	60	3.90	tiler	1	1	3.75	3.75		
sand	m^3	0.01	95	0.950	D/L	2	1	1.25	2.5		
cement	qt	0.014	60	0.840					0		
water	m^3	0.003	0.75	0.002					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				189.29	**Total (1:02)**				7.50		**Total (1:03**

A= Materials Unit Cost 189.29 Birr/m^2

B= Manpower Unit Cost 10.87 Birr/m^2

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		211.03	Birr/m^2
Over head cost : _	10%	21.10	"
Profit Cost:	15%	31.65	"
Total Unit Cost : _		263.79	Birr/m^2

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.**

WORK ITEM: (11.64) 2cm. thick white Gojam wall marble (1:2).

TOTAL QANTITY OF WORK ITEM: 1 m^2

LABOUR HOURLY OUTPUT: 0.69

EQUIPEMENT:

RESULT : 416.79 Birr/m^2

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.

gojam marble	m^2	1.02	300	306.00	Foreman	1	0.25	5	1.25	grinder	2
cement	qt	0.065	60	3.90	tiler	1	1	3.75	3.75		
sand	m^3	0.01	95	0.950	D/L	2	1	1.25	2.5		
cement	qt	0.014	60	0.840					0		
water	m^3	0.003	0.75	0.002					0		
				0					0		
				0					0		
				0					0		
Total (1:01)				311.69	**Total (1:02)**				7.50	**Total (1:03**	

A= Materials Unit Cost 311.69 Birr/m^2

B= Manpower Unit Cost 10.87 Birr/m^2

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =	333.43	Birr/m^2
Over head cost : _	10%	33.34 "
Profit Cost:	15%	50.01 "
Total Unit Cost : _		416.79 Birr/m^2

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.**

WORK ITEM: (11.65) Semi dressed stone pavement on 20cm. thick granular mats.

TOTAL QANTITY OF WORK ITEM: 1 m^2

LABOUR HOURLY OUTPUT: 1.5

EQUIPEMENT:

RESULT : 46.49 Birr/m^2

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
dressed stone	m^2	1.05	25	26.25	Foreman	1	0.25	5	1.25		
red ash	qt	1.05	3	3.15	masonii	1	1	3.75	3.75		
selected material	m^3	1.05	3.45	3.623	D/L	1	1	1.25	1.25		
				0					0		
				0					0		

				0					0		
				0					0		
				0					0		
Total (1:01)				33.02	**Total (1:02)**				6.25	**Total (1:03**	

A= Materials Unit Cost 33.02 Birr/m²

B= Manpower Unit Cost 4.17 Birr/m²

Total of (1:02)

Hourly Output: _____

Direct Cost of Work Item = A+B+C = 37.19 Birr/m²

Over head cost : _ 10% 3.72 "

Profit Cost: 15% 5.58 "

Total Unit Cost : _ 46.49 Birr/m²

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **FINISHING WORKS.** LABOUR HOURLY OUTPUT: 1

WORK ITEM: (11.66) C-15 8cm thick mass concrete pavement under hard core. EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 m² RESULT : 111157.87 Birr/m²

Material Cost (1:01)					Labour Cost (1:02)					Equipmer	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
cement	qt	0.235	60	14.10	Foreman	1	0.5	5	2.50		
sand	m³	0.037	95	3.51	masonii	1	1	3.75	3.75		
gravel	m³	0.064	120	7.68	D/L	1	1	1.25	1.25		
15cm stone hard core	m³	0.158	24	3.79					0		
7cm thick selected mats.	m³	0.074	23	1.70					88888		
water	m³	0.01	0.75	0.01					0		
				0					0		
				0					0		
				0					0		

Total (1:01)	30.80	**Total (1:02)**	88895.50	**Total (1:03**	

A= Materials Unit Cost 30.80 Birr/m²

B= Manpower Unit Cost 88895.50 Birr/m²

Total of (1:02)

Hourly Output: _____

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of Work Item = A+B+C =		88926.30	Birr/m²
Over head cost : _	10%	8892.63	"
Profit Cost:	15%	13338.94	"
Total Unit Cost : _		111157.87	Birr/m²

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

m²/hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0

0 Birr/m²

m²/hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0

0 Birr/m²

m²/hr

ıt Cost (1:03)

Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0

0 Birr/m^2

m^2/hr

nt Cost (1:03)	
Hourly Rental	Hourly Cost

	0
	0
	0
	0
	0
	0
	0
)	0

0 Birr/m^2

m^2/hr

t Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0

	0
	0
	0
)	0

0 Birr/m²

m²/hr

nt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0

0 Birr/m²

m²/hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
	0
	0
)	0

0 Birr/m²

m²/hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
	0
)	0

0 Birr/m²

m²/hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
	0
)	0

0 Birr/m²

m^2/hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
4.44	4.44
	0
	0
	0
	0
	0
	0
)	4.44

1.78 Birr/m^2

m²/hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0

0 Birr/m²

m²/hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
	0
	0
)	0

0 Birr/m^2

2

m^2/hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost

	0
	0
	0
	0
	0
	0
	0
	0
)	0

0 Birr/m²

m²/hr

nt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0

	0
	0
)	0

0 Birr/m²

m²/hr

nt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
	0
)	0

0 Birr/m²

m²/hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
	0
)	0

0 Birr/m²

m²/hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
	0
)	0

0 Birr/m²

m²/hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
	0
	0
)	0

0 Birr/m²

m²/hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	3.75
	0
	0
	0
	0
	0
	0
	0
	0
)	3.75

4.26 Birr/m²

m²/hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	3.75
	0
	0
	0
	0
	0
	0
	0
)	3.75

4.26 Birr/m²

m²/hr

ıt Cost (1:03)

Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0

0.00 Birr/m²

m²/hr 10

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0

	0
	0
	0
	0
	0
	0
	0
	0
)	0

0.00 Birr/m^2

m^2/hr

t Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0

	0
)	0

0.00 Birr/m²

m²/hr

nt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0

0.00 Birr/m²

m²/hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0

0.00 Birr/m²

m²/hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0

0.00 Birr/m²

m²/hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0

0.00 Birr/m²

ml/hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	3.75
	0
	0
	0
	0
	0
	0
	0
)	3.75

1.50 Birr/ml

ml/hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	3.75
	0
	0
	0
	0
	0
	0
	0
)	3.75

1.50 Birr/ml

ml/hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	3.75
	0
	0
	0
	0
	0
	0
	0
)	3.75

1.50 Birr/ml

_____

ml/hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost

3.75	3.75
	0
	0
	0
	0
	0
	0
	0
)	3.75

1.50 Birr/ml

ml/hr

t Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	3.75
	0
	0
	0
	0

	0
	0
)	3.75

1.50 Birr/ml

ml/hr

nt Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	3.75
	0
	0
	0
	0
	0
	0
)	3.75

