

| DIMENSION | QUANTITY | UNIT           |
|-----------|----------|----------------|
|           |          |                |
|           |          |                |
| 25.9      |          |                |
| 14.23     |          |                |
|           | 368.56   | m <sup>2</sup> |
|           |          |                |
| 24.9      |          |                |
| 13.23     |          |                |
| 0.5       | 164.71   | m <sup>2</sup> |
|           |          |                |
| 73.71     |          |                |
| 164.71    |          |                |
| 89.55     |          |                |
|           | 327.97   | m <sup>3</sup> |
|           |          |                |
| 73.71     |          |                |
| 164.71    |          |                |
| 89.55     |          |                |
|           | 327.97   | m <sup>3</sup> |
| 27.73     |          |                |
| 2.02      |          |                |
| 7.71      |          |                |
|           | -37.46   | m <sup>3</sup> |
|           | 290.51   | m <sup>3</sup> |
|           |          |                |
| 23.9      |          |                |
| 12.23     |          |                |
|           | 292.30   | m <sup>2</sup> |
| 2.02      |          |                |
| 15.4      |          |                |
|           | -17.42   | m <sup>2</sup> |
|           | 274.88   | m <sup>2</sup> |
|           |          |                |
|           |          |                |
|           |          |                |
| 0.2       |          | m <sup>3</sup> |
| 0.4       |          |                |

|       |         |                |
|-------|---------|----------------|
| 10.95 |         |                |
|       | 2.63    |                |
|       |         |                |
| 0.2   |         | m <sup>3</sup> |
| 0.4   |         |                |
| 10.45 |         |                |
|       | 2.51    | m <sup>3</sup> |
|       |         |                |
| 0.2   |         | m <sup>3</sup> |
| 0.4   |         |                |
| 23.25 |         |                |
|       | 5.58    | m <sup>3</sup> |
|       | 10.72   | m <sup>3</sup> |
|       |         |                |
|       |         |                |
| 0.6   |         | m <sup>3</sup> |
| 1.7   |         |                |
| 2.5   |         |                |
|       | 15.3    | m <sup>3</sup> |
|       |         |                |
| 0.45  |         | m <sup>3</sup> |
| 1.3   |         |                |
| 1.95  |         |                |
|       | 11.41   | m <sup>3</sup> |
|       |         |                |
| 0.35  |         |                |
| 1     |         |                |
| 1.45  |         |                |
|       | 1.015   | m <sup>3</sup> |
|       | 27.7225 | m <sup>3</sup> |
|       |         |                |
|       |         |                |
| 1.35  |         | m <sup>3</sup> |
| 0.45  |         |                |
| 0.25  |         |                |
|       | 2.73    |                |
|       | 2.73    | m <sup>3</sup> |
|       |         |                |
|       |         |                |
|       |         |                |
| 1.75  |         |                |
| 2.55  |         |                |
|       | 26.78   | m <sup>2</sup> |
|       |         |                |
| 1.35  |         |                |

|       |        |                |
|-------|--------|----------------|
| 2     |        |                |
|       | 27.00  | m <sup>2</sup> |
|       |        |                |
| 1.05  |        |                |
| 2     |        |                |
|       | 3.15   | m <sup>2</sup> |
|       | 56.93  | m <sup>2</sup> |
|       |        |                |
|       |        |                |
| 0.2   |        |                |
| 10.95 |        |                |
|       | 6.57   |                |
|       |        |                |
| 0.2   |        |                |
| 10.45 |        |                |
|       | 6.27   |                |
|       |        |                |
| 0.2   |        |                |
| 23.25 |        |                |
|       | 13.95  |                |
|       | 26.79  | m <sup>2</sup> |
|       |        |                |
|       |        |                |
|       |        |                |
| 23.25 |        |                |
| 0.7   |        |                |
|       | 16.275 | m <sup>2</sup> |
|       |        |                |
| 10.38 |        |                |
| 0.7   |        |                |
|       | 7.266  |                |
|       |        |                |
| 14.08 |        | m <sup>2</sup> |
| 0.7   |        |                |
|       | 9.856  |                |
|       |        |                |
| 14.08 |        | m <sup>2</sup> |
| 0.7   |        |                |
|       | 9.856  | m <sup>2</sup> |
|       |        |                |
| 0.5   |        | m <sup>2</sup> |
| 0.7   |        |                |
|       | 0.35   | m <sup>2</sup> |
|       |        |                |
| 9.5   |        | m <sup>2</sup> |

|       |        |                |
|-------|--------|----------------|
| 0.7   |        |                |
|       | 6.65   | m <sup>2</sup> |
|       |        |                |
| 10.95 |        | m <sup>2</sup> |
| 0.7   |        |                |
|       | 7.665  | m <sup>2</sup> |
|       | 28.96  | m <sup>2</sup> |
|       |        |                |
|       | 44.65  | m              |
|       |        |                |
|       |        |                |
|       |        |                |
| 0.2   |        | m <sup>2</sup> |
| 0.4   |        |                |
| 10.95 |        |                |
|       | 39.42  | m <sup>2</sup> |
|       |        |                |
| 0.2   |        | m <sup>2</sup> |
| 0.4   |        |                |
| 10.45 |        |                |
|       | 37.62  | m <sup>2</sup> |
|       |        |                |
| 0.2   |        | m <sup>2</sup> |
| 0.4   |        |                |
| 23.25 |        |                |
|       | 83.70  | m <sup>2</sup> |
|       | 160.74 | m <sup>2</sup> |
|       |        |                |
|       |        |                |
| 2.5   |        |                |
| 1.7   |        |                |
| 0.65  |        |                |
|       | 30.00  | m <sup>2</sup> |
|       |        |                |
| 1.95  |        |                |
| 1.3   |        |                |
| 0.5   |        |                |
|       | 32.50  | m <sup>2</sup> |
|       |        |                |
| 1.45  |        |                |
| 1     |        |                |
| 0.4   |        |                |
|       | 3.12   | m <sup>2</sup> |
|       | 65.62  | m <sup>2</sup> |

|       |       |                |
|-------|-------|----------------|
|       |       |                |
|       |       |                |
|       |       |                |
| 0.26  |       |                |
| 0.5   |       |                |
| 0.85  |       |                |
|       | 7.80  | m <sup>2</sup> |
|       |       |                |
| 0.26  |       |                |
| 0.5   |       |                |
| 1     |       |                |
|       | 15.20 | m <sup>2</sup> |
|       |       |                |
| 0.26  |       |                |
| 0.5   |       |                |
| 1.1   |       |                |
|       | 3.40  | m <sup>2</sup> |
|       | 26.40 | m <sup>2</sup> |
|       |       |                |
|       | 9.16  | m <sup>2</sup> |
|       |       |                |
|       |       |                |
|       |       |                |
|       |       |                |
|       |       |                |
| 0.2   |       | m <sup>3</sup> |
| 0.4   |       |                |
| 10.95 |       |                |
|       | 2.63  |                |
| 0.2   |       | m <sup>3</sup> |
| 0.4   |       |                |
| 10.45 |       |                |
|       | 2.51  | m <sup>3</sup> |
|       |       |                |
| 0.2   |       | m <sup>3</sup> |
| 0.4   |       |                |
| 23.25 |       |                |
|       | 5.58  | m <sup>3</sup> |
|       | 10.72 | m <sup>3</sup> |
|       |       |                |
|       |       |                |
| 0.2   |       | m <sup>3</sup> |
| 0.4   |       |                |

|       |       |                |
|-------|-------|----------------|
| 10.95 |       |                |
|       | 2.63  |                |
|       |       |                |
| 0.2   |       | m <sup>3</sup> |
| 0.4   |       |                |
| 10.45 |       |                |
|       | 2.51  | m <sup>3</sup> |
|       |       |                |
| 0.2   |       | m <sup>3</sup> |
| 0.4   |       |                |
| 23.25 |       |                |
|       | 5.58  | m <sup>3</sup> |
|       | 10.72 | m <sup>3</sup> |
|       |       |                |
|       |       |                |
| 0.2   |       | m <sup>3</sup> |
| 0.4   |       | m <sup>3</sup> |
| 2.75  |       | m <sup>3</sup> |
|       | 0.44  | m <sup>3</sup> |
|       |       |                |
|       |       |                |
|       |       | m <sup>3</sup> |
| 0.25  |       | m <sup>3</sup> |
| 0.45  |       |                |
| 6.9   |       |                |
|       | 6.21  | m <sup>3</sup> |
|       |       |                |
| 0.25  |       | m <sup>3</sup> |
| 0.45  |       |                |
| 9.4   |       |                |
|       | 4.23  | m <sup>3</sup> |
|       |       |                |
| 0.25  |       | m <sup>3</sup> |
| 0.45  |       |                |
| 6.9   |       |                |
|       | 0.78  | m <sup>3</sup> |
|       |       |                |
| 3.14  |       | m <sup>3</sup> |
| 0.04  |       |                |
| 6.9   |       |                |

|      |       |                |
|------|-------|----------------|
|      | 2.60  | m <sup>3</sup> |
|      | 13.82 | m <sup>3</sup> |
|      |       |                |
|      |       |                |
|      |       |                |
|      |       |                |
| 6.23 |       |                |
| 4.5  |       |                |
| 0.15 |       |                |
|      | 8.41  | m <sup>3</sup> |
|      |       |                |
| 4.73 |       |                |
| 4.73 |       |                |
| 0.15 |       |                |
|      | 6.71  | m <sup>3</sup> |
|      |       |                |
| 5.73 |       |                |
| 2.5  |       |                |
| 0.15 |       |                |
|      | 14.33 | m <sup>3</sup> |
|      |       |                |
| 4.73 |       |                |
| 2.5  |       |                |
| 0.15 |       |                |
|      | 11.83 | m <sup>3</sup> |
|      |       |                |
| 5.73 |       |                |
| 5.5  |       |                |
| 0.15 |       |                |
|      | 4.73  | m <sup>3</sup> |
|      |       |                |
| 4.73 |       |                |
| 5.5  |       |                |
| 0.15 |       |                |
|      | 3.90  | m <sup>3</sup> |
|      |       |                |
| 5.73 |       |                |
| 4.5  |       |                |
| 0.15 |       |                |
|      | 3.87  | m <sup>3</sup> |
|      |       |                |
| 4.73 |       |                |
| 4.5  |       |                |

|       |       |                |
|-------|-------|----------------|
| 0.15  |       |                |
|       | 3.19  | m <sup>3</sup> |
|       |       |                |
| 10.44 |       |                |
| 1.65  |       |                |
| 0.15  |       |                |
|       | 2.58  | m <sup>3</sup> |
|       | 59.55 | m <sup>3</sup> |
|       |       |                |
| 6.23  |       |                |
| 4.5   |       |                |
| 0.15  |       |                |
|       | 8.41  | m <sup>3</sup> |
|       |       |                |
| 4.73  |       |                |
| 4.73  |       |                |
| 0.15  |       |                |
|       | 6.71  | m <sup>3</sup> |
|       |       |                |
| 5.73  |       |                |
| 2.5   |       |                |
| 0.15  |       |                |
|       | 14.33 | m <sup>3</sup> |
|       |       |                |
| 4.73  |       |                |
| 2.5   |       |                |
| 0.15  |       |                |
|       | 11.83 | m <sup>3</sup> |
|       |       |                |
| 5.73  |       |                |
| 5.5   |       |                |
| 0.15  |       |                |
|       | 4.73  | m <sup>3</sup> |
|       |       |                |
| 4.73  |       |                |
| 5.5   |       |                |
| 0.15  |       |                |
|       | 3.90  | m <sup>3</sup> |
|       |       |                |
| 5.73  |       |                |
| 4.5   |       |                |
| 0.15  |       |                |
|       | 3.87  | m <sup>3</sup> |
|       |       |                |
| 4.73  |       |                |
| 4.5   |       |                |

|       |       |                |
|-------|-------|----------------|
| 0.15  |       |                |
|       | 3.19  | m <sup>3</sup> |
|       |       |                |
| 10.44 |       |                |
| 1.65  |       |                |
| 0.15  |       |                |
|       | 2.58  | m <sup>3</sup> |
|       | 59.55 | m <sup>3</sup> |
|       |       |                |
|       |       |                |
| 5.73  |       |                |
| 2.5   |       |                |
| 0.15  |       |                |
|       | 14.33 | m <sup>3</sup> |
|       |       |                |
| 4.73  |       |                |
| 2.5   |       |                |
| 0.15  |       |                |
|       | 11.83 | m <sup>3</sup> |
|       |       |                |
| 5.73  |       |                |
| 5.5   |       |                |
| 0.15  |       |                |
|       | 4.73  | m <sup>3</sup> |
|       |       |                |
| 4.73  |       |                |
| 5.5   |       |                |
| 0.15  |       |                |
|       | 3.90  | m <sup>3</sup> |
|       |       |                |
| 5.73  |       |                |
| 4.5   |       |                |
| 0.15  |       |                |
|       | 3.87  | m <sup>3</sup> |
|       |       |                |
| 4.73  |       |                |
| 4.5   |       |                |
| 0.15  |       |                |
|       | 3.19  | m <sup>3</sup> |
|       |       |                |
| 10.44 |       |                |
| 1.65  |       |                |
| 0.15  |       |                |
|       | 2.58  | m <sup>3</sup> |
|       | 44.42 | m <sup>3</sup> |
|       |       |                |

|      |      |                |
|------|------|----------------|
|      |      |                |
|      |      | m <sup>3</sup> |
|      |      |                |
| 3.35 |      |                |
| 1.1  |      |                |
| 0.15 |      |                |
|      | 2.21 | m <sup>3</sup> |
|      |      |                |
| 0.15 |      |                |
| 0.15 |      |                |
| 1.1  |      |                |
|      | 0.99 | m <sup>3</sup> |
|      |      |                |
| 2.4  |      |                |
| 1.3  |      |                |
| 0.15 |      |                |
|      | 0.94 | m <sup>3</sup> |
|      | 4.14 |                |
|      |      |                |
|      |      |                |
| 1.4  |      |                |
| 2.6  |      |                |
| 0.15 |      |                |
|      | 0.55 | m <sup>3</sup> |
|      |      |                |
| 0.15 |      |                |
| 0.15 |      |                |
| 2.6  |      |                |
|      | 0.23 | m <sup>3</sup> |
|      |      |                |
|      |      |                |
| 1.4  |      |                |
| 3    |      |                |
| 0.15 |      |                |
|      | 0.63 | m <sup>3</sup> |
|      |      |                |
| 0.15 |      |                |
| 0.15 |      |                |
| 3    |      |                |
|      | 0.27 | m <sup>3</sup> |
|      | 9.95 | m <sup>3</sup> |
|      |      |                |
| 2.74 |      | m <sup>3</sup> |

|      |         |                |
|------|---------|----------------|
| 4.3  |         |                |
| 0.15 |         |                |
|      | 1.77    | m <sup>3</sup> |
|      |         |                |
| 0.35 |         | m <sup>3</sup> |
| 0.15 |         |                |
| 9.25 |         |                |
|      | 0.97    | m <sup>3</sup> |
| 0.6  |         |                |
| 0.15 |         |                |
| 9.25 |         |                |
|      | 1.67    |                |
|      |         |                |
|      | 4.40    | m <sup>3</sup> |
|      |         |                |
|      |         | m <sup>2</sup> |
|      |         | m <sup>2</sup> |
| 0.25 |         | m <sup>2</sup> |
| 0.45 |         |                |
| 6.9  |         |                |
|      | 77.28   | m <sup>2</sup> |
|      |         |                |
| 0.25 |         | m <sup>2</sup> |
| 0.45 |         |                |
| 9.25 |         |                |
|      | 51.8    | m <sup>2</sup> |
|      |         |                |
| 0.25 |         | m <sup>2</sup> |
| 0.45 |         |                |
| 6.9  |         |                |
|      | 9.66    | m <sup>2</sup> |
|      |         |                |
| 2    |         | m <sup>2</sup> |
| 3.14 |         |                |
| 0.2  |         |                |
|      | 3.77    |                |
|      | 142.508 | m <sup>2</sup> |

|       |        |                |
|-------|--------|----------------|
|       |        |                |
|       |        |                |
| 0.05  |        | m <sup>2</sup> |
| 0.4   |        |                |
| 10.95 |        |                |
|       | 29.57  | m <sup>2</sup> |
|       |        |                |
| 0.05  |        | m <sup>2</sup> |
| 0.4   |        |                |
| 10.45 |        |                |
|       | 28.21  | m <sup>2</sup> |
|       |        |                |
| 0.05  |        | m <sup>2</sup> |
| 0.4   |        |                |
| 23.25 |        |                |
|       | 62.78  | m <sup>2</sup> |
|       | 120.56 | m <sup>2</sup> |
|       |        |                |
|       |        |                |
| 0.2   |        | m <sup>2</sup> |
| 0.4   |        |                |
| 10.95 |        |                |
|       | 13.14  | m <sup>2</sup> |
|       |        |                |
| 0.05  |        | m <sup>2</sup> |
| 0.4   |        |                |
| 10.45 |        |                |
|       | 28.21  | m <sup>2</sup> |
|       |        |                |
| 0.2   |        | m <sup>2</sup> |
| 0.4   |        |                |
| 9.25  |        |                |
|       | 33.30  | m <sup>2</sup> |
|       |        |                |
| 0.05  |        | m <sup>2</sup> |
| 0.4   |        |                |
| 1.4   |        |                |
|       | 3.78   | m <sup>2</sup> |
|       | 78.44  | m <sup>2</sup> |
|       |        |                |
|       |        |                |
| 10.95 |        |                |
| 9.2   |        |                |
|       | 100.74 | m <sup>2</sup> |
|       |        |                |
| 0.25  |        |                |
| 0.45  |        |                |

|       |        |                |
|-------|--------|----------------|
|       | -0.68  | m <sup>2</sup> |
|       |        |                |
|       | 100.06 | m <sup>2</sup> |
|       |        |                |
| 14    |        |                |
| 10.45 |        |                |
|       | 146.30 | m <sup>2</sup> |
|       |        |                |
| 0.25  |        |                |
| 0.45  |        |                |
|       | -0.45  | m <sup>2</sup> |
|       |        |                |
| 3.14  |        |                |
| 0.04  |        |                |
|       | -0.38  | m <sup>2</sup> |
|       | 145.47 | m <sup>2</sup> |
|       |        |                |
|       |        |                |
| 9.65  |        |                |
| 0.15  |        |                |
|       | 1.45   | m <sup>2</sup> |
|       |        |                |
| 23.24 |        |                |
| 0.15  |        |                |
|       | 3.49   | m <sup>2</sup> |
|       |        |                |
| 14    |        |                |
| 0.15  |        |                |
|       | 2.10   | m <sup>2</sup> |
|       |        |                |
| 10.45 |        |                |
| 0.15  |        |                |
|       | 1.57   | m <sup>2</sup> |
|       |        |                |
| 10.4  |        |                |
| 0.15  |        |                |
|       | 1.56   | m <sup>2</sup> |
|       | 10.16  | m <sup>2</sup> |
|       |        |                |
|       |        |                |
|       |        |                |
| 10.45 |        |                |
| 14    |        |                |
|       | 146.30 | m <sup>2</sup> |
|       |        |                |
| 31.5  |        |                |
| 2.75  |        |                |

|      |        |                |
|------|--------|----------------|
|      | -86.63 |                |
|      | 59.67  | m <sup>2</sup> |
|      |        |                |
| 35.7 |        |                |
| 0.15 |        |                |
|      | 5.36   | m <sup>2</sup> |
|      |        |                |
|      |        |                |
| 2.45 |        |                |
| 9.25 |        |                |
|      | 45.33  | m <sup>2</sup> |
|      |        |                |
|      |        |                |
|      |        |                |
| 1.1  |        |                |
| 3.35 |        |                |
|      | 14.74  | m <sup>2</sup> |
|      |        |                |
| 0.3  |        |                |
| 3.35 |        |                |
|      | 8.04   | m <sup>2</sup> |
|      |        |                |
| 1.1  |        |                |
| 0.15 |        |                |
|      | 3.30   | m <sup>2</sup> |
|      |        |                |
|      | 26.08  |                |
|      |        |                |
|      | `      |                |
| 2.5  |        |                |
| 4.5  |        |                |
|      | 11.25  | m <sup>2</sup> |
|      |        |                |
|      |        |                |
|      |        |                |
| 13   |        |                |
| 0.15 |        |                |
|      | 3.90   | m <sup>2</sup> |
|      |        |                |
|      |        |                |
|      |        |                |
| 7.8  |        |                |
| 2.6  |        |                |
|      | 18.10  | m <sup>2</sup> |
|      |        |                |