1.50 Birr/ml

ml /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0

Birr/ml

ml /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0

Birr/ml

ml /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0

Birr/ml

ml /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0

Birr/ml

ml /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0

Birr/ml

ml /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	3.75
	0
	0
	0
	0
	0
	0
	0
)	3.75

1.99 Birr/ml

ml /hr

ıt Cost (1:03)

Hourly Rental	Hourly Cost
3.75	3.75
	0
	0
	0
	0
	0
	0
)	3.75

1.99 Birr/ml

ml /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	3.75

	0
	0
	0
	0
	0
	0
	0
)	3.75

1.99 Birr/ml

ml /hr

t Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	3.75
	0
	0
	0
	0
	0

	0
)	3.75

1.99 Birr/ml

ml /hr

nt Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	3.75
	0
	0
	0
	0
	0
	0
	0
)	3.75

1.99 Birr/ml

ml /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	3.75
	0
	0
	0
	0
	0
	0
	0
)	3.75

1.99 Birr/ml

ml /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	3.75
	0
	0
	0
	0
	0
	0
	0
)	3.75

1.99 Birr/ml

ml /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	3.75
	0
	0
	0
	0
	0
	0
	0
)	3.75

1.99 Birr/ml

ml /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	3.75
	0
	0
	0
	0
	0
	0
	0
)	3.75

1.99 Birr/ml

ml /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	3.75
	0
	0
	0
	0
	0
	0
	0
)	3.75

1.99 Birr/ml

_____

ml /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost

3.75	3.75
	0
	0
	0
	0
	0
	0
	0
)	3.75

1.99 Birr/ml

ml /hr

(1:03)	
Hourly Rental	Hourly Cost
3.75	3.75
	0
	0
	0
	0

	0
	0
	0
)	3.75

1.99 Birr/ml

ml /hr

t Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	3.75
	0
	0
	0
	0
	0
	0
	0
)	3.75

1.99 Birr/ml

ml /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	3.75
	0
	0
	0
	0
	0
	0
	0
)	3.75

1.99 Birr/ml

ml /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	3.75
	0
	0
	0
	0
	0
	0
	0
)	3.75

4.26 Birr/ml

ml /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	3.75
	0
	0
	0
	0
	0
	0
	0
)	3.75

4.26 Birr/ml

ml /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	3.75
	0
	0
	0
	0
	0
	0
	0
)	3.75

4.26 Birr/ml

ml /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	3.75
	0
	0
	0
	0
	0
	0
	0
)	3.75

4.26 Birr/ml

ml /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	3.75
	0
	0
	0
	0
	0
	0
	0
)	3.75

3.32 Birr/ml

_____

ml /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost

3.75	3.75
	0
	0
	0
	0
	0
	0
	0
)	3.75

3.32 Birr/ml

ml /hr

t Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	3.75
	0
	0
	0
	0

	0
	0
	0
)	3.75

3.32 Birr/ml

_____

ml /hr

t Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	3.75
	0
	0
	0
	0
	0
	0
	0
)	3.75

3.32 Birr/ml

ml /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	3.75

	0
	0
	0
	0
	0
	0
	0
	0
)	3.75

4.26 Birr/ml

_____

ml /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	3.75
	0
	0
	0
	0

	0
	0
	0
)	3.75

4.26 Birr/ml

_____

m² /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	7.5
	0
	0
	0
	0
	0
	0
	0
)	7.5

10.00 Birr/m²

m² /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	7.5
	0
	0
	0
	0
	0
	0
	0
)	7.5

7.65 Birr/m²

m² /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	7.5
	0
	0
	0
	0
	0
	0
	0
)	7.5

7.65 Birr/m²

m² /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0

0.00 Birr/m²

m² /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
)	0

0.00 Birr/m²

m² /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	7.5
	0
	0
	0
	0
	0
	0
)	7.5

10.87 Birr/m²

m² /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost
3.75	7.5
	0
	0
	0
	0
	0
	0
	0
)	7.5

10.87 Birr/m^2

m^2 /hr

ıt Cost (1:03)	
Hourly Rental	Hourly Cost

3.75	7.5
	0
	0
	0
	0
	0
	0
	0
)	7.5

10.87 Birr/m²

m² /hr

t Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0

	0
	0
	0
)	0

0.00 Birr/m²

m² /hr

nt Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
	0
	0

)	0

0.00 Birr/m²

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **Carpentary & Joinery** LABOUR HOURLY OUTPUT: 0.63

WORK ITEM : (8.8) Built In Cupboard (Four drawers & openings) . EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 6.94 m^2 RESULT **625.98** Birr/m^2

Material Cost (1:01)					Labour (1:02)					Equipmen	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	no of hours
timber	m^3	0.45	3000	1350	Foreman	1	0.25	5	1.25	compinanto	4
Ply wood - Italy	m^2	7.92	37.89	300.09	Carpenter II	1	1	3.75	3.75	Vice	7
- normal	m^2	34.32	26.53	910.51	Carpenter I	1	1	2.5	2.5		
Nail - diff. size	kg	1	8.00	8.00	Helper	1	1	1.25	1.25		
					Fixing				8.75		
Hing & Latch	Pcs	26	2	52.00	Foreman	1	0.167	5	0.835		
Screw of diff. size	Pcs	30	0.1	3.00	Painter	1	1	3.75	3.75		
lock (two step)	Pcs	4	28	112.00	D/L	1	1	1.25	1.25		
					Painting				5.84		
Handle	Pcs	9	6	54.00	Carpenter III	1	24	5	120		
Colla & thiner	gall	2	102	204.00	Carpenter II	1	24	3.75	90		
Varnish	kg	1	26	26.00	Helper	1	24	0.63	15.12		
Iron rod	lm	2.4	8.3	19.92	Making				225.12		
Total (1:-01)				3039.52	**Total (1:02)**					**Total (1:03)**	

A= Material unit cost **437.97** Birr/m^2

B=Manpower Unit Cost	Making	Painting	Fixing	C= Equipment Unit Cost
Total of (1:02)	32.44	4.67	13.89	Total of (1:03)
Hourly Output		**50.99**	Birr/m2	Hourly output: _____
Direct cost of work item= A+B+C=			500.78	Birr/m^2
Overhead Cost :		10%	50.08	"
Profit Cost:		15%	75.12	"
Total Unit Cost :			**625.98**	Birr/m^2

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **Carpentry & Joinery** LABOUR HOURLY OUTPUT: 0.7

WORK ITEM :(8.1) Abujedi ceiling . EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 m^2 RESULT **32.72** Birr/m^2

Material Cost (1:01)					Labour (1:02)					Equipmen	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Abujedi ceiling material	m^2	1	5.00	5	Foreman	1	0.25	0.83	0.21		
Batten (4 X 5 cm)	lm	4	3.00	12	Carpenter II	1	1	3.75	3.75		
Corner list	lm	4	1.25	5	Carpenter I	1	1	3.13	3.13		
Center list	lm	1	3.00	3	Helper	1	1	1.88	1.88		
Nail - 8mm	kg	0.13	8	1.04					0		
- 6mm	kg	0.017	8	0.14					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				26.18	**Total (1:02)**				8.97		**Total (1:03**