|       |        |                |
|-------|--------|----------------|
| 7.37  |        |                |
| 2.6   |        |                |
|       | 17.00  | m <sup>2</sup> |
|       |        |                |
| 3     |        |                |
| 2.6   |        |                |
|       | 5.63   | m <sup>2</sup> |
|       |        |                |
| 3.62  |        |                |
| 2.6   |        |                |
|       | 7.20   | m <sup>2</sup> |
|       |        |                |
| 4.33  |        |                |
| 2.6   |        |                |
|       | 9.76   | m <sup>2</sup> |
|       |        |                |
| 11.75 |        |                |
| 2.6   |        |                |
|       | 20.00  | m <sup>2</sup> |
|       |        |                |
| 12.91 |        |                |
| 2.6   |        |                |
|       | 25.00  | m <sup>2</sup> |
|       | 102.69 |                |
|       |        |                |
|       |        |                |
| 8.63  |        |                |
| 2.6   |        |                |
|       | 20.12  | m <sup>2</sup> |
|       |        |                |
| 8.24  |        |                |
| 2.6   |        |                |
|       | 19.17  | m <sup>2</sup> |
|       |        |                |
| 3     |        |                |
| 2.6   |        |                |
|       | 5.63   | m <sup>2</sup> |
|       |        |                |
| 3.77  |        |                |
| 2.6   |        |                |
|       | 7.55   | m <sup>2</sup> |
|       |        |                |
| 2.28  |        |                |
| 2.6   |        |                |
|       | 4.43   | m <sup>2</sup> |
|       |        |                |
| 27.51 |        |                |
| 2.6   |        |                |

|       |        |                |
|-------|--------|----------------|
|       | 49.93  | m <sup>2</sup> |
|       | 106.83 | m <sup>2</sup> |
|       |        |                |
|       |        |                |
| 49.05 |        |                |
| 1.2   |        |                |
|       | 58.86  | m <sup>2</sup> |
|       |        |                |
| 7.2   |        |                |
| 1.2   |        |                |
|       | 8.64   |                |
|       | 67.5   | m <sup>2</sup> |
|       | 277.0  | m <sup>2</sup> |
|       |        |                |
|       |        |                |
|       |        |                |
|       |        |                |
| 3.75  |        |                |
| 2.85  |        |                |
|       | 10.67  | m <sup>2</sup> |
|       |        |                |
| 3.75  |        |                |
| 2.85  |        |                |
|       | 10.67  | m <sup>2</sup> |
|       |        |                |
| 4     |        |                |
| 2.85  |        |                |
|       | 11.54  | m <sup>2</sup> |
|       |        |                |
| 4     |        |                |
| 2.85  |        |                |
|       | 11.54  | m <sup>2</sup> |
|       |        |                |
| 14.14 |        |                |
| 2.85  |        |                |
|       | 10.67  | m <sup>2</sup> |
|       |        |                |
| 7.35  |        |                |
| 2.85  |        |                |
|       | 20.95  | m <sup>2</sup> |
|       |        |                |
| 9.2   |        |                |
| 2.85  |        |                |
|       | 26.22  | m <sup>2</sup> |
|       |        |                |
| 4.74  |        |                |
| 2.85  |        |                |

|       |        |                |
|-------|--------|----------------|
|       | 13.51  | m <sup>2</sup> |
|       |        |                |
| 5.38  |        |                |
| 2.85  |        |                |
|       | 15.33  | m <sup>2</sup> |
|       |        |                |
| 3.95  |        |                |
| 2.85  |        |                |
|       | 10.82  | m <sup>2</sup> |
|       |        |                |
| 4.07  |        |                |
| 2.85  |        |                |
|       | 11.20  | m <sup>2</sup> |
|       |        |                |
| 4     |        |                |
| 2.85  |        |                |
|       | 10.77  | m <sup>2</sup> |
|       | 163.89 | m <sup>2</sup> |
|       |        |                |
|       |        |                |
|       |        |                |
| 3.75  |        |                |
| 2.85  |        |                |
|       | 10.67  | m <sup>2</sup> |
|       |        |                |
| 3.75  |        |                |
| 2.85  |        |                |
|       | 10.67  | m <sup>2</sup> |
|       |        |                |
| 4     |        |                |
| 2.85  |        |                |
|       | 11.54  | m <sup>2</sup> |
|       |        |                |
| 4     |        |                |
| 2.85  |        |                |
|       | 11.54  | m <sup>2</sup> |
|       |        |                |
| 14.14 |        |                |
| 2.85  |        |                |
|       | 10.23  | m <sup>2</sup> |
|       |        |                |
| 3.85  |        |                |
| 2.85  |        |                |
|       | 10.53  | m <sup>2</sup> |
|       |        |                |
| 3.95  |        |                |
| 2.85  |        |                |
|       | 10.82  | m <sup>2</sup> |

|       |         |                |
|-------|---------|----------------|
|       |         |                |
| 4     |         |                |
| 2.85  |         |                |
|       | 11.20   | m <sup>2</sup> |
|       |         |                |
| 3.92  |         |                |
| 2.85  |         |                |
|       | 10.77   | m <sup>2</sup> |
|       |         |                |
| 7.35  |         |                |
| 2.85  |         |                |
|       | 20.95   | m <sup>2</sup> |
|       |         |                |
| 9.2   |         |                |
| 2.85  |         |                |
|       | 26.22   | m <sup>2</sup> |
|       |         |                |
| 5.25  |         |                |
| 2.85  |         |                |
|       | 14.96   | m <sup>2</sup> |
|       |         |                |
| 10.39 |         |                |
| 2.85  |         |                |
|       | 29.61   | m <sup>2</sup> |
|       | 189.71  | m <sup>2</sup> |
|       | 353.60  |                |
|       |         |                |
|       |         |                |
|       |         |                |
|       |         |                |
|       |         |                |
|       |         |                |
|       |         |                |
| 22.9  | 68.70   | m              |
| 11.85 | 71.10   | m              |
| 10.67 | 64.02   | m              |
| 12.57 | 75.42   | m              |
| 18    | 360.00  | m              |
|       | 2980.00 | pcs            |
|       | 2980.00 | pcs            |
|       | 42.00   | m              |
|       | 84.00   | pcs            |
|       | 39.60   | m              |

|      |        |                |
|------|--------|----------------|
|      | 42.86  | m              |
| 22.9 |        |                |
| 18   |        |                |
|      | 412.20 | m <sup>2</sup> |
|      |        |                |
|      |        |                |
|      |        |                |
|      |        |                |
|      | 14     | no             |
|      | 6      | no             |
|      | 2      | no             |
|      | 4      | no             |
|      |        |                |
|      |        |                |
|      | 12     | no             |
|      | 16     | no             |
|      | 2      | no             |
|      | 2      | no             |
|      | 8      | no             |
|      |        |                |
|      |        |                |
|      | 24.33  | m              |
|      |        |                |
|      |        |                |
|      |        |                |
|      |        |                |
|      | 102.13 | m <sup>2</sup> |

|       |        |                |
|-------|--------|----------------|
|       | 106.89 | m <sup>2</sup> |
|       | 67.50  | m <sup>2</sup> |
|       | 276.52 | m <sup>2</sup> |
|       |        |                |
|       |        |                |
|       | 198.58 | m <sup>2</sup> |
|       | 197.59 | m <sup>2</sup> |
|       | 396.17 | m <sup>2</sup> |
|       |        |                |
|       |        |                |
|       |        |                |
| 10.38 |        |                |
| 14.12 |        |                |
|       | 293.13 | m <sup>2</sup> |
|       |        |                |
| 9.00  |        |                |
| 10.95 |        |                |
|       | 197.10 | m <sup>2</sup> |
|       |        |                |
| 2.30  |        |                |
| 1.30  |        |                |
|       | 5.98   | m <sup>2</sup> |
|       |        |                |
|       |        |                |
| 2.50  |        |                |
| 4.50  |        |                |
|       | 11.25  | m <sup>2</sup> |
| 2.30  |        |                |
| 4.70  |        |                |
|       | -21.62 | m <sup>2</sup> |
|       |        |                |
|       | 485.84 | m <sup>2</sup> |
|       | 501.92 | m <sup>2</sup> |
|       |        |                |
|       |        |                |
|       | 198.58 | m <sup>2</sup> |
|       | 197.59 | m <sup>2</sup> |
|       | 396.17 | m <sup>2</sup> |
|       |        |                |
|       |        |                |
|       | 198.58 | m <sup>2</sup> |
|       | 197.59 | m <sup>2</sup> |

|       |        |                |
|-------|--------|----------------|
|       | 396.17 | m <sup>2</sup> |
|       |        |                |
|       |        |                |
| 11.45 |        |                |
| 9.25  |        |                |
|       | 105.91 | m <sup>2</sup> |
|       |        |                |
|       |        |                |
| 29.36 |        |                |
| 1.7   |        |                |
|       | 99.82  | m <sup>2</sup> |
|       |        |                |
| 8.43  |        |                |
| 1.7   |        |                |
|       | 14.33  | m <sup>2</sup> |
|       |        |                |
| 10.03 |        |                |
| 1.7   |        |                |
|       | 34.10  | m <sup>2</sup> |
|       | 148.26 | m <sup>2</sup> |
|       |        |                |
|       |        |                |
|       |        |                |
| 1.40  |        |                |
| 1.48  |        |                |
|       | 2.07   | m <sup>2</sup> |
|       |        |                |
| 1.30  |        |                |
| 1.48  |        |                |
|       | 1.92   | m <sup>2</sup> |
|       |        |                |
| 1.20  |        |                |
| 3.35  |        |                |
|       | 8.04   | m <sup>2</sup> |
|       |        |                |
| 1.27  |        |                |
| 3.35  |        |                |

|       |        |                |
|-------|--------|----------------|
|       | 8.51   | m <sup>2</sup> |
|       |        |                |
| 1.20  |        |                |
| 3.25  |        |                |
|       | 7.80   | m <sup>2</sup> |
|       |        |                |
| 1.27  |        |                |
| 3.25  |        |                |
|       | 8.26   | m <sup>2</sup> |
|       |        |                |
| 1.93  |        |                |
| 3.05  |        |                |
|       | -11.77 | m <sup>2</sup> |
|       |        |                |
| 2.00  |        |                |
| 3.05  |        |                |
|       | -6.10  | m <sup>2</sup> |
|       | 18.73  | m <sup>2</sup> |
|       |        |                |
|       | 155.10 | m              |
|       |        |                |
|       | 149.55 | m              |
|       |        |                |
|       | 117.84 | m              |
|       |        |                |
| 1.50  |        |                |
| 10.38 |        |                |
|       | 31.14  | m <sup>2</sup> |
|       |        |                |
| 1.55  |        |                |
| 12.40 |        |                |
|       | 38.44  | m <sup>2</sup> |
|       |        |                |
| 2.30  |        |                |
| 4.00  |        |                |
|       | 18.40  | m <sup>2</sup> |
|       |        |                |
| 1.00  |        |                |
| 9.23  |        |                |
|       | 18.46  | m <sup>2</sup> |
|       |        |                |
| 1.20  |        |                |
| 1.28  |        |                |
|       | 3.07   | m <sup>2</sup> |
|       |        |                |
| 1.15  |        |                |

|      |        |                |
|------|--------|----------------|
| 1.28 |        |                |
|      | 2.94   | m <sup>2</sup> |
|      |        |                |
| 6.70 |        |                |
| 8.45 |        |                |
|      | 56.61  | m <sup>2</sup> |
|      |        |                |
| 3.00 |        |                |
| 3.88 |        |                |
|      | 11.64  | m <sup>2</sup> |
|      |        |                |
| 3.00 |        |                |
| 4.37 |        |                |
|      | 13.11  | m <sup>2</sup> |
|      |        |                |
| 0.15 |        |                |
| 1.10 |        |                |
|      | 1.98   | m <sup>2</sup> |
|      |        |                |
| 0.30 |        |                |
| 1.10 |        |                |
|      | 3.63   | m <sup>2</sup> |
|      |        |                |
| 1.30 |        |                |
| 3.20 |        |                |
|      | 4.16   | m <sup>2</sup> |
|      |        |                |
| 1.40 |        |                |
| 1.48 |        |                |
|      | 2.07   | m <sup>2</sup> |
|      |        |                |
| 1.30 |        |                |
| 1.48 |        |                |
|      | 1.92   | m <sup>2</sup> |
|      |        |                |
| 1.93 |        |                |
| 3.05 |        |                |
|      | -11.77 | m <sup>2</sup> |
|      |        |                |
| 2.00 |        |                |
| 3.05 |        |                |
|      | -6.10  | m <sup>2</sup> |
|      |        |                |
|      | 189.71 | m <sup>2</sup> |
|      |        |                |
|      |        |                |

|      |        |                |
|------|--------|----------------|
|      |        |                |
|      | 396.17 | m <sup>2</sup> |
|      |        |                |
|      | 209.02 | m <sup>2</sup> |
|      | 293.13 | m <sup>2</sup> |
|      | 197.10 | m <sup>2</sup> |
|      | 293.13 | m <sup>2</sup> |
|      |        |                |
|      |        |                |
|      |        |                |
| 2.28 | 31.92  | m <sup>2</sup> |
| 0.6  | 3.60   | m <sup>2</sup> |
| 1    | 2.00   | m <sup>2</sup> |
| 2    | 8.00   | m <sup>2</sup> |
|      |        |                |
|      |        |                |
| 1.2  | 9.60   | m <sup>2</sup> |
| 1    | 1.00   | m <sup>2</sup> |
|      | 51.72  | m <sup>2</sup> |

|                                                                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DESCRIPTION                                                                                                                                                             |
| SUB-STRUCTURE                                                                                                                                                           |
| 1. 0 EXCAVATION & EARTH WORK                                                                                                                                            |
| Clear and remove top soil to an average depth of 20 cm.                                                                                                                 |
|                                                                                                                                                                         |
| TOTAL AREA                                                                                                                                                              |
|                                                                                                                                                                         |
| Bulk excavation in ordinary soil to reduce levels to the designed level up to 500mm .                                                                                   |
|                                                                                                                                                                         |
| TOTAL AREA                                                                                                                                                              |
|                                                                                                                                                                         |
| #NAME?                                                                                                                                                                  |
|                                                                                                                                                                         |
|                                                                                                                                                                         |
|                                                                                                                                                                         |
|                                                                                                                                                                         |
| Fill around footing and foundation columns with impo                                                                                                                    |
|                                                                                                                                                                         |
|                                                                                                                                                                         |
|                                                                                                                                                                         |
| Deduction                                                                                                                                                               |
|                                                                                                                                                                         |
|                                                                                                                                                                         |
|                                                                                                                                                                         |
| TOTAL VOLUME                                                                                                                                                            |
|                                                                                                                                                                         |
| 25cm basaltic stone hard core under concrete floor                                                                                                                      |
|                                                                                                                                                                         |
|                                                                                                                                                                         |
| Deduction                                                                                                                                                               |
|                                                                                                                                                                         |
|                                                                                                                                                                         |
| TOTAL AREA                                                                                                                                                              |
|                                                                                                                                                                         |
| 2)CONCRETE WORK                                                                                                                                                         |
| Reinforced concrete grade C-25 concrete (laboratory tested) cast into formworks and vibrated around rod reinforcement bars. (Steel reinforcement and formworks measured |
| I) Grade beam                                                                                                                                                           |
| GB-1                                                                                                                                                                    |
|                                                                                                                                                                         |

|                                                               |
|---------------------------------------------------------------|
|                                                               |
| TOTAL VOLUME OF GB-1                                          |
|                                                               |
| GB-2                                                          |
|                                                               |
|                                                               |
| TOTAL VOLUME OF GB-2                                          |
|                                                               |
| GB-3                                                          |
|                                                               |
|                                                               |
| TOTAL VOLUME OF GB-3                                          |
| TOTAL VOLUME OF ALL THE GRADE BEAM                            |
|                                                               |
| II) Footing                                                   |
| F-1                                                           |
|                                                               |
|                                                               |
|                                                               |
|                                                               |
| F-2                                                           |
|                                                               |
|                                                               |
|                                                               |
|                                                               |
| F-3                                                           |
|                                                               |
|                                                               |
|                                                               |
|                                                               |
| TOTAL VOLUME OF ALL THE FOOTING                               |
|                                                               |
| III) FOUNDATION COLUMN                                        |
|                                                               |
|                                                               |
|                                                               |
|                                                               |
| TOTAL VOLUME FOUNDATION COLUMN                                |
|                                                               |
| 50mm lean concrete quality C-5, 150 kg of<br>cement/m3: under |
| under foundation pad                                          |
| F-1                                                           |
|                                                               |
|                                                               |
|                                                               |
| F-2                                                           |

[illegible]

|                                                                                               |
|-----------------------------------------------------------------------------------------------|
|                                                                                               |
|                                                                                               |
|                                                                                               |
|                                                                                               |
|                                                                                               |
|                                                                                               |
| TOTAL MASONARY WORK                                                                           |
|                                                                                               |
| 10mm thick expansion joint filler under grade beam                                            |
|                                                                                               |
| 4. Provide, cut and fix in position sawn zigba wood or steel formwork which ever appropriate. |
|                                                                                               |
| a)Grade beam                                                                                  |
| GB-1                                                                                          |
|                                                                                               |
|                                                                                               |
| TOTAL AREA OF GB-1                                                                            |
|                                                                                               |
| GB-2                                                                                          |
|                                                                                               |
|                                                                                               |
| TOTAL AREA OF GB-2                                                                            |
|                                                                                               |
| GB-3                                                                                          |
|                                                                                               |
|                                                                                               |
| TOTAL AREA OF GB-3                                                                            |
| TOTAL AREA OF Grade beam                                                                      |
|                                                                                               |
| founadtion pad                                                                                |
| F-1                                                                                           |
|                                                                                               |
|                                                                                               |
|                                                                                               |
|                                                                                               |
| f-2                                                                                           |
|                                                                                               |
|                                                                                               |
|                                                                                               |
|                                                                                               |
| f-3                                                                                           |
|                                                                                               |
|                                                                                               |
|                                                                                               |
| TOTAL AREA                                                                                    |

|                                                                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                         |
|                                                                                                                                                                         |
| foundation column                                                                                                                                                       |
| F-1                                                                                                                                                                     |
|                                                                                                                                                                         |
|                                                                                                                                                                         |
|                                                                                                                                                                         |
|                                                                                                                                                                         |
| F-2                                                                                                                                                                     |
|                                                                                                                                                                         |
|                                                                                                                                                                         |
|                                                                                                                                                                         |
|                                                                                                                                                                         |
| F-3                                                                                                                                                                     |
|                                                                                                                                                                         |
|                                                                                                                                                                         |
|                                                                                                                                                                         |
| TOTAL AREA                                                                                                                                                              |
|                                                                                                                                                                         |
| STEPS                                                                                                                                                                   |
| SUPER STRUCTURE                                                                                                                                                         |
| 1)CONCRETE WORK                                                                                                                                                         |
| Reinforced concrete grade C-25 concrete (laboratory tested) cast into formworks and vibrated around rod reinforcement bars. (Steel reinforcement and formworks measured |
| I)First floor beam                                                                                                                                                      |
|                                                                                                                                                                         |
| FB-1                                                                                                                                                                    |
|                                                                                                                                                                         |
|                                                                                                                                                                         |
| TOTAL VOLUME OF FB-1                                                                                                                                                    |
| FB-2                                                                                                                                                                    |
|                                                                                                                                                                         |
|                                                                                                                                                                         |
| TOTAL VOLUME OF FB-2                                                                                                                                                    |
|                                                                                                                                                                         |
| FB-3                                                                                                                                                                    |
|                                                                                                                                                                         |
|                                                                                                                                                                         |
| TOTAL VOLUME OF FB-3                                                                                                                                                    |
| TOTAL VOLUME OF ALL THE FIRST BEAM                                                                                                                                      |
|                                                                                                                                                                         |
| II) Top tie beam                                                                                                                                                        |
| TB-1                                                                                                                                                                    |
|                                                                                                                                                                         |

|                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                      |
| TOTAL VOLUME OF TB-1                                                                                                                                                                 |
|                                                                                                                                                                                      |
| TB-2                                                                                                                                                                                 |
|                                                                                                                                                                                      |
|                                                                                                                                                                                      |
| TOTAL VOLUME OF TB-2                                                                                                                                                                 |
|                                                                                                                                                                                      |
| TB-3                                                                                                                                                                                 |
|                                                                                                                                                                                      |
|                                                                                                                                                                                      |
| TOTAL VOLUME OF TB-3                                                                                                                                                                 |
| TOTAL VOLUME OF ALL THE TOP TIE BEAM                                                                                                                                                 |
|                                                                                                                                                                                      |
| III)STAIR BEAM                                                                                                                                                                       |
| STB1 AND STB2                                                                                                                                                                        |
|                                                                                                                                                                                      |
|                                                                                                                                                                                      |
| VOLUME OF STB1                                                                                                                                                                       |
|                                                                                                                                                                                      |
|                                                                                                                                                                                      |
| B) COLUMN                                                                                                                                                                            |
| Reinforced concrete grade C-25 concrete (laboratory tested) cast into formworks and vibrated around rod reinforcement bars. (Steel reinforcement and formworks measured separately). |
| C1                                                                                                                                                                                   |
|                                                                                                                                                                                      |
|                                                                                                                                                                                      |
| VOLUME OF C1                                                                                                                                                                         |
|                                                                                                                                                                                      |
| C2                                                                                                                                                                                   |
|                                                                                                                                                                                      |
|                                                                                                                                                                                      |
| VOLUME OF C2                                                                                                                                                                         |
|                                                                                                                                                                                      |
| C3                                                                                                                                                                                   |
|                                                                                                                                                                                      |
|                                                                                                                                                                                      |
| VOLUME OF C3                                                                                                                                                                         |
|                                                                                                                                                                                      |
| C4 (circular column area= $\pi R^2$ )                                                                                                                                                |
|                                                                                                                                                                                      |
|                                                                                                                                                                                      |

|                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| VOLUME OF C4                                                                                                                                                                         |
| TOTAL VOLUME OF COLUMNS                                                                                                                                                              |
|                                                                                                                                                                                      |
| VI) Slab                                                                                                                                                                             |
| Reinforced concrete grade C-25 concrete (laboratory tested) cast into formworks and vibrated around rod reinforcement bars. (Steel reinforcement and formworks measured separately). |
| a) Ground slab                                                                                                                                                                       |
| b/n axis 1-2, 2-3 & A-B                                                                                                                                                              |
|                                                                                                                                                                                      |
|                                                                                                                                                                                      |
| VOLUME                                                                                                                                                                               |
|                                                                                                                                                                                      |
| b/n axis 1-2, 2-3 & B-C                                                                                                                                                              |
|                                                                                                                                                                                      |
|                                                                                                                                                                                      |
| VOLUME                                                                                                                                                                               |
|                                                                                                                                                                                      |
| b/n axis 3-4 & A-B                                                                                                                                                                   |
|                                                                                                                                                                                      |
|                                                                                                                                                                                      |
| VOLUME                                                                                                                                                                               |
|                                                                                                                                                                                      |
| b/n axis 3-4 & B-C                                                                                                                                                                   |
|                                                                                                                                                                                      |
|                                                                                                                                                                                      |
| VOLUME                                                                                                                                                                               |
|                                                                                                                                                                                      |
| b/n axis 4-5 & A-B                                                                                                                                                                   |
|                                                                                                                                                                                      |
|                                                                                                                                                                                      |
| VOLUME                                                                                                                                                                               |
|                                                                                                                                                                                      |
| b/n axis 4-5 & B-C                                                                                                                                                                   |
|                                                                                                                                                                                      |
|                                                                                                                                                                                      |
| VOLUME                                                                                                                                                                               |
|                                                                                                                                                                                      |
| b/n axis 5-6 & A-B                                                                                                                                                                   |
|                                                                                                                                                                                      |
|                                                                                                                                                                                      |
| VOLUME                                                                                                                                                                               |
|                                                                                                                                                                                      |
| b/n axis 5-6 & B-C                                                                                                                                                                   |
|                                                                                                                                                                                      |

|                              |
|------------------------------|
|                              |
| VOLUME                       |
|                              |
| under axis 6 (balcony)       |
|                              |
|                              |
| VOLUME                       |
| TOTAL VOLUME OF GROUND FLOOR |
| b) Floor slab                |
| b/n axis 1-2, 2-3 & A-B      |
|                              |
|                              |
| VOLUME                       |
|                              |
| b/n axis 1-2, 2-3 & B-C      |
|                              |
|                              |
| VOLUME                       |
|                              |
| b/n axis 3-4 & A-B           |
|                              |
|                              |
| VOLUME                       |
|                              |
| b/n axis 3-4 & B-C           |
|                              |
|                              |
| VOLUME                       |
|                              |
| b/n axis 4-5 & A-B           |
|                              |
|                              |
| VOLUME                       |
|                              |
| b/n axis 4-5 & B-C           |
|                              |
|                              |
| VOLUME                       |
|                              |
| b/n axis 5-6 & A-B           |
|                              |
|                              |
| VOLUME                       |
|                              |
| b/n axis 5-6 & B-C           |
|                              |

|                        |
|------------------------|
|                        |
| VOLUME                 |
|                        |
| under axis 6 (balcony) |
|                        |
|                        |
| VOLUME                 |
| Volume of floor slab   |
|                        |
| c) Flat roof           |
| b/n axis 3-4 & A-B     |
|                        |
|                        |
| VOLUME                 |
|                        |
| b/n axis 3-4 & B-C     |
|                        |
|                        |
| VOLUME                 |
|                        |
| b/n axis 4-5 & A-B     |
|                        |
|                        |
| VOLUME                 |
|                        |
| b/n axis 4-5 & B-C     |
|                        |
|                        |
| VOLUME                 |
|                        |
| b/n axis 5-6 & A-B     |
|                        |
|                        |
| VOLUME                 |
|                        |
| b/n axis 5-6 & B-C     |
|                        |
|                        |
| VOLUME                 |
|                        |
| under axis 6 (balcony) |
|                        |
|                        |
| VOLUME                 |
| TOTAL FLAT SLAB VOLUME |
|                        |

|                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| VII) Stairs                                                                                                                                                                          |
| Reinforced concrete grade C-25 concrete (laboratory tested) cast into formworks and vibrated around rod reinforcement bars. (Steel reinforcement and formworks measured separately). |
| b/n axis B&C and 3&4                                                                                                                                                                 |
| 1) Soffit                                                                                                                                                                            |
|                                                                                                                                                                                      |
|                                                                                                                                                                                      |
| VOLUME                                                                                                                                                                               |
|                                                                                                                                                                                      |
| 2) Tread and riser                                                                                                                                                                   |
|                                                                                                                                                                                      |
|                                                                                                                                                                                      |
| VOLUME                                                                                                                                                                               |
|                                                                                                                                                                                      |
| 3)Landing                                                                                                                                                                            |
|                                                                                                                                                                                      |
|                                                                                                                                                                                      |
| VOLUME                                                                                                                                                                               |
| TOTAL VOLUME                                                                                                                                                                         |
|                                                                                                                                                                                      |
| b/n 3&4 left of axis A                                                                                                                                                               |
| 1) Soffit                                                                                                                                                                            |
|                                                                                                                                                                                      |
|                                                                                                                                                                                      |
| VOLUME                                                                                                                                                                               |
|                                                                                                                                                                                      |
| 2) Tread and riser                                                                                                                                                                   |
|                                                                                                                                                                                      |
|                                                                                                                                                                                      |
| VOLUME                                                                                                                                                                               |
|                                                                                                                                                                                      |
| b/n B&C below of axis 6                                                                                                                                                              |
| 1) Soffit                                                                                                                                                                            |
|                                                                                                                                                                                      |
|                                                                                                                                                                                      |
| VOLUME                                                                                                                                                                               |
|                                                                                                                                                                                      |
| 2) Tread and riser                                                                                                                                                                   |
|                                                                                                                                                                                      |
|                                                                                                                                                                                      |
| VOLUME                                                                                                                                                                               |
| TOTAL STAIR VOLUME                                                                                                                                                                   |
|                                                                                                                                                                                      |
| VIII) Water tank slab                                                                                                                                                                |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| TOTAL WATER SLAB VOLUME                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| VIII) Gutter                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| \                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| TOTAL VOLUME OF GUTTER CONCRETE                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| FORMWORK                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Provide, cut and fix in position sawn zigba, steel, panel wood or appropriate formwork thereto. Forms shall be constructed to fare faced, the exact sizes, shapes lines and dimensions shown and as required to obtain accurate alignment, location grade, level and plumb work in finished structures. Provision shall be made for openings, offset, sinking, keyways, recesses, moldings, reglets, chamfers, blockings, screeds bullheads, anchorages, inserts and other |
| a) To elevation columns /The form shall be made chamfered at internal edges to create nosing in the concrete column edges/.                                                                                                                                                                                                                                                                                                                                                |
| C1                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| TOTAL AREA OF C1                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| C2                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| TOTAL AREA OF C2                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| C3                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| TOTAL AREA OF C3                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| C4 Circular column $P=2\pi r$                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| TOTAL AREA OF COLUMN FORMWORK                                                                                                                                                                                                                                                                                                                                                                                                                                              |

|                                  |
|----------------------------------|
|                                  |
| b) First floor beam              |
| FB-1                             |
|                                  |
|                                  |
| TOTAL AREA OF FB-1               |
|                                  |
| FB-2                             |
|                                  |
|                                  |
| TOTAL AREA OF FB-2               |
|                                  |
| FB-3                             |
|                                  |
|                                  |
| TOTAL AREA OF FB-3               |
| TOTAL AREA OF first floor beam   |
|                                  |
| c) Top tie beam                  |
| TB-1                             |
|                                  |
|                                  |
| TOTAL AREA OF TB-1               |
|                                  |
| TB-2                             |
|                                  |
|                                  |
| TOTAL AREA OF TB-2               |
|                                  |
| TB-3                             |
|                                  |
|                                  |
|                                  |
|                                  |
| TB-3                             |
|                                  |
|                                  |
|                                  |
| TOTAL AREA OF Top tie beam       |
|                                  |
| d) Slab                          |
| First floor slab                 |
| fond b/n axis A-C & 1-3          |
|                                  |
|                                  |
|                                  |
| deduct column size (0.25m*0.45m) |
|                                  |

|                                                       |
|-------------------------------------------------------|
|                                                       |
|                                                       |
| TOTAL AREA OF fond b/n axis A-C & 1-3                 |
|                                                       |
| fond b/n axis A-C & 3-6 and below axis-6              |
|                                                       |
|                                                       |
|                                                       |
| deduct column size (0.25m*0.45m)                      |
|                                                       |
|                                                       |
|                                                       |
| deduct column size of diameter=0.4m                   |
|                                                       |
|                                                       |
| TOTAL AREA OF fond b/n axis A-C & 3-6 and belowaxis-6 |
|                                                       |
| Side formwork                                         |
| left side of axis A                                   |
|                                                       |
|                                                       |
|                                                       |
|                                                       |
| on axis C                                             |
|                                                       |
|                                                       |
| on axis A b/n axis 3-6                                |
|                                                       |
|                                                       |
|                                                       |
| on axis-1                                             |
|                                                       |
|                                                       |
|                                                       |
| below axis-6                                          |
|                                                       |
|                                                       |
| TOTAL SIDE FORMWORK                                   |
|                                                       |
| flat roof                                             |
|                                                       |
| fond b/n axis A-C & 3-6                               |
|                                                       |
|                                                       |
|                                                       |
| deduct stair opening                                  |
|                                                       |

|                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                  |
| TOTAL AREA OF fond b/n axis A-C & 3-6 a                                                                                                          |
|                                                                                                                                                  |
| Side formwork on flat roof                                                                                                                       |
|                                                                                                                                                  |
|                                                                                                                                                  |
|                                                                                                                                                  |
| e) Gutter & toptie beam on axis A & C                                                                                                            |
|                                                                                                                                                  |
|                                                                                                                                                  |
|                                                                                                                                                  |
| f) stair                                                                                                                                         |
| b/n 3&4 left of axis A                                                                                                                           |
| 1) Soffit                                                                                                                                        |
|                                                                                                                                                  |
| AREA                                                                                                                                             |
|                                                                                                                                                  |
| 2) Side stair formwork                                                                                                                           |
|                                                                                                                                                  |
| AREA                                                                                                                                             |
|                                                                                                                                                  |
| 2) Tread and riser                                                                                                                               |
|                                                                                                                                                  |
| AREA                                                                                                                                             |
|                                                                                                                                                  |
| TOTAL AREA OF FORMWORK OF STAIR                                                                                                                  |
|                                                                                                                                                  |
| g) Water tank formwork                                                                                                                           |
| fond                                                                                                                                             |
|                                                                                                                                                  |
|                                                                                                                                                  |
|                                                                                                                                                  |
| Side formwork                                                                                                                                    |
|                                                                                                                                                  |
|                                                                                                                                                  |
|                                                                                                                                                  |
|                                                                                                                                                  |
| 3)BLOCK WORK                                                                                                                                     |
| 20cm thick Class B external HCB wall which can satisfy the designed strength , bedded in cement mortar (1:3).Price shall include mortar bedding. |
| Ground floor                                                                                                                                     |
| BEDROOM 1                                                                                                                                        |
|                                                                                                                                                  |
| AREA                                                                                                                                             |
|                                                                                                                                                  |

|             |
|-------------|
| BEDROOM 2   |
|             |
| AREA        |
|             |
| BEDROOM 3   |
|             |
| AREA        |
|             |
| BEDROOM 4   |
|             |
| AREA        |
|             |
| HALLWAY     |
|             |
| AREA        |
|             |
| CAFÉ        |
|             |
| AREA        |
|             |
| SHOPS       |
|             |
| AREA        |
| TOTAL AREA  |
|             |
| First floor |
| BEDROOM 1   |
|             |
| AREA        |
|             |
| BEDROOM 2   |
|             |
| AREA        |
|             |
| BEDROOM 3   |
|             |
| AREA        |
|             |
| BEDROOM 4   |
|             |
| AREA        |
|             |
| HALLWAY     |
|             |
| AREA        |
|             |
| RESTAURANT  |
|             |

|                                                 |
|-------------------------------------------------|
| AREA                                            |
| TOTAL AREA OF HCB ON FIRST FLOOR                |
|                                                 |
| Flat roof                                       |
| TERRACE                                         |
|                                                 |
|                                                 |
|                                                 |
| TANKER                                          |
|                                                 |
|                                                 |
| TOTAL AREA OF HCB ON FLAT ROOF                  |
| TOTAL 20 HCB ON BUILDING                        |
|                                                 |
|                                                 |
| Ditto as Item 2.01 but for 150mm HCB guard wall |
| Ground slab                                     |
|                                                 |
| BEDROOM 1                                       |
|                                                 |
|                                                 |
|                                                 |
| BEDROOM 2                                       |
|                                                 |
|                                                 |
|                                                 |
| BEDROOM 3                                       |
|                                                 |
|                                                 |
|                                                 |
| BEDROOM 4                                       |
|                                                 |
|                                                 |
|                                                 |
| HALLWAY                                         |
|                                                 |
|                                                 |
|                                                 |
| RECEPTION AREA                                  |
|                                                 |
|                                                 |
|                                                 |
| STAIR AREA                                      |
|                                                 |
|                                                 |
|                                                 |
| CAFÉ REST ROOM                                  |
|                                                 |

|                            |
|----------------------------|
|                            |
|                            |
| SHOP 1                     |
|                            |
|                            |
|                            |
| TOILET 2                   |
|                            |
|                            |
|                            |
| TOILET 3                   |
|                            |
|                            |
|                            |
| TOILET 4                   |
|                            |
|                            |
| TOTAL AREA ON GROUND FLOOR |
|                            |
| First floor slab           |
|                            |
| BEDROOM 1                  |
|                            |
|                            |
|                            |
| BEDROOM 2                  |
|                            |
|                            |
|                            |
| BEDROOM 3                  |
|                            |
|                            |
|                            |
| BEDROOM 4                  |
|                            |
|                            |
|                            |
| HALLWAY                    |
|                            |
|                            |
|                            |
| TOILET 1                   |
|                            |
|                            |
|                            |
| TOILET 2                   |
|                            |
|                            |

|                                                                                                                                                                                                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                             |
| TOILET 3                                                                                                                                                                                                                                                                                    |
|                                                                                                                                                                                                                                                                                             |
|                                                                                                                                                                                                                                                                                             |
|                                                                                                                                                                                                                                                                                             |
| TOILET 4                                                                                                                                                                                                                                                                                    |
|                                                                                                                                                                                                                                                                                             |
|                                                                                                                                                                                                                                                                                             |
|                                                                                                                                                                                                                                                                                             |
| RECEPTION AREA                                                                                                                                                                                                                                                                              |
|                                                                                                                                                                                                                                                                                             |
|                                                                                                                                                                                                                                                                                             |
|                                                                                                                                                                                                                                                                                             |
| STAIR AREA                                                                                                                                                                                                                                                                                  |
|                                                                                                                                                                                                                                                                                             |
|                                                                                                                                                                                                                                                                                             |
|                                                                                                                                                                                                                                                                                             |
| RESTRAURANT KITCHEN                                                                                                                                                                                                                                                                         |
|                                                                                                                                                                                                                                                                                             |
|                                                                                                                                                                                                                                                                                             |
|                                                                                                                                                                                                                                                                                             |
| RESTRAURANT TOILET                                                                                                                                                                                                                                                                          |
|                                                                                                                                                                                                                                                                                             |
|                                                                                                                                                                                                                                                                                             |
| TOTAL AREA ON FLOOR FLOOR                                                                                                                                                                                                                                                                   |
| TOTAL 15 HCB ON BUILDING                                                                                                                                                                                                                                                                    |
|                                                                                                                                                                                                                                                                                             |
| 4) Roof                                                                                                                                                                                                                                                                                     |
| <p>All structural truss members shall be in seasoned Eucalyptus wood and coated with wood preservative solution and firmly fixed with nails and band iron. Truss shall be tied with Dia. 6mm plain bar to top tie beam.</p> <p>A) 3cm thick cement sand screed over light weight pumice</p> |
|                                                                                                                                                                                                                                                                                             |
|                                                                                                                                                                                                                                                                                             |
| A.500*400mm LOWER CORED                                                                                                                                                                                                                                                                     |
| B.100*70 mm upper chord/rafter/                                                                                                                                                                                                                                                             |
| C.VERTICAL TRUSS MEMBER                                                                                                                                                                                                                                                                     |
| D.INCLINED TRUSS MEMBER                                                                                                                                                                                                                                                                     |
| E. 70*50 zigba purlin c/c 90mm                                                                                                                                                                                                                                                              |
| F, washer                                                                                                                                                                                                                                                                                   |
| G , dome headed nail                                                                                                                                                                                                                                                                        |
| h, Down pipe                                                                                                                                                                                                                                                                                |
| J , metal bracket 2pcs/m                                                                                                                                                                                                                                                                    |
| k, fascia board with 10% wastage                                                                                                                                                                                                                                                            |

|                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I. flashing                                                                                                                                                                                                                                                                                                                                                |
| 1.38m <sup>2</sup> corrugated iron sheet                                                                                                                                                                                                                                                                                                                   |
|                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                            |
| 5) Aluminium work                                                                                                                                                                                                                                                                                                                                          |
| Aluminium framed windows, top windows, window doors and doors As per iso standard aluminium frame profile thickness should be 2mm anodized thickness 15-25 micro unit , & all fixing accessories should be of same standard as that of the profile . Complete work according to suppliers instruction. Price includes 6mm thick non reflective clear glass |
| Windows                                                                                                                                                                                                                                                                                                                                                    |
| W-1 1500mm x1500mm                                                                                                                                                                                                                                                                                                                                         |
| W-2 1000mm x 400mm                                                                                                                                                                                                                                                                                                                                         |
| W-3 1000mm x 1500                                                                                                                                                                                                                                                                                                                                          |
| W-4 2500mm x 2600mm                                                                                                                                                                                                                                                                                                                                        |
|                                                                                                                                                                                                                                                                                                                                                            |
| Doors                                                                                                                                                                                                                                                                                                                                                      |
| D-1 850mm x 2600mm                                                                                                                                                                                                                                                                                                                                         |
| D-2 700mm x 2600mm                                                                                                                                                                                                                                                                                                                                         |
| D-3 1300mm x 2600mm                                                                                                                                                                                                                                                                                                                                        |
| D-4 1250mm x 2600mm                                                                                                                                                                                                                                                                                                                                        |
| D-5 850mm x 2600mm                                                                                                                                                                                                                                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                            |
| Supply and fix Ø50mm CHS hand rail(2mm thick) of 40x40x2mm RHS Post Anchored to the slab, 40X40X2mm RHS handrail in two rows horizontally and 30X20X2mm Vertical C/C spacing 228mm price shall include one coats of antirest paint two coats of synthatic enamel paint and necessary works and material to full fill the jobs.                             |
|                                                                                                                                                                                                                                                                                                                                                            |
| 6) finishing                                                                                                                                                                                                                                                                                                                                               |
| Finishing work shall includes all surface pre cleaning, preparation of finish, polishing and cleaning at the end of finishing work. Apply two coats of plaster in cement mortar to                                                                                                                                                                         |
| A) External exposed concrete & concrete block wall surface                                                                                                                                                                                                                                                                                                 |
| Ground floor                                                                                                                                                                                                                                                                                                                                               |