A= Material unit cost **26.18** Birr/m^2

B=Manpower Unit Cost **12.811** Birr/m^2

Total of (1:02)

Hourly Output

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of work item= A+B+C		26.18	Birr/m^2
Overhead Cost :	10%	2.62	"
Profit Cost:	15%	3.93	"
Total Unit Cost :		**32.72**	Birr/m^2

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **Carpentry & Joinery** LABOUR HOURLY OUTPUT: 0.75

WORK ITEM : (8.2) Hard board ceiling . EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 m^2 RESULT : **47.31** Birr/m^2

Material Cost (1:01)	Labour (1:02)	Equipment Cost (1:03)

Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Hard board	m^2	1	16.67	16.67	Foreman	0.25	1	0.83	0.21		
Batten (4 X 5 cm)	lm	4	3.00	12	Carpenter II	1	1	3.75	3.75		
Corner list	lm	1	3.00	3	Carpenter I	1	1	3.13	3.13		
Center list	lm	4	1.25	5	Helper	1	1	1.88	1.88		
Nail - 8mm	kg	0.13	8	1.04					0		
- 6mm	kg	0.017	8	0.14					0		
				0.00					0		
				0.00					0		
				0.00					0		
Total (1:-01)				37.85	**Total (1:02)**				8.97		**Total (1:03**

A= Material unit cost **37.85** Birr/m^2

B=Manpower Unit Cost **11.957** Birr/m^2

Total of (1:02)

Hourly Output

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of work item= A+B+C = **37.85** Birr/m^2

Overhead Cost : 10% 3.78 "

Profit Cost: 15% 5.68 "

Total Unit Cost : **47.31** Birr/m^2

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **CARPENTRY & JOINERY**

WORK ITEM (8.3) 8mm. thick chipwood Ceiling.

TOTAL QANTITY OF WORK ITEM: 1 m^2

LABOUR HOURLY OUTPUT: 0.65

EQUIPEMENT:

RESULT **74.09** Birr/m^2

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Chip wood	m^2	1.05	40.00	42	Foreman	0.25	1	0.83	0.21		

Batten (4 X 5 cm)	lm	4	3.00	12	Carpenter II	1	1	3.75	3.75		
Corner list	lm	1.25	3.00	3.75	Carpenter I	1	1	3.13	3.13		
Nail - 8mm	kg	0.13	8	1.04	Helper	1	1	1.88	1.88		
- 6mm	kg	0.06	8	0.48					0		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				**59.27**	**Total (1:02)**				8.97	**Total (1:03**	

A= Material unit cost **59.27** Birr/m²

B=Manpower Unit Cost **13.796** Birr/m²

Total of (1:02)

Hourly Output

C= Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of work item = A+B+C =		**59.27**	Birr/m²
Overhead Cost :	10%	5.93	"
Profit Cost:	15%	8.89	"
Total Unit Cost :		**74.09**	Birr/m²

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **MASONRY WORKS**

WORK ITEM : (2.4) 40cm. thick elevation wall (Two side dressed).

TOTAL QANTITY OF WORK ITEM: 1 m²

LABOUR HOURLY OUTPUT: 0.3

EQUIPEMENT:

RESULT : 144.83 Birr/m²

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Cement	Qnt.	0.41	60.00	24.6	Foreman	1	0.25	5	1.25		
Sand	m³	0.08	95.00	7.6	Masone II	2	1	3.75	7.50		
Stone	m³	0.59	50.00	29.5	Chisler	1	1	2.5	2.50		
				0	D/L	4	1	1.25	5.00		
				0					0.00		
				0					0.00		

				0					0.00		
				0					0.00		
				0					0.00		
Total (1:-01)				61.70	**Total (1:02)**				16.25	**Total (1:03**	

A= Material unit cost 61.7 Birr/m²

B=Manpower Unit Cost 54.1667 Birr/m²

Total of (1:02)

Hourly Output

C=Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of work item = A + B + C =		**115.87**	Birr/m²
Overhead Cost :	10%	11.59	"
Profit Cost:	15%	17.38	"
Total Unit Cost :		**144.83**	Birr/m²

Remark : _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **MASONRY WORKS**

WORK ITEM : (2.3) 40cm. thick elevation wall (One side dressed) .

TOTAL QANTITY OF WORK ITEM : 1 m²

LABOUR HOURLY OUTPUT: 0.35

EQUIPEMENT:

RESULT 667.07 Birr/m²

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Cement	Qnt.	0.41	280.00	114.8	Foreman	0.25	1	5	1.25		
Sand	m³	0.08	450.00	36	Masone II	2	1	18.75	37.50		
Stone	m³	0.55	300.00	165	Chisler	1	1	2.5	2.50		
				0	D/L	4	1	8.75	35.00		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
Total (1:-01)				315.8	**Total (1:02)**				76.25	**Total (1:03**	

A= Material unit cost	315.8	Birr/m²	B=Manpower Unit Cost	217.857	Birr/m²	C=Equipment Unit Cost	
			Total of (1:02)			Total of (1:03)	
			Hourly Output			Hourly output:	
			Direct Cost of work item = A + B + C =		**533.66**	Birr/m²	
			Overhead Cost :	10%	53.37	"	
			Profit Cost:	15%	80.05	"	
			Total Unit Cost :		**667.07**	Birr/m²	

Remark : _____

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654.1576087

130.83152174

1.84

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **MASONRY WORKS** LABOUR HOURLY OUTPUT: 0.23

WORK ITEM : (2.2) 50cm. thick masonry foundation (A.G.L). EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 m³ RESULT 675.30 Birr/m³

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Cement	Qnt.	0.88	280.00	246.4	Foreman	1	0.17	6.25	1.06		
Sand	m³	0.17	138.00	23.46	Masone II	2	1	5	10.00		
Stone	m³	1.25	150.00	187.5	D/L	4	1	2	8.00		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
Total (1:-01)				457.36	**Total (1:02)**				19.06	**Total (1:03**	

A= Material unit cost	457.36	Birr/m³	B=Manpower Unit Cost	82.8804	Birr/m³	C=Equipment Unit Cost	
			Total of (1:02)			Total of (1:03)	
			Hourly Output	7.08/0.24	29.5	Hourly output:	
			Direct Cost of work item = A + B + C =		**540.24**	Birr/m³	
			Overhead Cost :	10%	54.02	"	

Profit Cost:	15%	81.04	"
Total Unit Cost :		**675.30**	Birr/m³

Remark : _____

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300.9125

60.1825

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **MASONRY WORKS**

WORK ITEM : (2.1) 50cm. thick masonry foundation (B.G.L).