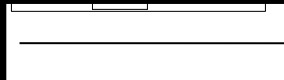
|                                                                           |
|---------------------------------------------------------------------------|
| First floor                                                               |
| Flat roof                                                                 |
| TOTAL AREA                                                                |
|                                                                           |
| B) Internal exposed concrete & concrete block wall surface                |
| Ground floor                                                              |
| First floor                                                               |
| TOTAL AREA                                                                |
|                                                                           |
| C) Concrete ceiling surface                                               |
|                                                                           |
| Ground & First Floor                                                      |
|                                                                           |
|                                                                           |
|                                                                           |
| stair                                                                     |
|                                                                           |
|                                                                           |
|                                                                           |
| Landing                                                                   |
|                                                                           |
|                                                                           |
|                                                                           |
| water tanker concrete ceiling                                             |
|                                                                           |
|                                                                           |
|                                                                           |
| deduction                                                                 |
|                                                                           |
|                                                                           |
|                                                                           |
|                                                                           |
| total area                                                                |
|                                                                           |
| Apply fine coat of fine cement sand plaster to internal plastered surface |
| Ground floor                                                              |
| First floor                                                               |
| TOTAL AREA                                                                |
|                                                                           |
| Gypsum plastering to all internal plastered surface                       |
| Ground floor                                                              |
| First Floor                                                               |

[illegible]

|                  |
|------------------|
|                  |
|                  |
|                  |
|                  |
|                  |
|                  |
|                  |
|                  |
|                  |
|                  |
|                  |
|                  |
|                  |
|                  |
|                  |
| Deduct rest room |
|                  |
|                  |
|                  |
| Deduct WC        |
| Total area       |
|                  |
| #NAME?           |
|                  |
| #NAME?           |
|                  |
| Perquet skirting |
| #NAME?           |
|                  |
|                  |
| Corridor         |
|                  |
| Corridor         |
|                  |
|                  |
|                  |
| Corridor         |
|                  |
|                  |
|                  |
|                  |
| Corridor         |
|                  |
|                  |
|                  |
|                  |
| Balcony          |
|                  |
|                  |
|                  |
|                  |

|                  |
|------------------|
|                  |
| Balcony          |
|                  |
|                  |
|                  |
| Restaurant       |
|                  |
|                  |
|                  |
| Shop             |
|                  |
|                  |
|                  |
| Shop             |
|                  |
|                  |
|                  |
| Riser            |
|                  |
|                  |
|                  |
| trade            |
|                  |
| landing          |
|                  |
|                  |
|                  |
|                  |
|                  |
|                  |
| Deduct rest room |
|                  |
|                  |
|                  |
| Deduct WC        |
|                  |
|                  |
|                  |
| Deduct rest room |
|                  |
|                  |
|                  |
| Deduct WC        |
|                  |
| TOTAL AREA       |
|                  |
| 7) Painted       |

|                                                                       |
|-----------------------------------------------------------------------|
| Quartz                                                                |
| #NAME?                                                                |
| Prepare and apply by brush three coats of synthetic enamel paint to:- |
| A)Internal plastered wall surface                                     |
| B)plastered ceiling surface                                           |
| C) plastered stair case belly & sides surface                         |
| D)Gypsum board ceiling surface                                        |
|                                                                       |
| 8) Glazing                                                            |
| Windows                                                               |
| W-1 1500mm x1500mm                                                    |
| W-2 1000mm x 400mm                                                    |
| W-3 1000mm x 1500                                                     |
| W-4 2500mm x 2600mm                                                   |
|                                                                       |
| Doors                                                                 |
| D-1 850mm x 2600mm                                                    |
| D-2 700mm x 2600mm                                                    |
| TOTAL GLAZING                                                         |

| BAR SCHEDULE      |                   |               |                                                                                     |     |      |                                                                                     |            |    |              |        |        |        |        |   |   |   |  |  |  |  |
|-------------------|-------------------|---------------|-------------------------------------------------------------------------------------|-----|------|-------------------------------------------------------------------------------------|------------|----|--------------|--------|--------|--------|--------|---|---|---|--|--|--|--|
|                   |                   | Sub structure |                                                                                     |     |      |                                                                                     |            |    |              |        |        |        |        |   |   |   |  |  |  |  |
|                   | Location          | Ref no        | Bar Shape                                                                           | Dia | c/c  | Length                                                                              | No of Bars |    | Total length | Dia 8  | Dia 10 | Dia 12 | Dia 14 |   |   |   |  |  |  |  |
| FOOTING           | longtudinal       |               |                                                                                     | 20  | 0.32 | 3.40                                                                                | 6          | 1  | 6            | 122    |        |        |        |   |   |   |  |  |  |  |
|                   |                   |               |                                                                                     | 20  |      | 7                                                                                   | 1          | 6  | 109.20       | -      | -      | -      | -      |   |   |   |  |  |  |  |
|                   |                   |               |                                                                                     | 20  |      | 6                                                                                   | 1          | 10 | 153.00       |        |        |        |        |   |   |   |  |  |  |  |
|                   |                   |               |                                                                                     | 20  |      | 4                                                                                   | 1          | 10 | 76.00        |        |        |        |        |   |   |   |  |  |  |  |
|                   |                   |               |                                                                                     | 20  |      | 3                                                                                   | 1          | 2  | 12.60        |        |        |        |        |   |   |   |  |  |  |  |
|                   |                   |               |                                                                                     | 20  |      | 3                                                                                   | 1          | 2  | 15.00        | -      | -      | -      | -      |   |   |   |  |  |  |  |
|                   | Total length [m]  |               |                                                                                     |     |      |                                                                                     |            |    |              | 0.00   | 0.00   | 0.00   | 0.00   |   |   |   |  |  |  |  |
|                   | Unit weight       |               |                                                                                     |     |      |                                                                                     |            |    |              | 0.394  | 0.616  | 0.888  | 1.208  |   |   |   |  |  |  |  |
|                   | Total weight [kg] |               |                                                                                     |     |      |                                                                                     |            |    |              | 0.00   | 0.00   | 0.00   | 0.00   |   |   |   |  |  |  |  |
|                   | C 1               |               |                                                                                     |     |      |  |            |    |              | 1      | 10     | 312.00 | -      | - | - | - |  |  |  |  |
| stirup            | 134.88            | -             | 134.88                                                                              |     |      |                                                                                     |            |    |              |        |        | -      | -      |   |   |   |  |  |  |  |
| C 2               | 156.00            | -             | -                                                                                   |     |      |                                                                                     |            |    |              |        |        | -      | -      |   |   |   |  |  |  |  |
| stirup            | 52.00             | -             | 52.00                                                                               |     |      |                                                                                     |            |    |              |        |        | -      | -      |   |   |   |  |  |  |  |
| C 3               | 31.20             | -             | -                                                                                   |     |      |                                                                                     |            |    |              |        |        | -      | -      |   |   |   |  |  |  |  |
| stirup            | 13.00             | -             | 13.00                                                                               |     |      |                                                                                     |            |    |              |        |        | -      | -      |   |   |   |  |  |  |  |
| C 4               |                   |               |  |     |      |                                                                                     | 1          | 3  | 70.20        | -      | -      | -      | -      |   |   |   |  |  |  |  |
| stirup            |                   |               |                                                                                     |     |      |                                                                                     |            |    | 39.00        | -      | 39.00  | -      | -      |   |   |   |  |  |  |  |
| Total length [m]  |                   |               |                                                                                     |     |      |                                                                                     |            |    | 0.00         | 238.88 | 0.00   | 0.00   |        |   |   |   |  |  |  |  |
| Unit weight       |                   |               |                                                                                     |     |      |                                                                                     |            |    | 0.394        | 0.616  | 0.888  | 1.208  |        |   |   |   |  |  |  |  |
| Total weight [kg] |                   |               |                                                                                     |     |      |                                                                                     |            |    | 0.00         | 147.00 | 0.00   | 0.00   |        |   |   |   |  |  |  |  |

|                        |                                  |   |         |        |       |       |
|------------------------|----------------------------------|---|---------|--------|-------|-------|
| GRADE BEAM             |                                  |   | -       | -      | -     |       |
|                        | 1                                | 3 | 63.90   | -      | -     |       |
|                        | 1                                | 3 | 6.00    | -      | -     |       |
|                        | 1                                | 3 | 68.10   | -      | -     |       |
|                        | 1                                | 3 | 180.00  | 180.00 | -     | -     |
|                        | 1                                | 3 | 75.60   | 75.60  | -     | -     |
|                        | 1                                | 3 | 60.00   | -      | -     |       |
|                        | 1                                | 3 | 6.00    | -      | -     |       |
|                        | 1                                | 3 | 64.50   | -      | -     |       |
|                        | 1                                | 3 | 162.00  | 162.00 | -     | -     |
|                        | 1                                | 3 | 57.60   | 57.60  | -     | -     |
|                        | 1                                | 3 | 45.78   | -      | -     |       |
|                        | 1                                | 3 | 139.44  | -      | -     |       |
|                        | 1                                | 3 | 86.40   | -      | -     |       |
|                        | 1                                | 3 | 324.00  | 324.00 | -     | -     |
|                        | 1                                | 3 | 230.40  | 230.40 | -     | -     |
|                        | Total length [m]                 |   | 1029.60 | 0.00   | 0.00  | 0.00  |
|                        | Unit weight                      |   | 0.394   | 0.616  | 0.888 | 1.208 |
|                        | Total weight [kg]                |   | 406.00  | 0.00   | 0.00  | 0.00  |
| GROUND FLOOR SLAB MESH |                                  |   | -       | -      | -     |       |
|                        | 1                                | 2 | 171.11  | 171.11 | -     | -     |
|                        | 1                                | 2 | 114.26  | 114.26 | -     | -     |
|                        | 1                                | 1 | 57.13   | 57.13  | -     | -     |
|                        | 1                                | 1 | 57.13   | 57.13  | -     | -     |
|                        | 1                                | 1 | 85.56   | 85.56  | -     | -     |
|                        | 1                                | 1 | 17.41   | 17.41  | -     | -     |
|                        | 1                                | 1 | 57.13   | 57.13  | -     | -     |
|                        | 1                                | 1 | 17.41   | 17.41  | -     | -     |
|                        | 1                                | 1 | 85.56   | 85.56  | -     | -     |
|                        | 1                                | 1 | 85.56   | 85.56  | -     | -     |
|                        | 1                                | 1 | 85.56   | 85.56  |       |       |
|                        | 1                                | 1 | 57.13   | 57.13  |       |       |
|                        | 1                                | 1 | 85.56   | 85.56  |       |       |
|                        | 1                                | 1 | 57.13   | 57.13  |       |       |
|                        | 1                                | 1 | 57.13   | 57.13  | -     | -     |
|                        | 1                                | 1 | 57.13   | 57.13  | -     | -     |
|                        | Total length [m]                 |   | 1147.89 | 0.00   | 0.00  | 0.00  |
|                        | Unit weight                      |   | 0.394   | 0.616  | 0.888 | 1.208 |
|                        | Total weight [kg]                |   | 453.00  | 0.00   | 0.00  | 0.00  |
|                        | Total weight [kg] for Sub Struct |   | 859.00  | 147.00 | 0.00  | 0.00  |

| SUPER STRUCTURE   |       |        |       |       |
|-------------------|-------|--------|-------|-------|
|                   | -     | -      | -     | -     |
|                   | -     | 224.25 | -     | -     |
|                   | -     | -      | -     | -     |
|                   | -     | 256.75 | -     | -     |
|                   | -     | -      | -     | -     |
|                   | -     | 93.60  | -     | -     |
|                   | -     | -      | -     | -     |
|                   | -     | 93.60  | -     | -     |
|                   | -     | -      | -     | -     |
|                   | -     | 104.00 | -     | -     |
|                   | -     | -      | -     | -     |
|                   | -     | 23.73  | -     | -     |
|                   | -     | -      | -     | -     |
|                   | -     | 23.40  | -     | -     |
|                   | -     | -      | -     | -     |
|                   | -     | 67.50  | -     | -     |
|                   | -     | -      | -     | -     |
|                   | -     | 52.50  | -     | -     |
| Total length [m]  | 0.00  | 939.33 | 0.00  | 0.00  |
| Unit weight       | 0.394 | 0.616  | 0.888 | 1.208 |
| Total weight [kg] | 0.00  | 579.00 | 0.00  | 0.00  |

|  |        |   |   |        |
|--|--------|---|---|--------|
|  | -      | - | - | 128.40 |
|  | -      | - | - | 6.00   |
|  | -      | - | - | 104.40 |
|  | 195.00 | - | - | -      |
|  | 81.90  | - | - | -      |
|  | -      | - | - | 95.40  |
|  | -      | - | - | 6.00   |
|  | -      | - | - | 102.60 |
|  | 195.00 | - | - | -      |
|  | 81.90  | - | - | -      |
|  | -      | - | - | 60.00  |
|  | -      | - | - | 20.40  |
|  | -      | - | - | 66.60  |
|  | -      | - | - | 19.80  |
|  | 175.50 | - | - | -      |
|  | 62.40  | - | - | -      |



|  |  |          |         |   |
|--|--|----------|---------|---|
|  |  | -        | 38.00   | - |
|  |  | -        | 38.00   | - |
|  |  | 49.50 -  |         | - |
|  |  | -        | 17.10   | - |
|  |  | -        | 17.10   | - |
|  |  | 50.00 -  |         | - |
|  |  | -        | 18.00   | - |
|  |  | -        | 18.00   | - |
|  |  | 55.00 -  |         | - |
|  |  | -        | 19.00   | - |
|  |  | -        | 19.00   | - |
|  |  | 60.00 -  |         | - |
|  |  | -        | 20.00   | - |
|  |  | -        | 20.00   | - |
|  |  | 202.50 - | -       | - |
|  |  | -        | 58.50 - | - |
|  |  | -        | 58.50 - | - |
|  |  | 202.50 - | -       | - |
|  |  | -        | 58.50 - | - |
|  |  | -        | 58.50 - | - |
|  |  | 99.00 -  |         | - |
|  |  | -        | 34.20   | - |
|  |  | -        | 34.20   | - |
|  |  | 100.00 - |         | - |
|  |  | -        | 36.00   | - |
|  |  | -        | 36.00   | - |
|  |  | 110.00 - |         | - |
|  |  | -        | 38.00   | - |
|  |  | -        | 38.00   | - |
|  |  | 110.00 - |         | - |
|  |  | -        | 38.00   | - |
|  |  | -        | 38.00   | - |
|  |  | 110.00 - |         | - |
|  |  | -        | 38.00   | - |
|  |  | -        | 38.00   | - |
|  |  | 110.00 - |         | - |
|  |  | -        | 38.00   | - |
|  |  | -        | 38.00   | - |
|  |  | 67.50 -  |         | - |
|  |  | -        | 28.50   | - |
|  |  | -        | 28.50   | - |
|  |  | 82.50 -  | -       | - |
|  |  | -        | 28.50 - | - |
|  |  | -        | 28.50 - | - |
|  |  | 90.00 -  | -       | - |
|  |  | -        | 26.00 - | - |
|  |  | -        | 26.00 - | - |
|  |  | 67.50 -  | -       | - |
|  |  | -        | 19.50 - | - |
|  |  | -        | 19.50 - | - |
|  |  | 67.50 -  | -       | - |
|  |  | -        | 19.50 - | - |

|                   |  |         |         |       |       |
|-------------------|--|---------|---------|-------|-------|
|                   |  | -       | 19.50   | -     | -     |
|                   |  | 55.00   | -       | -     | -     |
|                   |  | -       | 19.00   | -     | -     |
|                   |  | -       | 19.00   | -     | -     |
|                   |  | 60.00   | -       | -     | -     |
|                   |  | -       | 20.00   | -     | -     |
|                   |  | -       | 20.00   | -     | -     |
| Total length [m]  |  | 2553.50 | 1684.60 | 0.00  | 0.00  |
| Unit weight       |  | 0.394   | 0.616   | 0.888 | 1.208 |
| Total weight [kg] |  | 1007.00 | 1038.00 | 0.00  | 0.00  |

|                                  |  |         |         |       |         |
|----------------------------------|--|---------|---------|-------|---------|
| STAIR                            |  |         |         |       |         |
|                                  |  | -       | -       | -     | -       |
|                                  |  | 448.00  | -       | -     | -       |
|                                  |  | -       | -       | -     | -       |
|                                  |  | -       | -       | -     | -       |
|                                  |  | 123.20  | -       | -     | -       |
|                                  |  | -       | 112.00  | -     | -       |
|                                  |  | 78.40   | -       | -     | -       |
| Total length [m]                 |  | 649.60  | 112.00  | 0.00  | 0.00    |
| Unit weight                      |  | 0.394   | 0.616   | 0.888 | 1.208   |
| Total weight [kg]                |  | 256.00  | 69.00   | 0.00  | 0.00    |
| Total weight [kg] for Super Stru |  | 2151.00 | 1692.00 | 0.00  | 1561.00 |



|        |       |            |
|--------|-------|------------|
| -      | -     | -          |
| 63.90  | -     | m          |
| 6.00   | -     | m          |
| 68.10  | -     | m          |
| -      | -     | m          |
| -      | -     | m          |
| 60.00  | -     | m          |
| 6.00   | -     | m          |
| 64.50  | -     | m          |
| -      | -     | m          |
| -      | -     | m          |
| 45.78  | -     | m          |
| 139.44 | -     | m          |
| 86.40  | -     | m          |
| -      | -     | m          |
| -      | -     | m          |
| 540.12 | 0.00  | 0.00 m     |
| 1.578  | 1.997 | 2.466 kg/m |
| 852.00 | 0.00  | 0.00 kg    |
| -      | -     | -          |
| -      | -     | m          |
| -      | -     | m          |
| -      | -     | m          |
| -      | -     | m          |
| -      | -     | m          |
| -      | -     | m          |
| -      | -     | m          |
| -      | -     | m          |
| -      | -     | m          |
| -      | -     | m          |
| -      | -     | m          |
| -      | -     | m          |
| -      | -     | m          |
| -      | -     | -          |
| -      | -     | m          |
| -      | -     | m          |
| 0.00   | 0.00  | 0.00 m     |
| 1.578  | 1.997 | 2.466 kg/m |
| 0.00   | 0.00  | 0.00 kg    |
| 963.00 | 0.00  | 2435.00 kg |



[illegible]



|         |       |         |      |  |
|---------|-------|---------|------|--|
| -       | -     | -       | m    |  |
| -       | -     | -       | m    |  |
| -       | -     | -       | m    |  |
| -       | -     | -       | m    |  |
| -       | -     | -       | m    |  |
| -       | -     | -       | m    |  |
| -       | -     | -       | m    |  |
| 0.00    | 0.00  | 0.00    | m    |  |
| 1.578   | 1.997 | 2.466   | kg/m |  |
| 0.00    | 0.00  | 0.00    | kg   |  |
|         |       |         |      |  |
| 280.00  | -     | -       | m    |  |
| -       | -     | -       | m    |  |
| 156.00  | -     | -       | m    |  |
| 89.60   | -     | -       | m    |  |
| -       | -     | -       | m    |  |
| -       | -     | -       |      |  |
| -       | -     | -       | m    |  |
| 525.60  | 0.00  | 0.00    | m    |  |
| 1.578   | 1.997 | 2.466   | kg/m |  |
| 829.00  | 0.00  | 0.00    | kg   |  |
| 1682.00 | 0.00  | 2716.00 | kg   |  |