TOTAL QANTITY OF WORK ITEM: 1 m³

LABOUR HOURLY OUTPUT: 0.5

EQUIPEMENT:

RESULT 668.26 Birr/m³

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Cement	Qtl..	0.92	280.00	257.6	Foreman	1	0.17	6.25	1.06		
Sand	m³	0.26	138.00	35.88	Masone II	2	1	5	10.00		
Stone	m³	1.3	150.00	195	D/L	6	1	2	12.00		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
Total (1:-01)				488.48	**Total (1:02)**				23.06	**Total (1:03**	

A= Material unit cost 488.48 Birr/m³

B=Manpower Unit Cost 46.125 Birr/m³

Total of (1:02)

Hourly Output

C=Equipment Unit Cost

Total of (1:03)

Hourly output: _____

Direct Cost of work item = A + B + C =		**534.61**	Birr/m³
Overhead Cost :	10%	53.46	"
Profit Cost:	15%	80.19	"
Total Unit Cost :		**668.26**	Birr/m³

Remark : _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **CARPETRY & JOINERY** LABOUR HOURLY OUTPUT: 0.5

WORK ITEM : (8.5) (90x210 cm.) Flush wooden door Coverd With Kerero Plywood. EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 pcs. 1.89 m^2 RESULT 274.13 Birr/m^2

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Zigba wood	m^3	0.014	3000	42	Carpeter	1	1	3.75	3.75	Compinanto	2
Ply wood (Kerero)	m^2	3.78	29.55	111.70	Helper	1	1	1.90	1.90	Vice	1
Cylinderical lock	Pcs.	1	80.00	80	Foreman	1	0.167	5	0.84		
Hing	Pcs.	3	24	72	Carpeter	1	1	3.75	3.75		
Screw	Pcs.	10	0.1	1	Helper	1	1	1.90	1.90		
Colla	lit.	0.4	25	10					0.00		
Nails Of diff. Size	kg.	0.14	8	1.12					0.00		
Door list (Mostra)	ml.	5.1	4	20.4					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
Total (1:-01)				338.22	**Total (1:02)**				12.14	**Total (1:03**	

A= Material unit cost **338.219** Birr/pcs.

B=Manpower Unit Cost **24.27** Birr/pcs. Total of (1:02) / Hourly Output

C=Equipment Unit Cost Total of (1:03) / Hourly output:

Direct Cost of work item = A + B + C =		**414.49**	Birr/pcs.
Overhead Cost :	10%	41.45	"
Profit Cost:	15%	62.17	"
Total Unit Cost :		**518.11**	Birr/pcs.

Remark : _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **CARPETRY & JOINERY** LABOUR HOURLY OUTPUT: 0.5

WORK ITEM : (8.6) (90x210 cm.) Flush wooden door Coverd With Mahogony Plywood. EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 1 pcs. = 1.89 m^2 RESULT 489.15 Birr/m^2

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Zigba wood	m^3	0.014	3000	42	Carpeter	1	1	3.75	3.75	Compinanto	2
Ply wood (Mahogony)	m^2	3.78	60.00	226.80	Helper	1	1	1.90	1.90	Vice	1
Cylinderical lock	Pcs.	1	250.00	200	Foreman	1	0.167	5	0.84		
Hing	Pcs.	3	54	162	Carpeter	1	1	3.75	3.75		
Screw	Pcs.	10	0.1	1	Helper	1	1	1.90	1.90		
Colla	lit.	0.4	25	10					0.00		
Nails Of diff. Size	kg.	0.14	8	1.12					0.00		
Door list (Mostra)	ml.	5.1	4	20.4					0.00		
				0					0.00		
				0					0.00		
				0					0.00		
Total (1:-01)				663.32	**Total (1:02)**				12.14	**Total (1:03**	

A= Material unit cost **663.32** Birr/pcs. B=Manpower Unit Cost **24.27** Birr/pcs. C=Equipment Unit Cost

Total of (1:02) Total of (1:03)

Hourly Output Hourly output:

Direct Cost of work item = A + B + C = **739.59** Birr/pcs.

Overhead Cost : 10% 73.96 "

Profit Cost: 15% 110.94 "

Total Unit Cost : **924.49** Birr/pcs.

Remark : _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **CARPENTRY & JOINERY**
LABOUR HOURLY OUTPUT: 0.88
WORK ITEM (8.4) Tanged & Groved (T & G) Tidwood Ceiling.
EQUIPEMENT:
TOTAL QANTITY OF WORK ITEM: 1 m^2
RESULT **186.38** Birr/m^2

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
T & G Tidwood	m^2	1.05	100.00	105	Foreman	1	0.25	0.83	0.21	wood	
4 X 5 cm. Zigba purlin	lm	3.4	3.00	10.2	Carpenter II	1	1	3.75	3.75	Machine	1
Corner list	lm	3.4	3.00	10.2	Helper	1	1	1.88	1.88		
Nails of diff. Size	kg	0.14	7	0.98	Helper	1	1	1.90	1.90		
				0					0		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				**126.38**	**Total (1:02)**				7.74		**Total (1:03**

A= Material unit cost **126.38** Birr/m^2

B=Manpower Unit Cost **8.79** Birr/m^2
Total of (1:02)
Hourly Output

C= Equipment Unit Cost
Total of (1:03)
Hourly output: _____

Direct Cost of work item = A+B+C = **149.11** Birr/m^2
Overhead Cost : 10% 14.91 "
Profit Cost: 15% 22.37 "
Total Unit Cost : **186.38** Birr/m^2

Remark _____
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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **CARPETRY & JOINERY**
LABOUR HOURLY OUTPUT: 1.13
WORK ITEM : (8.7) Framed & Panelled solid Doors & Windows .
EQUIPEMENT:
TOTAL QANTITY OF WORK ITEM: 1 pcs. 1.89 m^2
RESULT **293.26** Birr/m^2

Material Cost (1:01)	Labour (1:02)	Equipment Cost (1:03)

Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Grade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Making & Fixing										Compinanto	2
Tid wood frame (external)	m^3	0.051	1400.00	71.40	Carpenter II	1	1	3.75	3.75	Vice	1
Tid wood frame (internal)	m^3	0.03	1400.00	42.00	Helper	1	1	1.9	1.90		
T & G Tidwood panel.	m^2	1.26	80.00	100.8	Foreman	1	0.167	5	0.84		
Door list.	ml.	5.1	4.00	20.4	Carpenter I	1	1	2.5	2.50		
Cylinderical Lock(Hungary)	Pcs.	1	80.00	80	Helper	1	1	1.9	1.90		
Hinges	"	3	24.00	72					0.00		
Screw	"	10	0.10	1					0.00		
Colla	lit.	0.4	25.00	10					0.00		
Nails of diff. Sizes.	kg.	0.2	8.00	1.6					0.00		
				0					0.00		
Total (1:-01)				399.20	**Total (1:02)**				10.89	**Total (1:03**	

A= Material unit cost **399.2** Birr/pcs.

B=Manpower Unit Cost **18.21** Birr/pcs.

C=Equipment Unit Cost

Total of (1:02) / Hourly Output

Total of (1:03) / Hourly output:

Direct Cost of work item = A + B + C =		**443.41**	Birr/pcs.
Overhead Cost :	10%	44.34	"
Profit Cost:	15%	66.51	"
Total Unit Cost :		**554.26**	Birr/pcs.

Remark : _____

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m²/hr 1.25

Birr/m²

t Cost (1:03)	
Hourly Rental	Hourly Cost
10	40
6	42
	0
	0
	0
	0
	0
	0
	0
	0
	0
	0
	0
	82

11.82 Birr/m²

m²/hr

t Cost (1:03)

Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
	0
	0
)	0

0 Birr/m^2

m^2/hr

Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
	0
	0
)	0

0 Birr/m^2

9.6

m^2/hr

Hourly Rental	Hourly Cost
	0

	0
	0
	0
	0
	0
	0
	0
	0
)	0

0 Birr/m^2

m^2/hr.

Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0

	0
	0
	0
)	0

0 Birr/m^2

_____

m^2/hr.

Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
	0
	0
)	0

0 Birr/m^2

m^3/hr.

Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
	0
	0
)	0

0 Birr/m^3

m^3/hr.

Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
	0
	0
)	0

0 Birr/m^3

pcs./hr.

Hourly Rental	Hourly Cost
10	20.00
6	6.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
)	26.00

52.00 Birr/pcs.

pcs./hr.

Hourly Rental	Hourly Cost
10.00	20.00
6.00	6.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
)	26.00

52.00 Birr/pcs.

m²/hr

Hourly Rental	Hourly Cost
	0
20	20
	0
	0
	0
	0
	0
	0
	0
)	20

22.73 Birr/m²

pcs./hr.

Hourly Rental	Hourly Cost
10.00	20.00
6.00	6.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
	0.00
)	26.00

26.00 Birr/pcs.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: ***CONCRETE WORK*** LABOUR HOURLY OUTPUT: 6.25

WORK ITEM: (3.1) C-7 Lean Concrete (Hand mix) 1:2:7 EQUIPEMENT:

TOTAL QUANTITY OF WORK ITEM: 1 m^2 0.05 m. thick RESULT: 89.40 Birr/m^2

Material Cost (1:01)					Labour (1:02)					Equipme	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Trade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Cement	Qnt.	2.13	280	596.4	Mason I	1	1	25	25	-	
Sand	m3	0.27	466.67	126	D/L	2	1	10	20	-	
Gravel (02)	m^3	0.95	535.71	508.9285714					0		
Water	m^3	0.054	0.75	0.041					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				1231.369071	**Total (1:02)**				45	**Total (1:0**	

A= Materials Unit Cost 61.57 Br./m^2 B=Manpower Unit Cost 7.20 Br./m^2 C=Equipment Unit Cost

Total of (1:02) 5.65 Total of (1:03)

267.49Br./m^3 X 0.05$m_.$ Hourly Output 6.25 Hourly output: _____

Direct Cost of work item= A+B+C= 68.77 Birr/m^2

Overhead Cost: 15% 10.32 "

Profit Cost: 15% 10.32 "

Total Unit Cost : 89.40 Birr/m^2

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: ***CONCRETE WORK*** LABOUR HOURLY OUTPUT: _____ 0.625

WORK ITEM:_ (3.2) C-20 Concrete (Hand mix) 1:2:4 EQUIPEMENT:

TOTAL QUANTITY OF WORK ITEM: **1m^3** 1 m^3 RESULT: 2255.89 Birr/m^3

Material Cost (1:01)					Labour (1:02)					Equipme	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Trade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Cement	Qnt.	3.44	280	963.2	Foreman	0.167	1	5	0.835	-	
Sand	m3	0.44	450.00	198	Mason II	1	1	18.75	18.75	-	
Gravel (02)	m3	0.88	600.00	528	D/L	6	1	8.75	52.5		
Water	m3	0.231	0.75	0.173					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				1689.37325	**Total (1:02)**				72.09	**Total (1:0**	

A= Materials Unit Cost 1689.37 Birr/m³

B=Manpower Unit Cost 115.34 Br./m³

Total of (1:02) 12.08

Hourly Output 0.625

C= Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of work item = A+B+C = 1804.71 Birr/m³

Overhead Cost: 10% 180.47 "

Profit Cost: 15% 270.71 "

Total Unit Cost : 2255.89 Birr/m³

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: ***CONCRETE WORK*** LABOUR HOURLY OUTPUT: 1.75

WORK ITEM: (3.3) C-20 Concrete (Mechanical Mix) 1:2:4 EQUIPEMENT: Mixer & Vibrator

TOTAL QUANTITY OF WORK ITEM: _ 1 m³ RESULT: 749.26 Birr/m³

Material Cost (1:01)					Labour (1:02)					Equipment Cost	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Trade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Cement	Qnt.	3.35	110.00	368.5	Foreman	1	1	5	5	Mixer	1
Sand	m3	0.43	110.00	47.3	Mason II	2	1	3.75	7.5	Vibrator	1
Gravel (02)	m³	0.86	140.00	120.4	D/L	45	1	1.25	56.25		

Water	m^3	0.19	0.75	0.143					0		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				536.3425	**Total (1:02)**				68.75	**Total (1:0**	

A= Materials Unit Cost 536.34 Birr/m^3

B=Manpower Unit Cost 39.29 Br./m^3

Total of (1:02) 68.75

Hourly Output 1.75

C= Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of work item = A+B+C = 599.41 Birr/m^3

Overhead Cost: 10% 59.94 "

Profit Cost: 15% 89.91 "

Total Unit Cost : 749.26 Birr/m^3

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: ***CONCRETE WORK***

WORK ITEM: (3.5) C-25 Concrete (Mechanical Mix) 1:2:3

TOTAL QUANTITY OF WORK ITEM: 1 m^3

LABOUR HOURLY OUTPUT: 1.125

EQUIPEMENT: Mixer & Vibrator

RESULT: 2598.63 Birr/m^3

Material Cost (1:01)					Labour (1:02)					Equipment Cost	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Trade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Cement	Qnt.	3.97	280.00	1111.60	Foreman	1	1	6.25	6.25	Mixer	1
Sand	m3	0.51	466.67	238.00	Mason II	2	1	25	50	Vibrator	2
Gravel (02)	m^3	0.76	535.71	407.14	D/L	25	1	10	250		
Water	m^3	0.213	0.75	0.16							
Total (1:-01)				1756.90	**Total (1:02)**				306.25	**Total (1:0**	

A= Materials Unit Cost	1756.90	Birr/m³	B=Manpower Unit Cost	272.22	Br./m³	C= Equipment Unit Cos	
			Total of (1:02)	43.75		Total of (1:03)	
			Hourly Output	0.75		Hourly output:	
			Direct Cost of work item = A+B+C =			2078.90	Birr/m³
			Overhead Cost:		15%	311.84	"
			Profit Cost:		10%	207.89	"
			Total Unit Cost :			2598.63	Birr/m³