## G+1 MULTI PURPOSE BUILDING

| Item No | Description                                                                                                                                               | Unit           | Qty    | Rate     |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------|----------|
|         | <b>A-SUB STRUCTURE</b>                                                                                                                                    |                |        |          |
|         | <b>1. 0 EXCAVATION &amp; EARTH WORK</b>                                                                                                                   |                |        |          |
| 1.01    | Clear and remove top soil to an average depth of 20 cm.                                                                                                   | m <sup>2</sup> | 368.56 | 31.25    |
| 1.02    | Bulk excavation in ordinary soil to reduce levels to the designed level up to 500mm .                                                                     | m <sup>3</sup> | 164.71 | 9.52     |
| 1.03    | Pit excavation 25 cm away from the max edge of footing pad at each side in M3..... (100 CM)                                                               | m <sup>3</sup> | 455.22 | 347.66   |
| 1.04    | Fill around footing and foundation columns with imported selected materials from out side well rolled and compacted in layers not exceeding 200 mm thick. | m <sup>3</sup> | 290.51 | 195.73   |
| 1.05    | fill around massonary wall                                                                                                                                | m <sup>3</sup> | 15.00  | 195.73   |
| 1.06    | selected material fill at an average depth of 30 cm                                                                                                       | m <sup>3</sup> | 35.00  | 195.73   |
| 1.07    | Cart away surplus excavated materials from the site as per the Engineer's instruction.                                                                    | m <sup>3</sup> | 327.97 | 84.90    |
| 1.08    | 25cm basaltic stone hard core under concrete floor                                                                                                        | m <sup>2</sup> | 274.88 | 135.77   |
|         | Total carried to Summary .....                                                                                                                            |                |        |          |
|         | <b>2. 0 CONCRETE WORK</b>                                                                                                                                 |                |        |          |
| 2.01    | 50mm lean concrete quality C-5, 150 kg of cement/m3: under                                                                                                |                |        |          |
|         | a) Under foundation pad                                                                                                                                   | m <sup>2</sup> | 56.93  | 15.60    |
|         | b) Under Grade beam                                                                                                                                       | m <sup>2</sup> | 26.79  | 15.60    |
| 2.02    | Reinforced concrete quality C-25                                                                                                                          |                |        |          |
|         | a) in pad foundation                                                                                                                                      | m <sup>3</sup> | 27.72  | 3,112.12 |
|         | b) In grade beam                                                                                                                                          | m <sup>3</sup> | 10.72  | 3,112.12 |
|         | c) In 150mm thick ground floor slab                                                                                                                       | m <sup>2</sup> | 59.55  | 466.58   |
|         | d) foundation column                                                                                                                                      | m <sup>3</sup> | 2.73   | 3,112.12 |
|         | e) Outside stairs                                                                                                                                         | m <sup>3</sup> | 1.68   | 3,112.12 |
| 2.03    | Provide, cut and fix in position sawn zigba wood or steel formwork which ever appropriate.                                                                |                |        |          |
|         | a)To grade beam                                                                                                                                           | m <sup>2</sup> | 10.72  | 654.52   |
|         | b)To steps                                                                                                                                                | m <sup>2</sup> | 9.16   | 622.47   |
|         | c) Foundation pad                                                                                                                                         | m <sup>2</sup> | 65.62  | 622.47   |
|         | d) foundation column                                                                                                                                      | m <sup>2</sup> | 26.40  | 622.47   |
| 2.04    | Mild steel reinforcement                                                                                                                                  |                |        |          |
|         | a) dia 6 mm plain bar                                                                                                                                     | kg             |        |          |
|         | b) dia 8 mm deformed bar                                                                                                                                  | kg             | 859.00 | 73.21    |
|         | c) dia 10 mm deformed bar                                                                                                                                 | kg             | 147.00 | 64.66    |
|         | d) dia 12 mm deformed bar                                                                                                                                 | kg             |        |          |
|         | e) dia 14 mm deformed bar                                                                                                                                 | kg             |        |          |
|         | f) dia 16 mm deformed bar                                                                                                                                 | kg             | 963.00 | 64.30    |

|             |                                                                                                                                                            |                |         |          |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------|----------|
|             | g) dia 20 mm deformed bar                                                                                                                                  | kg             | 2435.00 | 62.98    |
|             | h) dia 24 mm deformed bar                                                                                                                                  | kg             |         |          |
| 2.05        | 10mm thick expansion joint filler under grade beam                                                                                                         | m              | 44.65   | 20.00    |
|             | Total carried to Summary .....                                                                                                                             |                |         |          |
|             | <b>3.0 MASONRY WORKS</b>                                                                                                                                   |                |         |          |
| 3.01        | 500mm thick hard trachytic roughly dressed stone masonry foundation wall below ground level bedded in cement mortar mix ratio (1:3)                        | m <sup>3</sup> | 13.03   | 2,194.61 |
| 3.02        | ditto item 3.01 for above the ground                                                                                                                       | m <sup>3</sup> | 15.93   | 2,445.40 |
|             | Total carried to Summary .....                                                                                                                             |                |         |          |
|             | Total carried to Summary for all sub structure works ...                                                                                                   |                |         |          |
|             | <b>B-SUPER STRUCTURE</b>                                                                                                                                   |                |         |          |
| <b>1.01</b> | <b>CONCRETE WORK</b>                                                                                                                                       |                |         |          |
|             | Reinforced concrete quality C-25,                                                                                                                          |                |         |          |
|             | a) In elevation columns                                                                                                                                    | m <sup>3</sup> | 13.82   | 3,112.12 |
|             | b) In first floor beam                                                                                                                                     | m <sup>3</sup> | 10.72   | 3,112.12 |
|             | c) In Top tiebeams                                                                                                                                         | m <sup>3</sup> | 10.72   | 3,112.12 |
|             | d) Staircase and landing                                                                                                                                   | m <sup>3</sup> | 4.14    | 3,112.12 |
|             | e) stair beam                                                                                                                                              | m <sup>3</sup> | 0.44    | 3,112.12 |
|             | f) In Rc Gutter                                                                                                                                            | m <sup>3</sup> | 4.40    | 3,112.12 |
|             | i) In 150mm first floor slab                                                                                                                               | m <sup>2</sup> | 396.98  | 487.41   |
|             | i) In 150mm flatfloor slab                                                                                                                                 | m <sup>2</sup> | 296.16  | 487.41   |
|             | h) water tank slab                                                                                                                                         | m <sup>2</sup> | 11.78   | 487.41   |
| 1.02        | Provide, cut and fix in position sawn zigba wood or steel formwork which ever appropriate.                                                                 |                |         |          |
|             | a) In elevation columns                                                                                                                                    | m <sup>2</sup> | 142.51  | 670.27   |
|             | b) In first floor beam                                                                                                                                     | m <sup>2</sup> | 120.56  | 654.52   |
|             | c) In Top tiebeams                                                                                                                                         | m <sup>2</sup> | 78.44   | 654.52   |
|             | d) Staircase and landing                                                                                                                                   | m <sup>2</sup> | 26.08   |          |
|             | e) landing beam                                                                                                                                            | m <sup>2</sup> | 3.50    | 654.52   |
|             | f) In Rc Gutter                                                                                                                                            | m <sup>2</sup> | 45.33   | 654.52   |
|             | i) In 150mm first floor slab                                                                                                                               | m <sup>2</sup> | 120.56  | 648.57   |
|             | i) In 150mm flatfloor slab                                                                                                                                 | m <sup>2</sup> | 59.67   | 648.57   |
|             | h) water tank slab                                                                                                                                         | m <sup>2</sup> | 15.15   | 648.57   |
|             |                                                                                                                                                            |                |         |          |
| 1.30        | Mild steel reinforcement according to structural drawings. Price includes cutting, bending, placing in position , tying wire, concrete spacers and chairs. |                |         |          |
|             | a) dia 6 mm plain bar                                                                                                                                      | kg             |         |          |
|             | b) dia 8 mm deformed bar                                                                                                                                   | kg             | 2151.00 | 73.21    |
|             | c) dia 10 mm deformed bar                                                                                                                                  | kg             | 1692.00 | 64.66    |
|             | d) dia 12 mm deformed bar                                                                                                                                  | kg             |         |          |
|             | e) dia 14 mm deformed bar                                                                                                                                  | kg             | 1561.00 | 63.33    |
|             | f) dia 16 mm deformed bar                                                                                                                                  | kg             | 1682.00 | 64.30    |

|      |                                                                                                                                                                                                                                                    |                |         |          |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------|----------|
|      | g) dia 20 mm deformed bar                                                                                                                                                                                                                          | kg             | 2716.00 | 62.98    |
|      | h) dia 24mm deformed bar                                                                                                                                                                                                                           | kg             |         |          |
|      | Total carried to Summary .....                                                                                                                                                                                                                     |                |         |          |
|      | <b>2. BLOCK WORK</b>                                                                                                                                                                                                                               |                |         |          |
| 2.01 | 20cm thick Class B external HCB wall which can satisfy the designed strength , bedded in cement mortar (1:3).Price shall include mortar bedding.                                                                                                   | m <sup>2</sup> | 277.02  | 378.19   |
| 2.02 | Ditto as Item 2.01 but for 150mm HCB guard wall                                                                                                                                                                                                    | m <sup>2</sup> | 353.60  | 361.93   |
|      | Total carried to Summary .....                                                                                                                                                                                                                     |                |         |          |
|      | <b>3. ROOFING</b>                                                                                                                                                                                                                                  |                |         |          |
| 3.01 | For 15 cm solid slab flat roof                                                                                                                                                                                                                     |                |         |          |
|      | A) 3cm thick cement sand screed over light weight pumice                                                                                                                                                                                           | m <sup>2</sup> | 294.67  | 177.12   |
|      | B) Average 12cm thick light weight concrete over roof slab giving 2% slope towards down pipe trowel finished to receive water proofing material.                                                                                                   | m <sup>2</sup> | 294.67  | 186.69   |
|      | C) Bituminous modified polymer water proofing material with 4 mm thick sand finisher equivalent all according to manufacturers instruction.                                                                                                        | m <sup>2</sup> | 294.67  | 55.00    |
| 3.02 | G30 CIS Roofing (without truss and purlin) price includes ridge cover and washer                                                                                                                                                                   | m <sup>2</sup> | 412.20  | 243.10   |
| 3.03 | G28 Sheet Metal Down down pipe                                                                                                                                                                                                                     | ml             | 42.00   | 24.97    |
| 3.04 | Flashing.                                                                                                                                                                                                                                          | ml             | 42.86   | 183.09   |
| 3.05 | 20 cm wide fascia board                                                                                                                                                                                                                            | ml             | 39.60   | 271.19   |
| 3.06 | gutter development size 40                                                                                                                                                                                                                         | ml             | 52.00   | 318.44   |
|      | Total carried to Summary .....                                                                                                                                                                                                                     |                |         |          |
|      | <b>4. CARPENTRY &amp; JOINERY</b>                                                                                                                                                                                                                  |                |         |          |
|      | Wood roof truss member :                                                                                                                                                                                                                           |                |         |          |
| 4.01 | 10 cm. dia. Upper & Lower Chords Eucaliptus Wood                                                                                                                                                                                                   | m              | 139.80  | 33.53    |
| 4.02 | 6 cm. dia. Vertical & Diagonal Members of a Truss                                                                                                                                                                                                  | m              | 139.44  | 45.98    |
| 4.03 | 5 X 7 cm. Tid Wood Roof Purlin                                                                                                                                                                                                                     | m              | 360.00  | 94.74    |
| 4.04 | INTERNAL DOORS Supply & fix 40mm thick wood framed door both sides covered with 4mm ply wood sides ,top, sides covered with 4mm ply wood sides ,top,bottom lipped & edged with hard wood price includes three coats of varnish paint & cylindrical |                |         |          |
|      | a) Type D1 size 850x2600 mm                                                                                                                                                                                                                        | no             | 10.00   | 2,566.29 |
|      | b) Type D2 size 700x2600 mm                                                                                                                                                                                                                        | no             | 18.00   | 2,113.42 |
|      | Total carried to Summary .....                                                                                                                                                                                                                     |                |         |          |
|      | <b>5. METAL AND ALUMINUM WORK</b>                                                                                                                                                                                                                  |                |         |          |

|     |                                                                                                                                                                                                                                                                                                                                                            |                |        |           |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------|-----------|
|     | Aluminium framed windows, top windows, window doors and doors As per iso standard aluminium frame profile thickness should be 2mm anodized thickness 15-25 micro unit , & all fixing accessories should be of same standard as that of the profile . Complete work according to suppliers instruction. Price includes 6mm thick non reflective clear glass |                |        |           |
|     | NB-All dimensions shall be verified on site prior to production. All lockes,handles,springs& lashes shall be of best quality & approved by the Arch.                                                                                                                                                                                                       |                |        |           |
|     |                                                                                                                                                                                                                                                                                                                                                            |                |        |           |
|     | WINDOWS                                                                                                                                                                                                                                                                                                                                                    |                |        |           |
|     | a) Type W1 Size :1500x1500mm                                                                                                                                                                                                                                                                                                                               | no             | 14.00  | 5,850.00  |
|     | b) Type W2 Size :1000x400mm                                                                                                                                                                                                                                                                                                                                | no             | 6.00   | 1,024.00  |
|     | c) Type W3 Size :1000x1500mm                                                                                                                                                                                                                                                                                                                               | no             | 2.00   | 3,840.00  |
|     | d) Type W4 Size :2500x2600mm                                                                                                                                                                                                                                                                                                                               | no             | 4.00   | 16,640.00 |
|     |                                                                                                                                                                                                                                                                                                                                                            |                |        |           |
|     | DOORS                                                                                                                                                                                                                                                                                                                                                      |                |        |           |
|     | external                                                                                                                                                                                                                                                                                                                                                   |                |        |           |
|     | a) Type D1 size 850x2600 mm                                                                                                                                                                                                                                                                                                                                | no             | 10.00  | 5,657.60  |
|     | b) Type D3 size 1300x2600 mm                                                                                                                                                                                                                                                                                                                               | no             | 2.00   | 8,652.80  |
| 5.2 | c) Type D4 size 1250x2600 mm                                                                                                                                                                                                                                                                                                                               | no             | 2.00   | 8,320.00  |
|     | Supply and fix Ø50mm CHS hand rail(2mm thick) of 40x40x2mm RHS Post Anchored to the slab, 40X40X2mm RHS handrail in two rows horizontally and 30X20X2mm Vertical C/C spacing 228mm price shall include one coats of antirest paint two coats of synthatic enamel paint and necessary works and material to full fill the jobs.                             |                |        |           |
|     | a) Hand rail                                                                                                                                                                                                                                                                                                                                               | m              | 16.00  | 1,440.00  |
|     | b) Guard rail                                                                                                                                                                                                                                                                                                                                              | m              | 50.00  | 1,440.00  |
|     | Total carried to Summary .....                                                                                                                                                                                                                                                                                                                             |                |        |           |
|     | <b>6. FINISHING</b>                                                                                                                                                                                                                                                                                                                                        |                |        |           |
| 6.1 | WALL FINISH                                                                                                                                                                                                                                                                                                                                                |                |        |           |
|     | Finishing work shall includes all surface pre cleaning, preparation of finish, polishing and cleaning at the end of finishing work. Apply two coats of plaster in cement mortar to                                                                                                                                                                         |                |        |           |
|     | A) External exposed concrete & concrete block wall surface                                                                                                                                                                                                                                                                                                 | m <sup>2</sup> | 276.52 | 276.42    |
|     | B) Internal exposed concrete & concrete block wall surface                                                                                                                                                                                                                                                                                                 | m <sup>2</sup> | 396.17 | 276.42    |
|     | C) Concrete ceiling surface                                                                                                                                                                                                                                                                                                                                | m <sup>2</sup> | 293.13 | 222.29    |
|     | D) Stair belly,sides & landing                                                                                                                                                                                                                                                                                                                             | m <sup>2</sup> | 203.08 | 222.29    |
|     | E) water tanker ceiling                                                                                                                                                                                                                                                                                                                                    | m <sup>2</sup> | 110.00 | 222.29    |

|      |                                                                                                                                                                 |                |        |          |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------|----------|
| 6.05 | Apply fine coat of fine cement sand plaster to internal plastered surface                                                                                       | m <sup>2</sup> | 396.17 | 45.12    |
| 6.06 | Gypsum plastering to all internal plastered surface                                                                                                             | m <sup>2</sup> | 396.17 | 53.28    |
| 6.07 | Gypsum board suspended ceiling nailed on & including 4x4cm zigba batten at c/c60cm both ways price includes corner list & all suspension material complete work | m <sup>2</sup> | 105.91 | 180.00   |
| 6.08 | 6mm thick glazed ceramic wall tile bedded on & including cement mortar backing and joints grouted in white cement.                                              | m <sup>2</sup> | 148.26 | 616.83   |
| 6.09 | 9mm thick non slippery ceramic floor tile bedded on and including 50mm thick cement sand screed and joints grouted .                                            | m <sup>2</sup> | 18.73  | 632.55   |
| 6.10 | 25mm thick tid perquet floor with all accecerries                                                                                                               | m <sup>2</sup> | 45.00  | 1,714.44 |
| 6.10 | 25mm thick non slippery terrazo floor tile bedded on and including 30mm thick cement sand screed and joints grouted .                                           | m <sup>2</sup> | 110.00 | 541.24   |
| 6.10 | 9mm thick non slippery pvc floor tile bedded on and including 50mm thick cement sand screed and joints grouted .                                                | m <sup>2</sup> | 32.00  | 620.61   |
| 6.11 | marble tile skirting stuck to wall with cement mortar                                                                                                           | m <sup>2</sup> | 85.00  | 355.01   |
| 6.12 | ceramic tile skirting stuck to wall with cement mortar                                                                                                          | m <sup>2</sup> | 155.00 | 157.64   |
| 6.13 | Copping in harar marble tile bedded in cement mortar & joints grouted .Size - 20/2cm                                                                            | m <sup>2</sup> | 149.55 | 1,599.35 |
| 6.14 | 8cm pvc skirting                                                                                                                                                | m              | 117.84 | 107.95   |
| 6.15 | Copping in harar marble tile bedded in cement mortar & joints grouted for riser                                                                                 | m              | 50.00  | 409.06   |
| 6.16 | Copping in harar marble tile bedded in cement mortar & joints grouted for tread                                                                                 | m              | 50.00  | 585.81   |
| 6.17 | 3cm thick marble window sill 30cm                                                                                                                               | m              | 44.00  | 417.23   |
|      | TOTAL TO SUMMARY.....                                                                                                                                           |                |        |          |
|      | <b>7. PAINTING</b>                                                                                                                                              |                |        |          |
| 7.1  | Quartz paint External plastered wall surface                                                                                                                    | m <sup>2</sup> | 396.00 | 53.25    |
| 7.2  | Prepare and apply by brush three coats of synthetic enamel paint to:-                                                                                           |                |        |          |
|      | A)Internal plastered wall surface                                                                                                                               | m <sup>2</sup> | 575.00 | 64.47    |
|      | B)plastered ceiling surface                                                                                                                                     | m <sup>2</sup> | 293.13 | 77.42    |
|      | C) plastered stair case belly & sides surface                                                                                                                   | m <sup>2</sup> | 197.10 | 77.42    |
|      | D)Gypsum board ceiling surface                                                                                                                                  | m <sup>2</sup> | 293.13 | 77.42    |
|      | Total carried to summary .....                                                                                                                                  |                |        |          |
|      | <b>8)GLAZING</b>                                                                                                                                                |                |        |          |
| 8.1  | 5mm thick clear glass glazed with beads, rubber gasket and sealant to alumunium profile frames.                                                                 | m <sup>2</sup> | 51.72  | 567.29   |

|     |                                                                                                                                                         |                |       |           |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------|-----------|
| 8.2 | 5mm thick frosted glass glazed with beads, rubber gasket and sealant to alumunium profile frames.                                                       | m <sup>2</sup> | 4.40  | 710.66    |
|     | Total carried to Summary .....                                                                                                                          |                |       |           |
|     | <b>9.SANITARY INSTALLATION</b>                                                                                                                          |                |       |           |
|     | <b>A. Interior Installation</b>                                                                                                                         |                |       |           |
|     | <b>Water Supply Pipes &amp; fittings</b>                                                                                                                |                |       |           |
| 9.1 | Supply and install galvanized steel pipes from elevated water tank to cold and hot water distribution to all sanitary fixtures as shown on the drawing  |                |       |           |
|     |                                                                                                                                                         |                |       |           |
|     | Diameter 15 mm                                                                                                                                          | ml             | 60.00 | 65.00     |
|     | Diameter 20 mm                                                                                                                                          | ml             | 40.00 | 85.00     |
| 9.2 | Supply and install gate valves made of brass complete with rubber gaskets, hand wheels and connecting pieces such as unions etc, for all fixtures       |                |       |           |
|     | Diameter 15 mm                                                                                                                                          | Pcs            | 14.00 | 40.00     |
|     | Diameter 20 mm                                                                                                                                          | Pcs            | 10.00 | 45.00     |
|     | <b>Elevated water tank</b>                                                                                                                              |                |       |           |
| 9.3 | Supply and mount 8m <sup>3</sup> fibre glass water tank on roof complete with all the necessary accessories                                             |                |       |           |
|     | a) Size of water tank = 4 x 2 m                                                                                                                         | Pc             | 1.00  | 15,000.00 |
|     | b) Diameter 32mm brass gate valve for outlet pipe                                                                                                       | Pcs            | 1.00  | 350.00    |
|     | c) Diameter 32mm brass gate valve for drain pipe                                                                                                        | Pcs            | 1.00  | 350.00    |
|     | d) Diameter 32mm brass gate valve for inlet pipe                                                                                                        | Pcs            | 1.00  | 250.00    |
|     | e) Diameter 40mm PVC float valve                                                                                                                        | Pcs            | 1.00  | 350.00    |
|     | f) Diameter 50 mm PVC vent pipe with vent cap length of pipe 30 cm                                                                                      |                |       |           |
|     | g) Diameter 32mm drain and over flow galvanized steel pipe                                                                                              |                |       |           |
|     | <b>Sanitary Fixtures</b>                                                                                                                                |                |       |           |
| 9.4 | Supply and install low level water closet white glazed vitreous China WC pan of approved quality complete with all the necessary accessories            | Pcs            | 12.00 | 3,500.00  |
| 9.5 | Supply and install hand wash basins made of white vitreous China with two tap holes complete with all the necessary accessories<br>Size :- 500 x 405 mm | Pcs            | 12.00 | 3,500.00  |

|      |                                                                                                                                                                                                                                                                                                       |             |        |          |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------|----------|
| 9.6  | Supply & install white glazed steel cast-iron shower tray with slip resistance base,15mm chrome plated shower mixer with cold & hot taps,concealed riser tube chrome plated shower arm tube & swivel spray head,38mm brass shower tray waste drain hole with chrome plated grated,dia 38mm uPVC trap. |             |        |          |
|      | size 900x900mm                                                                                                                                                                                                                                                                                        | Pcs         | 12.00  | 3,500.00 |
| 9.7  | Supply and install single tubular chrome plated swingtowel hanger,with chrome plated fastening screws completed with all the necessary accessories                                                                                                                                                    | Pcs         | 12.00  | 200.00   |
| 9.8  | Supply and fix toilet paper holder in white vitreous China complete with all the necessary accessories                                                                                                                                                                                                | Pcs         | 12.00  | 100.00   |
| 9.9  | Supply and fix crystal glass mirror 500 x 400 mm Including chrome plated brass clips and screws                                                                                                                                                                                                       | Pcs         | 6.00   | 1,500.00 |
|      | <b>Waste water &amp; Ventilation Pipe</b>                                                                                                                                                                                                                                                             |             |        |          |
| 9.10 | Supply and fix water heater complete with all neccessories.                                                                                                                                                                                                                                           |             |        |          |
|      | a/Capacity 25 litters                                                                                                                                                                                                                                                                                 | Pcs         | 6.00   | 4,500.00 |
| 9.11 | Supply and install , waste and vent pipe in horizontal branches and vertical stacks made of PVC including the necessary fittings such as bends, branches tees, elbow etc. All horizontal branches should be laid at a slope of 2% .                                                                   |             |        |          |
|      | Diameter 50 mm                                                                                                                                                                                                                                                                                        | ml          | 106.00 | 74.00    |
| 9.12 | Supply and install vent caps made of PVC at vent pipes fitted with PVC pipe roof weathering slate at roof level.                                                                                                                                                                                      |             |        |          |
|      | Diameter 50 mm                                                                                                                                                                                                                                                                                        | Pc          | 25.00  | 85.00    |
|      | <b>Total carried to Summary.....</b>                                                                                                                                                                                                                                                                  | <b>Birr</b> |        |          |