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: ***CONCRETE WORK*** LABOUR HOURLY OUTPUT: 0.625

WORK ITEM: (3.4) C-25 Concrete (Hand Mix) 1:2:3 EQUIPEMENT:_

TOTAL QUANTITY OF WORK ITEM: _ 1 m³ RESULT : 513.35 Birr/m³

Material Cost (1:01)					Labour (1:02)					Equipment Cost	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour byTrade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Cement	Qnt.	4.1	60	246	Foreman	0.167	1	5	0.835		
Sand	m3	0.53	95.00	50.35	Mason II	1	1	3.75	3.75		
Gravel (02)	m³	0.79	120.00	94.8	D/L	6	1	1.25	7.5		
Water	m³	0.26	0.75	0.195					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				391.345	**Total (1:02)**				12.09	**Total (1:0**	

A= Materials Unit Cost	391.34	Birr/m³	B=Manpower Unit Cost	19.34	Br./m³	C= Equipment Unit Cos	
			Total of (1:02)	12.08		Total of (1:03)	
			Hourly Output	0.625		Hourly output:	
			Direct Cost of work item = A+B+C =			410.68	Birr/m³
			Overhead Cost:		10%	41.07	"
			Profit Cost:		15%	61.60	"

Total Unit Cost : 513.35 Birr/m³

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: ***CONCRETE WORK*** LABOUR HOURLY OUTPUT: 9

WORK ITEM: (3.6) C-30 Concrete (Mechanical Mix) 1:1:3 EQUIPEMENT: Mixer & Vibrator

TOTAL QUANTITY OF WORK ITEM: 1 m³ RESULT: 160.13 Birr/m³

Material Cost (1:01)					Labour (1:02)					Equipment Cost	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Trade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
BANZEL	L	2.5	16.7	41.75	Foreman	1	0.25	31.25	7.8125		
				0	Mason II	4	1	37.5	150	Vibrator	4
					Captere	2	1	37.5	75		
				0	D/L	16	1	18.75	300		
				0.000					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				41.75	**Total (1:02)**				532.81	**Total (1:0**	

A= Materials Unit Cost 41.75 Birr/m³

B=Manpower Unit Cost 59.20 Br./m³

Total of (1:02) 43.75

Hourly Output 0.75

C= Equipment Unit Cos

Total of (1:03)

Hourly output:

Direct Cost of work item = A+B+C = 123.17 Birr/m³

Overhead Cost: 15% 18.48 "

Profit Cost: 15% 18.48 "

Total Unit Cost : 160.13 Birr/m³

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: ***CONCRETE WORK*** LABOUR HOURLY OUTPUT: 0.625

WORK ITEM:_ (3.7) C-20 Concrete Slab 10 cm. thick (Hand mix) 1:2:4 EQUIPEMENT:

TOTAL QUANTITY OF WORK ITEM: **1m³** 1 m³ 0.1 m. thick RESULT: 46.66 Birr/m²

Material Cost (1:01)					Labour (1:02)					Equipme	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Trade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Cement	Qnt.	3.44	60	206.4	Foreman	0.167	1	5	0.835	-	
Sand	m3	0.44	95.00	41.8	Mason II	1	1	3.75	3.75	-	
Gravel (02)	m3	0.88	120.00	105.6	D/L	6	1	1.25	7.5		
Water	m3	0.231	0.75	0.173					0		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				353.97325	**Total (1:02)**				12.09	**Total (1:0**	

A= Materials Unit Cost 353.97 Birr/m³

B=Manpower Unit Cost 19.34 Br./m³

Total of (1:02) 12.08

Hourly Output 0.625

C= Equipment Unit Cos

Total of (1:03)

Hourly output: _____

Direct Cost of work item = A+B+C = 373.31 Birr/m³

Overhead Cost: 10% 37.33 "

Profit Cost: 15% 56.00 "

Total Unit Cost : 466.64 Birr/m³

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: ***CONCRETE WORK*** LABOUR HOURLY OUTPUT: 1.75

WORK ITEM: (3.8) C-20 Concrete Slab 10 cm. thick (Mech. Mix) 1:2:4 EQUIPEMENT: Mixer & Vibrator

TOTAL QUANTITY OF WORK ITEM: _ 1 m^3 0.1 m. thick RESULT: 51.03 Birr/m^2

Material Cost (1:01)					Labour (1:02)					Equipment Cost	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour byTrade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
Cement	Qnt.	3.35	60	201	Foreman	1	1	5	5	Mixer	1
Sand	m3	0.43	95.00	40.85	Mason II	2	1	3.75	7.5	Vibrator	1
Gravel (02)	m^3	0.86	120.00	103.2	D/L	45	1	1.25	56.25		
Water	m^3	0.19	0.75	0.143					0		
				0					0		
				0					0		
				0					0		
				0					0		
Total (1:-01)				345.1925	**Total (1:02)**				68.75	**Total (1:0**	

A= Materials Unit Cost 345.19 Birr/m^3 B=Manpower Unit Cost 39.29 Br./m^3 C= Equipment Unit Cos

Total of (1:02) Total of (1:03)

Hourly Output Hourly output: _____

Direct Cost of work item = A+B+C = 408.26 Birr/m^3

Overhead Cost: 10% 40.83 "

Profit Cost: 15% 61.24 "

Total Unit Cost : 510.32 Birr/m^3

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: ***METAL WORK*** LABOUR HOURLY OUTPUT: 0.5

WORK ITEM: (9.1) Fully metal doors of 28LTZ without grill 90 x210cm 1.89 m^2 EQUIPEMENT: Welding & Grinding machine

TOTAL QUANTITY OF WORK ITEM: _ 1 m^2 RESULT: 253.07 Br./m^2

Material Cost (1:01)	Labour (1:02)	Equ

Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Trade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
MAKING											
L Tubular section	ml	6	6.00	36	Welder	1	1	3.75	3.75	Weld. Mach.	1
Z " "	ml	6	6.00	36	Helper	1	1	1.9	1.9		
Sheet metal (2mm thick)	m^2	1.98	65.00	128.7	Forman	1	0.167	5	0.835		
Cylinderical lock	pc	1	85.00	85.00	D/L	1	1	1.25	1.25		
Hinges	pcs	3	12.00	36					0		
Screw for hinges	pcs	15	0.60	9					0		
Electrode (3.2 mm)	pcs	10	0.30	3					0		
Anchor (iron mongery)	pcs	4	2.25	9					0		
Anti - rust	gal	0.04	60.00	2.4					0		
Tinner	lit	0.02	5.00	0.1					0		
FIXING				345.2					7.735		
					Forman	1	0.167	5	0.835		
					CarpenterII	1	1	4.4	4.4		
					Helper	2	1	1.9	3.8		
					Chiseler	1	1	2.15	2.15		
									11.185		
Total (1:-01)					**Total (1:02)**					**Total (1:0**	