**Total to Summary for super sturacture .....**

|               |
|---------------|
|               |
| <b>Amount</b> |
|               |
|               |
| 11,517.41     |
| 1,568.04      |
|               |
| 158,260.08    |
|               |
| 56,861.28     |
| 2,935.94      |
|               |
| 6,850.52      |
|               |
| 27,843.29     |
|               |
| 37,320.11     |
| 303,156.66    |
|               |
|               |
|               |
| 888.11        |
| 417.92        |
|               |
|               |
| 86,275.68     |
| 33,349.45     |
| 27,783.36     |
|               |
| 8,507.75      |
| 5,228.36      |
|               |
|               |
| 7,013.82      |
| 5,701.86      |
| 40,846.71     |
| 16,433.30     |
|               |
|               |
| -             |
| 62,887.45     |
| 9,505.66      |
|               |
| -             |
| -             |
| 61,917.89     |

|            |
|------------|
| 153,351.73 |
| -          |
| 893.00     |
| 521,002.06 |
|            |
|            |
| 28,599.20  |
| 38,949.01  |
| 67,548.21  |
| 891,706.94 |
|            |
|            |
|            |
| 42,997.55  |
| 33,349.45  |
| 33,349.45  |
| 12,874.83  |
| 1,369.33   |
| 13,704.37  |
| 193,488.57 |
| 144,350.22 |
| 5,742.63   |
|            |
| 95,518.66  |
| 78,905.51  |
| 51,337.18  |
| -          |
| 2,290.82   |
| 29,666.06  |
| 78,187.83  |
| 38,703.15  |
| 9,825.77   |
|            |
|            |
| -          |
| 157,474.86 |
| 109,412.12 |
| -          |
| 98,851.30  |
| 108,147.34 |

|              |
|--------------|
| 171,048.59   |
|              |
| 1,510,595.60 |
|              |
|              |
| 104,766.19   |
| 127,978.01   |
| 232,744.20   |
|              |
|              |
| 52,191.62    |
|              |
| 55,011.24    |
|              |
| 16,206.67    |
|              |
| 100,204.33   |
| 1,048.69     |
| 7,847.25     |
| 10,739.03    |
| 16,559.06    |
| 259,807.89   |
|              |
|              |
|              |
| 4,688.15     |
| 6,411.71     |
| 34,108.11    |
|              |
|              |
|              |
| 25,662.93    |
| 38,041.52    |
| 108,912.42   |
|              |

|            |
|------------|
|            |
|            |
|            |
|            |
| 81,900.00  |
| 6,144.00   |
| 7,680.00   |
| 66,560.00  |
|            |
|            |
|            |
| 56,576.00  |
| 17,305.60  |
| 16,640.00  |
|            |
| 23,040.00  |
| 72,000.00  |
| 347,845.60 |
|            |
|            |
|            |
| 76,435.53  |
| 109,509.13 |
| 65,161.22  |
| 45,143.40  |
| 24,452.31  |

|              |
|--------------|
| 17,875.19    |
| 21,107.94    |
| 19,064.25    |
| 91,450.03    |
| 11,845.85    |
| 77,149.69    |
| 59,536.67    |
| 19,859.48    |
| 30,175.59    |
| 24,434.88    |
| 239,183.51   |
| 12,721.05    |
| 20,452.98    |
| 29,290.33    |
| 18,358.04    |
| 1,013,207.06 |
| -            |
| 21,087.46    |
| -            |
| 37,070.60    |
| 22,694.06    |
| 15,259.44    |
| 22,694.06    |
| 97,718.15    |
|              |
| 29,340.15    |

|           |
|-----------|
|           |
| 3,126.88  |
| 32,467.03 |
|           |
|           |
|           |
|           |
|           |
|           |
|           |
| 3,900.00  |
| 3,400.00  |
|           |
|           |
| 560.00    |
| 450.00    |
|           |
|           |
|           |
| 15,000.00 |
|           |
| 350.00    |
| 350.00    |
| 250.00    |
| 350.00    |
|           |
|           |
|           |
|           |
| 42,000.00 |
| 42,000.00 |

|                   |
|-------------------|
|                   |
| 42,000.00         |
|                   |
| 2,400.00          |
|                   |
| 1,200.00          |
|                   |
| 9,000.00          |
|                   |
|                   |
| 27,000.00         |
|                   |
|                   |
| 7,844.00          |
|                   |
|                   |
| 2,125.00          |
| <b>200,179.00</b> |

3,803,476.95

## SUMMARY

**Project : G+1 MULTIPURPOSE**

**Location :**

**Client :**

**Contractor :**

**Consultant :**

### **SUMMARY**

#### **A-SUB STRUCTURE**

1 EXCAVATION AND EARTH WORK..... BIRR

2 CONCRETE WORK..... BIRR

3 MASONARY WORK..... BIRR

**SUB TOTAL A..... BIRR**

#### **B-SUPER STRUCTURE**

1 CONCRETE WORK..... BIRR

2 BLOCK WORK..... BIRR

3 ROOFING WORK..... BIRR

4 CARPENTRY WORK..... BIRR

5 METAL AND ALUMINIUM WORK..... BIRR

6 FINISHING WORK..... BIRR

9 PAINTING WORK..... BIRR

8 GLAZING WORK..... BIRR

10 SANITARY INSTALLATION WORK..... BIRR

**SUB TOTAL B..... BIRR**

**TOTAL A+B..... BIRR**

### **GRAND SUMMARY**

|                                     |             |                     |
|-------------------------------------|-------------|---------------------|
| MAIN BUILDING .....                 | BIRR        | 4,695,183.89        |
| VAT 15% .....                       | BIRR        | 704,277.58          |
| <b>Grand total with VAT15%.....</b> | <b>BIRR</b> | <b>5,399,461.48</b> |



303,156.66

521,002.06

67,548.21

**891,706.94**

1,510,595.60

232,744.20

259,807.89

108,912.42

347,845.60

1,013,207.06

97,718.15

32,467.03

200,179.00

**3,803,476.95**

**4,695,183.89**

# **ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS**

PROJECT: G+1 MULTI PURPOSE

**EXCAVATION AND EARTH WORK.**

LABOUR HOURLY OUTPUT:

WORK ITEM: ( 1.01 )

20 cm. Clearing on loose & dry soil.

EQUIPEMENT: Tool

RESULT:

31.25

TOTAL QANTITY OF WORK ITEM: 1 m<sup>2</sup>

| Material Cost (1:01) |      |       |      |               | Labour Cost (1:02)  |     |     |                        |             | Eq                |
|----------------------|------|-------|------|---------------|---------------------|-----|-----|------------------------|-------------|-------------------|
| Type of Material     | Unit | Qty * | Rate | Cost per Unit | Labour by Grade     | No. | UF  | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
|                      |      |       |      | 0             | D/L                 | 1   | 1   | 18.75                  | 18.75       | Tool              |
|                      |      |       |      | 0             | G.Chief             | 1   | 0.1 | 25                     | 2.5         |                   |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                   |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                   |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                   |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                   |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                   |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                   |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                   |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                   |
| <b>Total (1:-01)</b> |      |       |      | 0             | <b>Total (1:02)</b> |     |     |                        | 21.25       | <b>Total</b>      |

A= Materials Unit Cost

0 Birr/m<sup>2</sup>

B= Manpower Unit Cost

23.876 Birr/m<sup>2</sup>

C= Equipment Unit Cost

Total of (1:02)

1.44

Total of (1:03)

Hourly Output:

0.89

Hourly output

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

25.00

Over head cost :

10%

2.50

Profit Cost:

15%

3.75

Total Unit Cost :

31.25

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

### **ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS**

PROJECT: G+1 MULTI PURPOSE  
WORK ITEM: ( 1.02 )

EXCAVATION AND EARTH WORK.  
Bulk excav. to a depth not exceeding 500mm

LABOUR HOURLY OUTPUT:  
EQUIPEMENT: Tool  
RESULT:

TOTAL QANTITY OF WORK ITEM: 1 m<sup>3</sup>

| Material Cost (1:01) |      |       |      |               | Labour Cost (1:02)  |     |     |                        |             | Eq                |
|----------------------|------|-------|------|---------------|---------------------|-----|-----|------------------------|-------------|-------------------|
| Type of Material     | Unit | Qty * | Rate | Cost per Unit | Labour by Grade     | No. | UF  | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
|                      |      |       |      | 0             | G chef              | 1   | 0.1 | 37.5                   | 3.75        | tool              |
|                      |      |       |      | 0             | DL                  | 1   | 1   | 18.75                  | 18.75       |                   |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                   |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                   |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                   |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                   |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                   |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                   |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                   |
| <b>Total (1:-01)</b> |      |       |      | 0             | <b>Total (1:02)</b> |     |     |                        | 22.5        | <b>Tot</b>        |

A= Materials Unit Cost

0 Birr/m<sup>3</sup>

B= Manpower Unit Cost

107.14 Birr/m<sup>3</sup>

C= Equipment Unit Cost

Total of (1:02)

Total of (1:03)

Hourly Output:

Hourly output

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

111.90

Over head cost :

10%

11.19

Profit Cost:

15%

16.79

Total Unit Cost :

139.88

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

### **ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS**

PROJECT: G+1 MULTI PURPOSE  
WORK ITEM: ( 1.03)

EXCAVATION AND EARTH WORK.  
Excavation foundation pits to adepth of 150-300cm.

LABOUR HOURLY OUTPUT:  
EQUIPEMENT: Tool  
RESULT:

347.66

TOTAL QANTITY OF WORK ITEM: 1 m<sup>3</sup>

| Material Cost (1:01) |      |       |      |               | Labour Cost (1:02)  |     |     |                        |             | Eq                |
|----------------------|------|-------|------|---------------|---------------------|-----|-----|------------------------|-------------|-------------------|
| Type of Material     | Unit | Qty * | Rate | Cost per Unit | Labour by Grade     | No. | UF  | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
|                      |      |       |      | 0             | DL                  | 1   | 1   | 18.75                  | 18.75       | Tools             |
|                      |      |       |      | 0             | G.Chief             | 1   | 0.1 | 25                     | 2.5         |                   |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                   |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                   |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                   |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                   |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                   |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                   |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                   |
| <b>Total (1:-01)</b> |      |       |      | 0             | <b>Total (1:02)</b> |     |     |                        | 21.25       | <b>Tot:</b>       |

A= Materials Unit Cost

0 Birr/m<sup>3</sup>

B= Manpower Unit Cost

265.63 Birr/m<sup>3</sup>

C= Equipment Unit Cost

Total of (1:02)

Total of (1:03)

Hourly Output:

Hourly output

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

278.13

Over head cost :

10%

27.81

Profit Cost:

15%

41.72

Total Unit Cost :

347.66

Remark

UF: UTILIZATION FACTOR

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

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

-4 -

### **ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS**

PROJECT: G+1 MULTI PURPOSE

EXCAVATION AND EARTH WORK.

LABOUR HOURLY OUTPUT:

WORK ITEM: ( 1.04)

Back fill excavated materials from the site.

EQUIPEMENT: Tool

RESULT: 195.73

TOTAL QANTITY OF WORK ITEM: 1 m<sup>3</sup>

| Material Cost (1:01) |      |       |      |               | Labour Cost (1:02)  |     |       |                        |             | Eq                |
|----------------------|------|-------|------|---------------|---------------------|-----|-------|------------------------|-------------|-------------------|
| Type of Material     | Unit | Qty * | Rate | Cost per Unit | Labour by Grade     | No. | UF    | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
|                      |      |       |      | 0             | foreman             | 1   | 0.033 | 37.5                   | 1.24        | tool              |
|                      |      |       |      | 0             | DL                  | 1   | 1     | 18.75                  | 18.75       |                   |
|                      |      |       |      | 0             | G.CHIEF             | 1   | 0.1   | 25                     | 2.5         |                   |
|                      |      |       |      | 0             |                     |     |       |                        | 0           |                   |
|                      |      |       |      | 0             |                     |     |       |                        | 0           |                   |
|                      |      |       |      | 0             |                     |     |       |                        | 0           |                   |
|                      |      |       |      | 0             |                     |     |       |                        | 0           |                   |
|                      |      |       |      | 0             |                     |     |       |                        | 0           |                   |
|                      |      |       |      | 0             |                     |     |       |                        | 0           |                   |
|                      |      |       |      | 0             |                     |     |       |                        | 0           |                   |
| <b>Total (1:-01)</b> |      |       |      | 0             | <b>Total (1:02)</b> |     |       |                        | 22.49       | <b>Total</b>      |

A= Materials Unit Cost

0 Birr/m<sup>3</sup>

B= Manpower Unit Cost

150 Birr/m<sup>3</sup>

C= Equipment Unit Cost

Total of (1:02)

Total of (1:03)

Hourly Output:

Hourly output

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

156.58

Over head cost :

10%

15.66

Profit Cost:

15%

23.49

Total Unit Cost :

195.73

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

5

### ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: G+1 MULTI PURPOSE

EXCAVATION AND EARTH WORK.

LABOUR HOURLY OUTPUT:

WORK ITEM: ( 1.07)

Cart away surplus excavated mats. 3km. from the site.

EQUIPEMENT: Tool

RESULT:

**84.90**

TOTAL QANTITY OF WORK ITEM: 1 m<sup>3</sup>

| Material Cost (1:01) |      |       |      |               | Labour Cost (1:02) |     |    |                        |             | Eq                |
|----------------------|------|-------|------|---------------|--------------------|-----|----|------------------------|-------------|-------------------|
| Type of Material     | Unit | Qty * | Rate | Cost per Unit | Labour by Grade    | No. | UF | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
|                      |      |       |      | 0             | operator           | 1   | 1  | 70.00                  | 70.00       | loader            |
|                      |      |       |      | 0             | driver             | 2   | 2  | 50.00                  | 200.00      | dump truck        |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |    |                        | 0           |                   |
|                      |      |       |      |               |                    |     |    |                        |             |                   |

A= Materials Unit Cost

0 Birr/m<sup>3</sup>

B= Manpower Unit Cost

11.25 Birr/m<sup>3</sup>

C= Equipment Unit Cost

Total of (1:02)

Total of (1:03)

Hourly Output:

Hourly output

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

67.92

Over head cost :

10%

6.79

Profit Cost:

15%

10.19

Total Unit Cost :

**84.90**

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

-6 -

#### **ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS**

PROJECT: G+1 MULTI PURPOSE EXCAVATION AND EARTH WORK.  
WORK ITEM: ( 1.08) 25cm. thick basaltic hard core.

LABOUR HOURLY OUTPUT:

EQUIPEMENT: Tool

RESULT:

135.77

TOTAL QANTITY OF WORK ITEM: 1 m<sup>2</sup>

| Material Cost (1:01) |                |       |      |               | Labour Cost (1:02)  |     |      |                        |             | Eq                |
|----------------------|----------------|-------|------|---------------|---------------------|-----|------|------------------------|-------------|-------------------|
| Type of Material     | Unit           | Qty * | Rate | Cost per Unit | Labour by Grade     | No. | UF   | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
| basaltic stone       | m <sup>2</sup> | 0.28  | 150  | 42            | foreman             | 1   | 0.25 | 37.5                   | 9.38        | tools             |
|                      |                |       |      | 0             | mason               | 1   | 1    | 37.5                   | 37.50       |                   |
|                      |                |       |      | 0             | DL                  | 4   | 1    | 18.75                  | 75          |                   |
|                      |                |       |      | 0             |                     |     |      |                        | 0           |                   |
|                      |                |       |      | 0             |                     |     |      |                        | 0           |                   |
|                      |                |       |      | 0             |                     |     |      |                        | 0           |                   |
|                      |                |       |      | 0             |                     |     |      |                        | 0           |                   |
|                      |                |       |      | 0             |                     |     |      |                        | 0           |                   |
|                      |                |       |      | 0             |                     |     |      |                        | 0           |                   |
|                      |                |       |      | 0             |                     |     |      |                        | 0           |                   |
| <b>Total (1:-01)</b> |                |       |      | 42            | <b>Total (1:02)</b> |     |      |                        | 121.875     | <b>Total</b>      |

A= Materials Unit Cost

42 Birr/m<sup>2</sup>

B= Manpower Unit Cost

60.938 Birr/m<sup>2</sup>

C= Equipment Unit Cost

Total of (1:02)

Total of (1:03)

Hourly Output:

Hourly output

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

104.44

Over head cost :

15%

15.67

Profit Cost:

15%

15.67

Total Unit Cost :

135.77

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

0.89 m<sup>2</sup>/hr.

Birr/m<sup>2</sup>

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
| 1                     | 1             | 1           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
| Total (1:03)          |               | 1           |

1.12 Birr/m<sup>2</sup>

)  
 : \_\_\_\_\_  
 Birr/m<sup>2</sup>  
 "  
 "  
 Birr/m<sup>2</sup>

0.21 m³/hr.

9.52 Birr/m³

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
| 1                     | 1             | 1           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
| Total (1:03)          |               | 1           |

4.76 Birr/m³

)  
:  
Birr/m³  
"  
"  
Birr/m³

0.08 m³/hr.

Birr/m³

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
| 1                     | 1             | 1           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
| Total (1:03)          |               | 1           |

12.50 Birr/m³

)  
:  
Birr/m³  
"  
"  
Birr/m³

0.15 m³/hr.

Birr/m<sup>3</sup>

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
| 1                     | 1             | 1           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
| Total (1:03)          |               | 1           |

6.67 Birr/m<sup>3</sup>

)  
:  
Birr/m<sup>3</sup>  
"  
"  
Birr/m<sup>3</sup>

24 m<sup>3</sup>/hr.

Birr/m<sup>3</sup>

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
| 1                     | 700.00        | 700.00      |
| 2                     | 330.00        | 660.00      |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
| <b>al (1:03)</b>      |               | 1360.00     |

)  
 : \_\_\_\_\_  
 Birr/m³  
 "  
 "  
**Birr/m³**

2 m²/hr.  
 Birr/m²

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
| 3                     | 1             | 3           |
|                       |               |             |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
| Total (1:03)          |               | 3           |

1.50 Birr/m²

)  
:  
Birr/m²  
"  
"  
Birr/m²

**ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS**

PROJECT: G+1 MULTI PURPOSE **CONCRETE WORK**

LABOUR HOURLY OUTPUT:

WORK ITEM: A(2.01 ) C-5 Lean Concrete (Hand mix) 1:5:10 , 0.05 M thick

EQUIPEMENT:

RESULT: 15.60

TOTAL QUANTITY OF WORK ITEM: 1 m<sup>2</sup>

| Material Cost (1:01) |                |       |        |               | Labour (1:02)       |     |    |                        |             |                   |
|----------------------|----------------|-------|--------|---------------|---------------------|-----|----|------------------------|-------------|-------------------|
| Type of Material     | Unit           | Qty * | Rate   | Cost per Unit | Labour by Trade     | No. | UF | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
| Cement               | Qnt.           | 2.13  | 385    | 820.05        | Mason I             | 1   | 1  | 37.5                   | 37.5        | -                 |
| Sand                 | m <sup>3</sup> | 0.175 | 464.00 | 81.2          | D/L                 | 2   | 1  | 18.75                  | 37.5        | -                 |
| Gravel (02)          | m <sup>3</sup> | 0.35  | 360.00 | 126           |                     |     |    |                        | 0           |                   |
| Water                | m <sup>3</sup> | 0.054 | 0.75   | 0.041         |                     |     |    |                        | 0           |                   |
|                      |                |       |        | 0             |                     |     |    |                        | 0           |                   |
|                      |                |       |        | 0             |                     |     |    |                        | 0           |                   |
|                      |                |       |        | 0             |                     |     |    |                        | 0           |                   |
| <b>Total (1:-01)</b> |                |       |        | 1027.2905     | <b>Total (1:02)</b> |     |    |                        | 75          | <b>T</b>          |

|                        |                         |                                  |                          |                        |
|------------------------|-------------------------|----------------------------------|--------------------------|------------------------|
| A= Materials Unit Cost | 0.00 Br./m <sup>2</sup> | B=Manpower Unit Cost             | 12.00 Br./m <sup>2</sup> | C=Equipmen             |
|                        |                         | <u>Total of (1:02)</u>           | <u>5.65</u>              | <u>Total of (1:02)</u> |
|                        |                         | Hourly Output                    | 6.25                     | Hourly outp            |
|                        |                         | Direct Cost of work item= A+B+C= |                          | 12.00                  |
|                        |                         | Overhead Cost:                   | 15%                      | 1.80                   |
|                        |                         | Profit Cost:                     | 15%                      | 1.80                   |
|                        |                         | Total Unit Cost :                |                          | 15.60                  |

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

**ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS**

PROJECT: G+1 DUPLEX **CONCRETE WORK**

WORK ITEM: B(1.01 ) C-25 Concrete (Mechanical Mix) 1:2:3

LABOUR HOURLY OUTPUT:

EQUIPEMENT: Mixer & Vibrator

TOTAL QUANTITY OF

WORK ITEM: 1 m<sup>3</sup>

RESULT: 3112.12

| Material Cost (1:01) |                |       |        |               | Labour (1:02)       |     |    |                        |             | Equip             |
|----------------------|----------------|-------|--------|---------------|---------------------|-----|----|------------------------|-------------|-------------------|
| Type of Material     | Unit           | Qty * | Rate   | Cost per Unit | Labour by Trade     | No. | UF | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
| Cement               | Qnt.           | 3.97  | 385.00 | 1528.45       | Foreman             | 1   | 1  | 37.5                   | 37.5        | Mixer             |
| Sand                 | m <sup>3</sup> | 0.51  | 464.00 | 236.64        | Mason II            | 2   | 1  | 37.5                   | 75          | Vibrator          |
| Gravel (02)          | m <sup>3</sup> | 0.76  | 500.00 | 380.00        | D/L                 | 10  | 1  | 18.75                  | 187.5       |                   |
| Water                | m <sup>3</sup> | 0.213 | 0.75   | 0.16          |                     |     |    |                        |             |                   |
|                      |                |       |        |               |                     |     |    |                        |             |                   |
|                      |                |       |        |               |                     |     |    |                        |             |                   |
|                      |                |       |        |               |                     |     |    |                        |             |                   |
| <b>Total (1:-01)</b> |                |       |        | 2145.25       | <b>Total (1:02)</b> |     |    |                        | 300.00      | <b>T</b>          |

A= Material 2145.25 Birr/m<sup>3</sup>

B=Manpower Unit Cost

266.67 Br./m<sup>3</sup>

C= Equipmer

Total of (1:02)

43.75

Total of (1:02)

Hourly Output

0.75

Hourly outp

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

2489.69

Overhead Cost:

15%

373.45

Profit Cost:

10%

248.97

Total Unit Cost :

3112.12

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

### ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: G+1 DUPLEX **CONCRETE WORK**  
 WORK ITEM: B( 1.01) C-25 Concrete (Hand Mix) 1:2:3

LABOUR HOURLY OUTPUT:

EQUIPEMENT:\_

TOTAL QUANTITY OF  
 WORK ITEM: \_ 1 m<sup>3</sup>

RESULT : 3237.04

| Material Cost (1:01) |                |       |        |               | Labour (1:02)       |     |       |                        |             | Equip             |
|----------------------|----------------|-------|--------|---------------|---------------------|-----|-------|------------------------|-------------|-------------------|
| Type of Material     | Unit           | Qty * | Rate   | Cost per Unit | Labour byTrade      | No. | UF    | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
| Cement               | Qnt.           | 4.1   | 385    | 1578.5        | Foreman             | 1   | 0.167 | 37.5                   | 6.2625      |                   |
| Sand                 | m3             | 0.53  | 464.00 | 245.92        | Mason II            | 1   | 1     | 37.5                   | 37.5        |                   |
| Gravel (02)          | m <sup>3</sup> | 0.79  | 500.00 | 395           | D/L                 | 10  | 1     | 18.75                  | 187.5       |                   |
| Water                | m <sup>3</sup> | 0.26  | 0.75   | 0.195         |                     |     |       |                        | 0           |                   |
|                      |                |       |        | 0             |                     |     |       |                        | 0           |                   |
|                      |                |       |        | 0             |                     |     |       |                        | 0           |                   |
|                      |                |       |        | 0             |                     |     |       |                        | 0           |                   |
| <b>Total (1:-01)</b> |                |       |        | 2219.615      | <b>Total (1:02)</b> |     |       |                        | 231.26      | <b>T</b>          |

A= Material 2219.62 Birr/m<sup>3</sup>

B=Manpower Unit Cost 370.02 Br./m<sup>3</sup>

C= Equipmer

Total of (1:02)

12.08

Total of (1:02)

Hourly Output

0.625

Hourly outp

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

2589.64

Overhead Cost:

10%

258.96

Profit Cost:

15%

388.45

Total Unit Cost :

3237.04

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

### ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: G+1 DUPLEX **CONCRETE WORK**  
 WORK ITEM: ( 1.10) C-25 Concrete (Mechanical Mix) 1:2:3

LABOUR HOURLY OUTPUT:  
 EQUIPEMENT: Mixer & Vibrator  
 RESULT: 3251.01

TOTAL QUANTITY OF  
 WORK ITEM: 1 m<sup>3</sup>

| Material Cost (1:01) |      |       |        |               | Labour (1:02)   |     |    |                        |             | Equip             |
|----------------------|------|-------|--------|---------------|-----------------|-----|----|------------------------|-------------|-------------------|
| Type of Material     | Unit | Qty * | Rate   | Cost per Unit | Labour by Trade | No. | UF | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
| Cement               | Qnt. | 3.97  | 385.00 | 1528.45       | Foreman         | 1   | 1  | 37.5                   | 37.5        | Mixer             |
| Sand                 | m3   | 0.51  | 464.00 | 236.64        | Mason II        | 2   | 1  | 37.5                   | 75          | Vibrator          |
| Gravel (02)          | m³   | 0.76  | 500.00 | 380.00        | D/L             | 10  | 1  | 18.75                  | 187.5       | winch             |
| Water                | m³   | 0.213 | 0.75   | 0.16          |                 |     |    |                        |             |                   |
|                      |      |       |        |               |                 |     |    |                        |             |                   |
|                      |      |       |        |               |                 |     |    |                        |             |                   |
|                      |      |       |        |               |                 |     |    |                        |             |                   |
| Total (1:-01)        |      |       |        | 2145.25       | Total (1:02)    |     |    |                        | 300.00      | T                 |

|             |                             |                                    |                           |                        |
|-------------|-----------------------------|------------------------------------|---------------------------|------------------------|
| A= Material | 2145.25 Birr/m <sup>3</sup> | B=Manpower Unit Cost               | 266.67 Br./m <sup>3</sup> | C= Equipmer            |
|             |                             | <u>Total of (1:02)</u>             | <u>43.75</u>              | <u>Total of (1:02)</u> |
|             |                             | Hourly Output                      | 0.75                      | Hourly outp            |
|             |                             | Direct Cost of work item = A+B+C = |                           | 2600.81                |
|             |                             | Overhead Cost:                     | 15%                       | 390.12                 |
|             |                             | Profit Cost:                       | 10%                       | 260.08                 |
|             |                             | Total Unit Cost :                  |                           | 3251.01                |

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

6.25 m²/hr.

Birr/m²

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
| Total (1:03)          |               | 0           |

t Unit Cost                      0 Br./m²

3)

ut: \_\_\_\_\_

Birr/m²

"                      16.8

"

Birr/m²

1.125 m<sup>3</sup> / hr.

9

Birr/m<sup>3</sup>

| ment Cost (1:03) |               |             |
|------------------|---------------|-------------|
| No.              | Hourly Rental | Hourly Cost |
| 1                | 62.5          | 62.5        |
| 1                | 25            | 25          |
|                  |               |             |
|                  |               |             |
|                  |               |             |
|                  |               |             |
|                  |               |             |
| Total (1:03)     |               | 87.5        |

nt Unit Cost : 77.78 Br./m<sup>3</sup>

03) 46.85

ut: 0.75

Birr/m<sup>3</sup>

"

"

Birr/m<sup>3</sup>

0.625 m³/hr.

Birr/m³

| ment Cost (1:03) |               |             |
|------------------|---------------|-------------|
| No.              | Hourly Rental | Hourly Cost |
|                  |               | 0           |
|                  |               | 0           |
|                  |               | 0           |
|                  |               | 0           |
|                  |               | 0           |
|                  |               | 0           |
|                  |               | 0           |
| Total (1:03)     |               | 0           |

nt Unit Cost : 0.00 Br./m³

3)

ut:

Birr/m³

"

"

Birr/m³

1.125 m<sup>3</sup> / hr.

9

Birr/m<sup>3</sup>

| ment Cost (1:03) |               |             |
|------------------|---------------|-------------|
| No.              | Hourly Rental | Hourly Cost |
| 1                | 62.5          | 62.5        |
| 1                | 25            | 25          |
| 1                | 125           | 125         |
|                  |               |             |
|                  |               |             |
|                  |               |             |
|                  |               |             |
| Total (1:03)     |               | 212.5       |

nt Unit Cost : 188.89 Br./m<sup>3</sup>

13) 46.85

ut: 0.75

Birr/m<sup>3</sup>

"

"

Birr/m<sup>3</sup>

- 1 -

# **ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS**

**PROJECT : G+1 DUPLEX REINFORCEMENT BARS**

WORK ITEM: dia. 8 mm. plain bars

LABOUR HOURLY OUTPUT:

EQUIPMENT:

TOTAL QUANTITY OF WORK

RESULT: 73.21

ITEM: 1 kg.

| Material Cost (1:01)       |      |       |      |               | Labour (1:02)       |     |      |                        |             |                     |
|----------------------------|------|-------|------|---------------|---------------------|-----|------|------------------------|-------------|---------------------|
| Type of Material           | Unit | Qty * | Rate | Cost per Unit | Labour by Grade     | No. | UF   | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment   |
| φ 8 mm plain bars          | kg   | 1.05  | 43   | 45.15         | Foreman             | 1   | 0.17 | 37.5                   | 6.26        |                     |
| 1.5 mm black annealed wire | "    | 0.05  | 60   | 3.00          | Bar bender          | 1   | 1    | 31.25                  | 31.25       |                     |
|                            |      |       |      | 0             | D/L                 | 3   | 1    | 18.75                  | 56.25       |                     |
|                            |      |       |      | 0             |                     |     |      |                        | 0.00        |                     |
|                            |      |       |      | 0             |                     |     |      |                        | 0.00        |                     |
|                            |      |       |      | 0             |                     |     |      |                        | 0.00        |                     |
|                            |      |       |      | 0             |                     |     |      |                        | 0.00        |                     |
| <b>Total (1:-01)</b>       |      |       |      | 48.15         | <b>Total (1:02)</b> |     |      |                        | 93.76       | <b>Total (1:03)</b> |

A= Materials Unit Cost 48.15 birr/kg

B= Manpower Unit Cost 10.42 Birr/kg.

Equipment U

Total of (1:02)

Total of (1:02)

hourly output: 7.08/9=0.79

Hourly outp

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

58.57

Over head cost :

10%

5.86

Profit Cost:

15%

8.79

Total Unit Cost :

73.21

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

- 2-

### ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

**PROJECT : G+1 DUPLEX REINFORCEMENT BARS**

WORK ITEM: ( 1.20c )      dia. 10 deformed bars

TOTAL QUANTITY OF WORK

ITEM :                      1                      kg

LABOUR HOURLY OUTPUT:

EQUIPMENT:

RESULT:                                              64.66

| Material Cost (1:01)       |      |        |       |               | Labour (1:02)       |     |    |                        |             | Equ                 |
|----------------------------|------|--------|-------|---------------|---------------------|-----|----|------------------------|-------------|---------------------|
| Type of Material           | Unit | Qty *  | Rate  | Cost per Unit | Labour by Grade     | No. | UF | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment   |
| φ10-deformed bars          | kg   | 1.05   | 39.03 | 40.9815       | foreman             | 1   | 1  | 37.5                   | 37.50       |                     |
| 1.5 mm black Annealed wire | "    | 0.0125 | 60    | 0.75          | bar bender          | 1   | 1  | 31.25                  | 31.25       |                     |
|                            |      |        |       | 0             | D/L                 | 3   | 1  | 18.75                  | 56.25       |                     |
|                            |      |        |       | 0             |                     |     |    |                        | 0.00        |                     |
|                            |      |        |       | 0             |                     |     |    |                        | 0.00        |                     |
|                            |      |        |       | 0             |                     |     |    |                        | 0.00        |                     |
|                            |      |        |       | 0             |                     |     |    |                        | 0.00        |                     |
|                            |      |        |       | 0             |                     |     |    |                        | 0.00        |                     |
|                            |      |        |       | 0             |                     |     |    |                        | 0.00        |                     |
|                            |      |        |       | 0             |                     |     |    |                        | 0.00        |                     |
|                            |      |        |       | 0             |                     |     |    |                        | 0.00        |                     |
| <b>Total (1:-01)</b>       |      |        |       | 41.7315       | <b>Total (1:02)</b> |     |    |                        | 125         | <b>Total (1:03)</b> |

A= Materials Unit      41.7315 Birr/kg.

B= Manpower Unit Cost

10.00 Birr/kg.

C= Equipmen

Total of (1:02)

Total of (1:03)

Hourly Output: \_\_\_\_\_ 11.25/12.5=0.90

Hourly outp

Direct Cost of Work Item = A+B+C = 51.73

Over head cost :                                              10%                      5.173

Profit Cost:                                              15%                      7.760

Total Unit Cost :                                              64.664

UF: UTILIZATION FACTOR

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

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

### ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

**PROJECT : G+1 DUPLEX REINFORCEMENT BARS**

WORK ITEM: ( 1.20f ) dia. 16 deformed bars

TOTAL QUANTITY OF WORK

ITEM : 1 kg

LABOUR HOURLY OUTPUT:

EQUIPMENT:

RESULT: 64.30

| Material Cost (1:01)       |      |        |       |               | Labour (1:02)       |     |    |                        |             | Equ                 |
|----------------------------|------|--------|-------|---------------|---------------------|-----|----|------------------------|-------------|---------------------|
| Type of Material           | Unit | Qty *  | Rate  | Cost per Unit | Labour by Grade     | No. | UF | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment   |
| φ16-deformed bars          | kg   | 1.05   | 38.75 | 40.6875       | foreman             | 1   | 1  | 37.5                   | 37.50       |                     |
| 1.5 mm black Annealed wire | "    | 0.0125 | 60    | 0.75          | bar bender          | 1   | 1  | 31.25                  | 31.25       |                     |
|                            |      |        |       | 0             | D/L                 | 3   | 1  | 18.75                  | 56.25       |                     |
|                            |      |        |       | 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        |                     |
| <b>Total (1:-01)</b>       |      |        |       | 41.4375       | <b>Total (1:02)</b> |     |    |                        | 125         | <b>Total (1:03)</b> |

A= Materials Unit 41.4375 Birr/kg.

B= Manpower Unit Cost

10.00 Birr/kg.

C= Equipment

Total of (1:02)

Total of (1:03)

Hourly Output:

11.25/12.5=0.90

Hourly output

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

51.44

Over head cost :

10%

5.144

Profit Cost:

15%

7.716

Total Unit Cost :

64.297

UF: UTILIZATION FACTOR

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

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

4

**ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS****PROJECT : G+1 DUPLEX REINFORCEMENT BARS**

LABOUR HOURLY OUTPUT:

WORK ITEM: ( 1.20g)      dia. 20 deformed    bars  
TOTAL QUANTITY OF WORK  
ITEM :                      1                      kg

EQUIPMENT:  
RESULT:                                              62.98

| Material Cost (1:01)       |      |        |      |               | Labour (1:02)       |     |    |                        |             | Equ                 |
|----------------------------|------|--------|------|---------------|---------------------|-----|----|------------------------|-------------|---------------------|
| Type of Material           | Unit | Qty *  | Rate | Cost per Unit | Labour by Grade     | No. | UF | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment   |
| φ20-deformed bars          | kg   | 1.05   | 38.4 | 40.32         | foreman             | 1   | 1  | 37.5                   | 37.50       |                     |
| 1.5 mm black Annealed wire | "    | 0.0125 | 5    | 0.0625        | bar bender          | 1   | 1  | 31.25                  | 31.25       |                     |
|                            |      |        |      | 0             | D/L                 | 3   | 1  | 18.75                  | 56.25       |                     |
|                            |      |        |      | 0             |                     |     |    |                        | 0.00        |                     |
|                            |      |        |      | 0             |                     |     |    |                        | 0.00        |                     |
|                            |      |        |      | 0             |                     |     |    |                        | 0.00        |                     |
|                            |      |        |      | 0             |                     |     |    |                        | 0.00        |                     |
|                            |      |        |      | 0             |                     |     |    |                        | 0.00        |                     |
|                            |      |        |      | 0             |                     |     |    |                        | 0.00        |                     |
|                            |      |        |      | 0             |                     |     |    |                        | 0.00        |                     |
|                            |      |        |      | 0             |                     |     |    |                        | 0.00        |                     |
| <b>Total (1:-01)</b>       |      |        |      | 40.3825       | <b>Total (1:02)</b> |     |    |                        | 125         | <b>Total (1:03)</b> |

A= Materials Unit    40.3825 Birr/kg.

B= Manpower Unit Cost

10.00 Birr/kg.

C= Equipmer

Total of (1:02)

Total of (1:03)

Hourly Output: \_\_\_\_\_

11.25/12.5=0.90

Hourly outp

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

50.38

Over head cost :

10%

5.038

Profit Cost:

15%

7.557

Total Unit Cost :

62.978

UF: UTILIZATION FACTOR

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

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

- 5 -

#### ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

**PROJECT : G+1 DUPLEX    REINFORCEMENT    BARS**

LABOUR HOURLY OUTPUT:

WORK ITEM: ( 1.20e )

dia. 14 deformed    bars

EQUIPMENT:

RESULT:

63.33

TOTAL QUANTITY OF WORK ITEM 1 kg

| Material Cost (1:01)       |      |        |       |               | Labour (1:02)       |     |    |                        |             | Equ                 |
|----------------------------|------|--------|-------|---------------|---------------------|-----|----|------------------------|-------------|---------------------|
| Type of Material           | Unit | Qty *  | Rate  | Cost per Unit | Labour by Grade     | No. | UF | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment   |
| φ14-deformed bars          | kg   | 1.05   | 38.01 | 39.9105       | foreman             | 1   | 1  | 37.5                   | 37.50       |                     |
| 1.5 mm black Annealed wire | "    | 0.0125 | 60    | 0.75          | bar bender          | 1   | 1  | 31.25                  | 31.25       |                     |
|                            |      |        |       | 0             | D/L                 | 3   | 1  | 18.75                  | 56.25       |                     |
|                            |      |        |       | 0             |                     |     |    |                        | 0.00        |                     |
|                            |      |        |       | 0             |                     |     |    |                        | 0.00        |                     |
|                            |      |        |       | 0             |                     |     |    |                        | 0.00        |                     |
|                            |      |        |       | 0             |                     |     |    |                        | 0.00        |                     |
|                            |      |        |       | 0             |                     |     |    |                        | 0.00        |                     |
|                            |      |        |       | 0             |                     |     |    |                        | 0.00        |                     |
|                            |      |        |       | 0             |                     |     |    |                        | 0.00        |                     |
| <b>Total (1:-01)</b>       |      |        |       | 40.6605       | <b>Total (1:02)</b> |     |    |                        | 125         | <b>Total (1:03)</b> |

A= Materials Unit 40.6605 Birr/kg.

B= Manpower Unit Cost

10.00 Birr/kg.

C= Equipmen

Total of (1:02)

Total of (1:03)

Hourly Output: 11.25/12.5=0.90

Hourly outp

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

50.66

Over head cost :

5.066

Profit Cost:

7.599

Total Unit Cost :

63.326

UF: UTILIZATION FACTOR

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

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

9 kg/hr.

Birr/kg.

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |

nit Cost                    0.00 Birr/kg.

23)

ut: \_\_\_\_\_

Birr/kg.

"

"

Birr/kg.