A= Materials Unit Cost 345.2 Birr/pc

B=Manpower Unit Cost **15.47** **15.98** Br./pc

Total of (1:02)

Hourly Output

C= Equipment Unit Cos

Total of (1:03)

Hourly output:

Direct Cost of work item = A+B+C = 382.6 Birr/pc

Overhead Cost: 10% 38.26 "

Profit Cost: 15% 57.40 "

Total Unit Cost : 478.31 "

Remark _____

UF: UTILIZATION FACTOR

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: ***METAL WORK*** LABOUR HOURLY OUTPUT: 0.5

WORK ITEM: (9.2) Fully metal doors of 38LTZ without grill 90 x210cm 1.89 m2 EQUIPEMENT: Welding & Grinding machine

TOTAL QUANTITY OF WORK ITEM: 1 m^2 RESULT: 268.95 Br./m^2

Material Cost (1:01)					Labour (1:02)					Equ	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Trade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
MAKING											
L Tubular section	ml	6	8.00	48	Welder	1	1	3.75	3.75	Weld. Mach.	1
Z " "	ml	6	8.00	48	Helper	1	1	1.9	1.90		
Sheet metal (2mm thick)	m^2	1.98	65.00	128.7	Forman	1	0.167	5	0.84		
Cylinderical lock	pc	1	85.00	85	D/L	1	1	1.25	1.25		
Hinges	pcs	3	12.00	36					0		
Screw for hinges	pcs	15	0.60	9					0		
Electrode (3.2 mm)	pcs	10	0.30	3					0		
Anchor (iron mongery)	pcs	4	2.25	9					0		
Anti - rust	gal	0.04	60.00	2.4					0		
Tinner	lit	0.02	5.00	0.1					0		
FIXING				369.2					7.74		
					Forman	1	0.167	5	0.84		
					CarpenterII	1	1	4.4	4.4		
					Helper	2	1	1.9	3.8		
					Chiseler	1	1	2.15	2.15		
									11.19		
Total (1:-01)					**Total (1:02)**					**Total (1:0**	

A= Materials Unit Cost 369.2 Birr/pc B=Manpower Unit Cost **15.5** **16.0** Br./pc C= Equipment Unit Cos

Total of (1:02) Total of (1:03)

Hourly Output Hourly output:

Direct Cost of work item = A+B+C = 406.6 Birr/pc

Overhead Cost: 10% 40.66 "

Profit Cost: 15% 61.00 "

Total Unit Cost : 508.31 "

Remark _____

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ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: ***METAL WORK***

LABOUR HOURLY OUTPUT: 0.5

WORK ITEM: (9.3) Halfglazed metal doors of 38LTZ withoutgrill 90 x210cm 1.89 m²

EQUIPEMENT: Welding & Grinding machine

TOTAL QUANTITY OF WORK ITEM: _ 1 m²

RESULT: 221.00 Br./m²

Material Cost (1:01)					Labour (1:02)					Equipment Cost	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Trade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
MAKING											
L Tubular section	ml	6	8.00	48	Welder	1	1	3.75	3.75	Weld. Mach.	1
T " "	ml	0.9	8.00	7.2	Helper	1	1	1.9	1.9		
Z " "	ml	4	8.00	32	Forman	1	0.167	5	0.835		
Sheet metal (2mm thick)	m²	0.95	65.00	61.75	D/L	1	1	1.25	1.25		
Cylinderical lock	pc	1	85.00	85.0					0		
Hinges	pcs	3	12.00	36					0		
Screw for hinges	pcs	15	0.60	9					0		
Electrode (3.2 mm)	pcs	25	0.30	7.5					0		
Anchor (iron mongery)	pcs	4	2.25	9					0		
Anti - rust	gal	0.02	60.00	1.2					0		
Tinner	lit	0.01	5.00	0.05					0		
FIXING				296.7					7.7		
					Forman	1	0.167	5	0.835		
					CarpenterII	1	1	4.4	4.4		
					Helper	2	1	1.9	3.8		
					Chiseler	1	1	2.15	2.15		
									11.185		
Total (1:-01)					**Total (1:02)**					**Total (1:0**	

A= Materials Unit Cost 296.7 Birr/pc

B=Manpower Unit Cost **15.5** **16.0** Br./pc

C= Equipment Unit Cos

Total of (1:02)

Hourly Output

Total of (1:03)

Hourly output:

Direct Cost of work item = A+B+C = 334.1 Birr/pc

Overhead Cost: 10% 33.41 "

Profit Cost: 15% 50.12 "

Total Unit Cost : 417.69 "

Remark _____

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**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: ***METAL WORK*** LABOUR HOURLY OUTPUT: 0.5

WORK ITEM: (9.4) Halfglazed metal doors of 28LTZ withoutgrill 90 x210cm 1.89 m2 EQUIPEMENT: Welding & Grinding machine

TOTAL QUANTITY OF WORK ITEM: 1 m2 RESULT: 205.59 Br./m²

Material Cost (1:01)					Labour (1:02)					Equipment Cost (1:03)	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Trade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
MAKING											
L Tubular section	ml	6	6.00	36	Welder	1	1	3.75	3.75	Weld. Mach.	1
T " "	ml	0.9	6.00	5.4	Helper	1	1	1.9	1.9		
Z " "	ml	4	6.00	24	Forman	1	0.167	5	0.835		
Sheet metal (2mm thick)	m²	0.95	65.00	61.75	D/L	1	1	1.25	1.25		
Cylinderical lock	pc	1	85.00	85.0					0		
Hinges	pcs	3	12.00	36					0		
Screw for hinges	pcs	15	0.60	9					0		
Electrode (3.2 mm)	pcs	20	0.30	6					0		
Anchor (iron mongery)	pcs	4	2.25	9					0		
Anti - rust	gal	0.02	60.00	1.2					0		
Tinner	lit	0.01	5.00	0.05					0		
FIXING				273.4					7.7		
					Forman	1	0.167	5	0.835		
					CarpenterII	1	1	4.4	4.4		
					Helper	2	1	1.9	3.8		
					Chiseler	1	1	2.15	2.15		
									11.185		
Total (1:-01)					**Total (1:02)**					**Total (1:0**	

A= Materials Unit Cost 273.4 Birr/pc

B=Manpower Unit Cost **15.5** **16.0** Br./pc

C= Equipment Unit Cos

Total of (1:02)

Hourly Output

Total of (1:03)

Hourly output:

Direct Cost of work item = A+B+C = 310.8 Birr/pc

Overhead Cost: 10% 31.08 "

Profit Cost: 15% 46.63 "

Total Unit Cost : 388.56 "

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: ***METAL WORK*** LABOUR HOURLY OUTPUT: 0.375

WORK ITEM: (9.5) Guard rails & Balustrade of RHS 1mx1m EQUIPEMENT: Welding & Grinding machine

TOTAL QUANTITY OF WORK ITEM: _ 1 m^2 RESULT: 152.68 Br./m^2

Material Cost (1:01)					Labour (1:02)					Equipment Cost	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Trade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
MAKING											
RHS of 30x10x1.2mm	kg	2.82	7.00	19.74	Welder	1	1	3.75	3.75	Weld. Mach.	1
RHS of 50x30x1.2mm	kg	2.54	7.50	19.1	Helper	1	1	1.9	1.9		
RHS of 80x40x2.0mm	kg	4	7.50	30	Forman	1	0.125	5	0.625		
Electrode (3.2 mm)	pcs	15	0.30	4.5	D/L	1	1	1.25	1.25		
Anchor (iron mongery)	pcs	3	2.25	6.75					0		
Anti - rust	gal	0.01	60.00	0.6					0		
Tinner	lit	0.005	5.00	0.025					0		
FIXING				80.7					7.5		
					CarpenterII	1	1	4.4	4.4		
					Helper	1	1	1.9	1.9		
					Chiseler	1	1	2.15	2.15		
									0		
									8.45		
Total (1:-01)					**Total (1:02)**					**Total (1:0**	

A= Materials Unit Cost 80.7 m^2 B=Manpower Unit Cost **20.1** **13.4** Br./pc C= Equipment Unit Cos

Total of (1:02) Total of (1:03)

Hourly Output Hourly output:

Direct Cost of work item = A+B+C = 122.1 Br./M^2

Overhead Cost: 10% 12.21 "

Profit Cost: 15% 18.32 "

Total Unit Cost : 152.68 "

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: ***METAL WORK*** LABOUR HOURLY OUTPUT: 0.25

WORK ITEM: (9.6) 90 cm high verndah grill & RHS post . EQUIPEMENT: Welding & Grinding machine

TOTAL QUANTITY OF WORK ITEM: _ 1 m² 1mx2m 2 m² RESULT: 134.33 Br./m²

Material Cost (1:01)					Labour (1:02)					Equipment Cos	
Type of Material	Unit	Qty *	Rate	Cost per Unit	Labour by Trade	No.	UF	** Indexed Hourly Cost	Hourly Cost	Type of Equipment	No.
MAKING											
RHS of 15x15mm	kg	12.4	7.00	86.8	Welder	1	1	3.75	3.75	Weld. Mach.	1
RHS of 25x25mm	kg	7.4	7.00	51.8	Helper	1	1	1.9	1.9		
RHS of 20x20mm	kg	0.34	7.00	2.38	Forman	1	0.125	5	0.625		
RHS of 30x10mm	kg	1.36	7.00	9.52	D/L	1	1	1.25	1.25		
RHS of 30x20mm	kg	1.74	7.00	12.18					0		
Electrode (3.2 mm)	pcs	30	0.30	9					0		
Anchor (iron mongery)	pcs	5	2.25	11.25					0		
Anti - rust	gal	0.03	60.00	1.8					0		
Tinner	lit	0.015	5.00	0.075					0		
				184.8					7.5		
FIXING											
					Carpenter II	1	1	4.4	4.4		
					Helper	1	1	1.9	1.9		
					Chiseler	1	1	2.15	2.15		
									0		
									8.45		
Total (1:-01)					**Total (1:02)**					**Total (1:0**	

A= Materials Unit Cost 184.8 Br./m²

B=Manpower Unit Cost **11.9** **13.4** Br./pc

Total of (1:02) 7.5 8.45

Hourly Output

C= Equipment Unit Cos

Total of (1:03)

Hourly output:

Direct Cost of work item = A+B+C = 214.9 Br./M²

Overhead Cost: 10% 21.49 "

Profit Cost: 15% 32.24 "

Total Unit Cost : 134.33 "

Remark _____

UF: UTILIZATION FACTOR

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

**: INCLUSIVE OF BENEFITS, TRAVEL SUBSIDES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

m^2/hr.

ent Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
3)	0

0 Br./m^2

96.275835

m^3 / hr.

ent Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
3)	0

0 Br./m^3

_____

m^3 / hr.

(1:03)	
Hourly Rental	Hourly Cost
36.37	36.37
5.24	5.24
	0

	0
	0
	0
	0
	0
3)	41.61

23.78 Br./m^3

---

m^3 / hr. 9

(1:03)	
Hourly Rental	Hourly Cost
44	44
6	12
3)	56

49.78 Br./m^3
46.85
0.75

m^3/hr.

(1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
3)	0

0.00 Br./m^3

m^3 / hr.

t (1:03)	
Hourly Rental	Hourly Cost
	0
50	200
	0
	0
	0
	0
	0
3)	200

22.22 Br./m^3

46.85

0.75

m^3 / hr.

ent Cost (1:03)	
Hourly Rental	Hourly Cost
	0
	0
	0
	0
	0
	0
	0
	0
3)	0

0 Br./m^3

m^3 / hr.

(1:03)	
Hourly Rental	Hourly Cost
36.37	36.37
5.24	5.24
	0
	0
	0
	0
	0
	0
3)	41.61

23.78 Br./m^3

pc/hr 0.7

m^2/hr.

ipment Cost (1:03)

Hourly Rental	Hourly Cost
3	3
	0
	0
	0
	0
	0
	0
	0
	0
	0
	3
	0
	0
	0
	0
	0
3)	

6.00 Br./pc

253.07 Br./m²

pc/hr 0.7

m2/hr.

ipment Cost (1:03)	
Hourly Rental	Hourly Cost
3	3
	0
	0
	0
	0
	0
	0
	0
	0
	0
	3
	0
	0
	0
	0
3)	

6.00 Br./pc

268.95 Br./m²

pc/hr 0.7

m^2/hr.

t (1:03)	
Hourly Rental	Hourly Cost
3	3
	0
	0
	0
	0
	0
	0
	0
	0
	0
	0
	0
	3
	0
	0
	0
	0
	0
3)	

6.00 Br./pc

221.00 Br./m^2

pc/hr 0.7

m2/hr.

Hourly Rental	Hourly Cost
3	3
	0
	0
	0
	0
	0
	0
	0
	0
	0
	0
	3
	0
	0
	0
	0
	0
3)	

6.00 Br./pc

205.59 Br./m²

pc/hr 0.63

m^2/hr.

t (1:03)	
Hourly Rental	Hourly Cost
3	3
	0
	0
	0
	0
	0
	0
	3
	0
	0
	0
	0
	0
3)	

8.00 Br./M^2

11.4

0.375

Br./m^2

pc/hr 0.63

m^2/hr.

t (1:03)	
Hourly Rental	Hourly Cost
3	3
	0
	0
	0
	0
	0
	0
	0
	0
	3
	0
	0
	0
	0
	0
3)	

4.76 Br./M^2