12.5 kg./hr

Birr/kg.

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
| 03)                   |               | 0           |

Unit Cost                      0 Birr/kg.

03)

Unit: \_\_\_\_\_

Birr/kg.

"

"

Birr/kg.

12.5 kg./hr

Birr/kg.

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
| 03)                   |               | 0           |

Unit Cost                      0 Birr/kg.

03)

ut: \_\_\_\_\_

Birr/kg.

"

"

Birr/kg.

12.5 kg./hr

Birr/kg.

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
| 03)                   |               | 0           |

Unit Cost                      0 Birr/kg.

03)

ut: \_\_\_\_\_

Birr/kg.

"

"

Birr/kg.

12.5 kg./hr

Birr/kg.

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
| 03)                   |               | 0           |

nt Unit Cost                      0 Birr/kg.

03)

ut: \_\_\_\_\_

Birr/kg.

"

"

Birr/kg.

**ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS**PROJECT:G+1 MULTIPURPOSE **MASONRY WORKS**

WORK ITEM : ( 3.02 ) 50cm. thick masonry foundation (A.G.L)

LABOUR HOURLY OUTPUT:

EQUIPEMENT:

TOTAL QUANTITY OF

WORK ITEM: 1 m<sup>3</sup>

RESULT

2445.40

| 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 |
| Cement               | Qnt.           | 0.88  | 385.00 | 338.8         | Foreman             | 1   | 0.17 | 37.5                   | 6.38        |                   |
| Sand                 | m <sup>3</sup> | 0.17  | 464.00 | 78.88         | Masone II           | 2   | 1    | 37.5                   | 75.00       |                   |
| Stone                | m <sup>3</sup> | 1.25  | 687.00 | 858.75        | D/L                 | 4   | 1    | 18.75                  | 75.00       |                   |
|                      |                |       |        | 0             |                     |     |      |                        | 0.00        |                   |
|                      |                |       |        | 0             |                     |     |      |                        | 0.00        |                   |
|                      |                |       |        | 0             |                     |     |      |                        | 0.00        |                   |
|                      |                |       |        | 0             |                     |     |      |                        | 0.00        |                   |
|                      |                |       |        | 0             |                     |     |      |                        | 0.00        |                   |
|                      |                |       |        | 0             |                     |     |      |                        | 0.00        |                   |
| <b>Total (1:-01)</b> |                |       |        | 1276.43       | <b>Total (1:02)</b> |     |      |                        | 156.38      | <b>T</b>          |

A= Material 1276.43 Birr/m<sup>3</sup>

B=Manpower Unit Cost

679.8913 Birr/m<sup>3</sup>

C=Equipment

Total of (1:02)Total of (1:0

Hourly Outp 7.08/0.24 = 29.5

Hourly outp

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

**1956.32** Birr/m<sup>3</sup>

Overhead Cost :

10%

195.63 "

Profit Cost:

15%

293.45 "

Total Unit Cost :

**2445.40** Birr/m<sup>3</sup>

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:G+1 MULTIPURPOSE **MASONRY WORKS**

WORK ITEM : ( 3.01 ) 50cm. thick masonry foundation (B.G.L).

LABOUR HOURLY OUTPUT:

EQUIPEMENT:

TOTAL QANTITY OF

WORK ITEM:

1

m<sup>3</sup>

RESULT

2194.61

| 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 |
| Cement               | Qtl..          | 0.92  | 385.00 | 354.2         | Foreman             | 1   | 0.17 | 37.5                   | 6.38        |                   |
| Sand                 | m <sup>3</sup> | 0.26  | 464.00 | 120.64        | Masone II           | 2   | 1    | 37.5                   | 75.00       |                   |
| Stone                | m <sup>3</sup> | 1.3   | 687.00 | 893.1         | D/L                 | 6   | 1    | 18.75                  | 112.50      |                   |
|                      |                |       |        | 0             |                     |     |      |                        | 0.00        |                   |
|                      |                |       |        | 0             |                     |     |      |                        | 0.00        |                   |
|                      |                |       |        | 0             |                     |     |      |                        | 0.00        |                   |
|                      |                |       |        | 0             |                     |     |      |                        | 0.00        |                   |
|                      |                |       |        | 0             |                     |     |      |                        | 0.00        |                   |
|                      |                |       |        | 0             |                     |     |      |                        | 0.00        |                   |
| <b>Total (1:-01)</b> |                |       |        | 1367.94       | <b>Total (1:02)</b> |     |      |                        | 193.88      | <b>T</b>          |

A= Material 1367.94 Birr/m<sup>3</sup>

B=Manpower Unit Cost

387.75 Birr/m<sup>3</sup>

C=Equipment

Total of (1:02)Total of (1:0

Hourly Output

Hourly outp

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

**1755.69** Birr/m<sup>3</sup>

Overhead Cost :

10%

175.57 "

Profit Cost:

15%

263.35 "

Total Unit Cost :

**2194.61** Birr/m<sup>3</sup>

Remark : \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

0.23 m³/hr.

Birr/m³

| st (1:03)    |               |             |
|--------------|---------------|-------------|
| No.          | Hourly Rental | Hourly Cost |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
| total (1:03) |               | 0           |

: Unit Cost                    0 Birr/m³  
13)  
ut: \_\_\_\_\_

0.5 m³/hr.

Birr/m³

| st (1:03)    |               |             |
|--------------|---------------|-------------|
| No.          | Hourly Rental | Hourly Cost |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
| total (1:03) |               | 0           |

: Unit Cost                    0 Birr/m³  
13)  
ut: \_\_\_\_\_

**ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS**PROJECT: **G+1 DUPLEX FORM WORKS**

WORK ITEM: ( 2.03 ) For Foundation Footing &amp; Column.

LABOUR HOURLY OUTPUT:

EQUIPEMENT:

RESULT: 622.47

TOTAL QANTITY OF WORK ITEM: 1 m<sup>2</sup>

| Material Cost (1:01) |                |       |       |               | Labour (1:02)       |     |       |                        |             |                   |
|----------------------|----------------|-------|-------|---------------|---------------------|-----|-------|------------------------|-------------|-------------------|
| Type of Material     | Unit           | Qty * | Rate  | Cost per Unit | Labour by Grade     | No. | UF    | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
| 2.5cm thick timber   | M <sup>2</sup> | 1.05  | 325   | 341.25        | Foreman             | 1   | 0.167 | 37.5                   | 6.25        |                   |
| 40 x 50 cm. battens  | M              | 0.32  | 56.25 | 18            | Carpenter           | 1   | 1     | 37.5                   | 37.50       |                   |
| Nails                | Kg             | 0.05  | 65    | 3.25          | Helper              | 1   | 1     | 18.75                  | 18.75       |                   |
| Mould Oil            | Lit.           | 0.015 | 4     | 0.06          | D/L                 | 1   | 1     | 18.75                  | 18.75       |                   |
|                      |                |       |       |               |                     |     |       |                        | 0.00        |                   |
|                      |                |       |       |               |                     |     |       |                        | 0.00        |                   |
|                      |                |       |       |               |                     |     |       |                        | 0.00        |                   |
|                      |                |       |       |               |                     |     |       |                        | 0.00        |                   |
|                      |                |       |       |               |                     |     |       |                        | 0.00        |                   |
|                      |                |       |       |               |                     |     |       |                        | 0.00        |                   |
| <b>Total (1:-01)</b> |                |       |       | 362.56        | <b>Total (1:02)</b> |     |       |                        | 81.25       |                   |

Materials Unit Cost 362.56 Birr/m<sup>2</sup>

B= Manpower Unit Cost

135.42 Birr/m<sup>2</sup>

C=Equipment Unit Cost

Total of (1:02)Total of (1

Hourly Output: \_\_\_\_\_

Hourly out

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

497.98

Over head cost :

10%

49.80

P Profit Cost:

15%

74.70

T Total Unit Cost :

622.47

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: G+1 DUPLEX **FORM WORK**  
 WORK ITEM: \_ ( 2.03 ) For Grade Beam.

LABOUR HOURLY OUTPUT:  
 EQUIPEMENT:  
 RESULT: 654.52

TOTAL QUANTITY OF WORK ITEM : 1 m<sup>2</sup>

| Material Cost (1:01) |                |       |      |               | Labour (1:02)       |     |       |                        |             |                   |
|----------------------|----------------|-------|------|---------------|---------------------|-----|-------|------------------------|-------------|-------------------|
| Type of Material     | Unit           | Qty * | Rate | Cost per Unit | Labour by Grade     | No. | UF    | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
| 2.5cm thick timber   | M <sup>2</sup> | 1.05  | 325  | 341.25        | Foreman             | 1   | 0.167 | 37.5                   | 6.26        |                   |
| 50 x 70 cm battens   | M              | 0.11  | 25   | 2.75          | Carpenter           | 1   | 1     | 37.5                   | 37.50       |                   |
| Strut 0 60 mm        | M              | 0.1   | 6    | 0.6           | Helper              | 1   | 1     | 18.75                  | 18.75       |                   |
| Nails                | Kg             | 0.25  | 65   | 16.25         | D/L                 | 1   | 1     | 18.75                  | 18.75       |                   |
| Mould Oil            | Lit.           | 0.06  | 4    | 0.24          |                     |     |       |                        | 0.00        |                   |
|                      |                |       |      |               |                     |     |       |                        | 0.00        |                   |
|                      |                |       |      |               |                     |     |       |                        | 0.00        |                   |
|                      |                |       |      |               |                     |     |       |                        | 0.00        |                   |
|                      |                |       |      |               |                     |     |       |                        | 0.00        |                   |
|                      |                |       |      |               |                     |     |       |                        | 0.00        |                   |
| <b>Total (1:-01)</b> |                |       |      | 361.09        | <b>Total (1:02)</b> |     |       |                        | 81.26       |                   |

|                       |                            |                                    |                             |                      |  |
|-----------------------|----------------------------|------------------------------------|-----------------------------|----------------------|--|
| A Materials Unit Cost | 361.09 Birr/m <sup>2</sup> | B= Manpower Unit Cost              | 162.525 Birr/m <sup>2</sup> | C=Equipment Unit Cos |  |
|                       |                            | <u>Total of (1:02)</u>             |                             | <u>Total of (1</u>   |  |
|                       |                            | Hourly Output:                     |                             | Hourly out           |  |
|                       |                            | Direct Cost of Work Item = A+B+C = |                             | 523.62               |  |
|                       |                            | Over head cost :                   |                             | 10% 52.36            |  |
|                       |                            | P Profit Cost:                     |                             | 15% 78.54            |  |
|                       |                            | T Total Unit Cost : _              |                             | 654.52               |  |

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: G+1 DUPLEX **FORM WORK**  
 WORK ITEM: ( 1.02 ) For Elevation Column.

LABOUR HOURLY OUTPUT: \_\_\_\_  
 EQUIPEMENT:  
 RESULT: 670.27

TOTAL QUANTITY OF WORK ITEM : 1 m<sup>2</sup>

| Material Cost (1:01) |                |       |      |               | Labour (1:02)       |     |       |                        |             |                   |
|----------------------|----------------|-------|------|---------------|---------------------|-----|-------|------------------------|-------------|-------------------|
| Type of Material     | Unit           | Qty * | Rate | Cost per Unit | Labour by Grade     | No. | UF    | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
| 2.5cm thick timber   | M <sup>2</sup> | 1.05  | 325  | 341.25        | Foreman             | 1   | 0.167 | 37.5                   | 6.26        |                   |
| 50 x 70 cm battens   | M              | 0.46  | 25   | 11.50         | Carpenter           | 1   | 1     | 37.5                   | 37.50       |                   |
| Strut 60 mm. dia.    | M              | 0.2   | 6    | 1.2           | Helper              | 1   | 1     | 18.75                  | 18.75       |                   |
| Nails                | Kg             | 0.3   | 65   | 19.5          | D/L                 | 1   | 1     | 18.75                  | 18.75       |                   |
| Mould Oil            | Lit.           | 0.06  | 4    | 0.24          |                     |     |       |                        | 0.00        |                   |
|                      |                |       |      |               |                     |     |       |                        | 0.00        |                   |
|                      |                |       |      |               |                     |     |       |                        | 0.00        |                   |
|                      |                |       |      |               |                     |     |       |                        | 0.00        |                   |
|                      |                |       |      |               |                     |     |       |                        | 0.00        |                   |
|                      |                |       |      |               |                     |     |       |                        | 0.00        |                   |
| <b>Total (1:-01)</b> |                |       |      | 373.69        | <b>Total (1:02)</b> |     |       |                        | 81.26       |                   |

A Materials Unit Cost 373.69 Birr/m<sup>2</sup>

B= Manpower Unit Cost 162.525 Birr/m<sup>2</sup>

C=Equipment Unit Cos

Total of (1:02)

Total of (1

Hourly Output:

Hourly out

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

536.22

Over head cost : \_\_

10% 53.62

P Profit Cost:

15% 80.43

T Total Unit Cost : \_\_

670.27

UF: UTILIZATION FACTOR

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

### ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT:G+1 DUPLEX  
WORK ITEM: (1.02)

**FORM WORK**  
For Suspended slab (150mm)

LABOUR HOURLY OUTPUT:  
EQUIPEMENT:  
RESULT 648.57

TOTAL QUANTITY OF WORK ITEM : 1 m<sup>2</sup>

| Material Cost (1:01) |                |       |      |               | Labour (1:02)       |     |       |                        |             |                   |
|----------------------|----------------|-------|------|---------------|---------------------|-----|-------|------------------------|-------------|-------------------|
| Type of Material     | Unit           | Qty * | Rate | Cost per Unit | Labour by Grade     | No. | UF    | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
| 2.5cm thick timber   | M <sup>2</sup> | 1.05  | 375  | 393.75        | Foreman             | 1   | 0.167 | 37.50                  | 6.26        |                   |
| 50 x 70 cm battens   | M              | 0.84  | 25   | 21            | Carpenter           | 1   | 1     | 37.5                   | 37.50       |                   |
| 50 x 70 cm battens   | M              | 0.1   | 25   | 2.5           | Helper              | 1   | 1     | 18.75                  | 18.75       |                   |
| Strut 0 60 mm        | M              | 0.1   | 6    | 0.6           | D/L                 | 1   | 1     | 18.75                  | 18.75       |                   |
| Nails                | Kg             | 0.3   | 65   | 19.5          |                     |     |       |                        | 0.00        |                   |
| Mould Oil            | Lit.           | 0.06  | 4    | 0.24          |                     |     |       |                        | 0.00        |                   |
|                      |                |       |      | 0             |                     |     |       |                        | 0.00        |                   |
|                      |                |       |      | 0             |                     |     |       |                        | 0.00        |                   |
|                      |                |       |      | 0             |                     |     |       |                        | 0.00        |                   |
|                      |                |       |      |               |                     |     |       |                        | 0.00        |                   |
| <b>Total (1:-01)</b> |                |       |      | 437.59        | <b>Total (1:02)</b> |     |       |                        | 81.26       |                   |

A= Materials Unit Cost 437.59 Birr/m<sup>2</sup>

B= Manpower Unit Cost

81.26 Birr/m<sup>2</sup>

C=Equipment Unit Cos

Total of (1:02)

Total of (1

Hourly Output:

Hourly out

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

518.85

Over head cost : \_

10%

51.89

P Profit Cost:

15%

77.83

T Total Unit Cost :

648.57

UF: UTILIZATION FACTOR

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

0.6 m²/hr.

Birr/m²

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
| Total (1:03)          |               | 0           |

st 0 Birr/m²

:03)

put: \_\_\_\_\_

Birr/m²

Birr/m²

Birr/m²

Birr/m²

0.5 m²/hr.

Birr/m²

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
| Total (1:03)          |               | 0           |

t 0 Birr/m²

:03)

put: \_\_\_\_\_

Birr/m²

Birr/m²

Birr/m²

Birr/m²

0.5 m²/hr.

Birr/m²

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               |             |
|                       |               |             |
|                       |               |             |
|                       |               |             |
| Total (1:03)          |               | 0.00        |

t 0 Birr/m²

:03)

put: \_\_\_\_\_

Birr/m²

Birr/m²

Birr/m²

Birr/m²

1 M<sup>2</sup>/hr

Birr/m<sup>2</sup>

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
| Total (1:03)          |               | 0.00        |

t 0 Birr/m<sup>2</sup>

:03)

put: \_\_\_\_\_

Birr/m<sup>2</sup>

Birr/m<sup>2</sup>

Birr/m<sup>2</sup>

Birr/m<sup>2</sup>

**ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS**

PROJECT: :G+1 DUPLEX

**ROOFING WORKS**

LABOUR HOURLY OUTPUT: \_

WORK ITEM 3.04

Flashing Development Size 19 cm.

EQUIPEMENT:

RESULT: \_\_\_\_\_ 183.09

TOTAL QUANTITY OF WORK ITEM: 1 m

| Material Cost (1:01)    |      |       |      |               | Labour (1:02)   |     |       |                        |             |                   |
|-------------------------|------|-------|------|---------------|-----------------|-----|-------|------------------------|-------------|-------------------|
| Type of Material        | Unit | Qty * | Rate | Cost per Unit | Labour by Grade | No. | UF    | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
| G28 Sheet Metal Flasing |      |       |      | 0             | Foreman         | 1   | 0.167 | 37.5                   | 6.26        |                   |
| Dev. Size 19 cm.        | ml.  | 1.05  | 110  | 115.5         | Carpenter       | 1   | 1     | 37.5                   | 37.50       |                   |
| Nails                   | kg   | 0.03  | 65   | 1.95          | Helper          | 1   | 1     | 18.75                  | 18.75       |                   |
|                         |      |       |      | 0             | D/L             | 1   | 1     | 18.75                  | 18.75       |                   |
|                         |      |       |      | 0             |                 |     |       |                        | 0.00        |                   |
|                         |      |       |      | 0             |                 |     |       |                        | 0.00        |                   |
|                         |      |       |      | 0             |                 |     |       |                        | 0.00        |                   |
|                         |      |       |      |               |                 |     |       |                        | 0.00        |                   |
| Total (1:-01)           |      |       |      | 117.45        | Total (1:02)    |     |       |                        | 81.26       |                   |

A Materials Unit Cost 117.45 Birr/m

B= Manpower Unit Cost \_ 29.02 Birr/m

C=Equipment Unit Cos

Total of (1:02)

Total of (1

Hourly Output 7.73/2.8 = 2.75

Hourly out

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

146.47

Over Head :

10% 14.65

P Profit Cost:

15% 21.97

Total Unit Cost :

183.09

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

### ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: G+1 DUPLEX **ROOFING WORKS**

WORK ITEM: 3.03

Down Pipe Development Size 33 cm.

LABOUR HOURLY OUTPUT:

EQUIPMENT:

RESULT: 24.97

TOTAL QUANTITY OF WORK ITEM: 1 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 | Type of Equipment |
| 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              |
| <b>Total (1:-01)</b>  |      |       |      | 17.70         | <b>Total (1:02)</b> |     |       | 7.73                   |                   |

A= Materials Unit Cost 17.7 Birr/m B= Manpower Unit Cost 2.28 Birr/m C=Equipment Unit Cost

Total of (1:02)

Hourly Output: 7.73/3.4

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

Over head cost : \_

P Profit Cost: \_

T Total Unit Cost :

Total of (1

Hourly out

19.98

2.00

3.00

24.97

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

### ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: G+1 DUPLEX **ROOFING WORKS**

WORK ITEM: (3.06) Gutter Development Size 40 cm.

LABOUR HOURLY OUTPUT:

EQUIPEMENT:

RESULT: 318.44

TOTAL QANTITY OF WORK ITEM: 1 m

| Material Cost (1:01)   |      |       |      |               | Labour (1:02)   |     |       |                        |             |                   |
|------------------------|------|-------|------|---------------|-----------------|-----|-------|------------------------|-------------|-------------------|
| Type of Material       | Unit | Qty * | Rate | Cost per Unit | Labour by Grade | No. | UF    | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
| G28 Sheet Metal Gutter |      |       |      | 0             | Foreman         | 1   | 0.167 | 37.5                   | 6.26        |                   |
| Dev. Size40 cm.        | m    | 1.05  | 210  | 220.5         | Carpenter       | 1   | 1     | 37.5                   | 37.50       |                   |
| Staffa For Gutter      | pcs. | 2     | 1.5  | 3             | Helper          | 1   | 1     | 18.75                  | 18.75       |                   |
|                        |      |       |      | 0             | D/L             | 1   | 1     | 18.75                  | 18.75       |                   |
|                        |      |       |      | 0             |                 |     |       |                        | 0.00        |                   |
|                        |      |       |      | 0             |                 |     |       |                        | 0.00        |                   |
|                        |      |       |      | 0             |                 |     |       |                        | 0.00        |                   |
|                        |      |       |      | 0             |                 |     |       |                        | 0.00        |                   |
| Total (1:-01)          |      |       |      | 223.50        | Total (1:02)    |     |       |                        | 81.26       |                   |

A= Materials Unit Cost 223.5 birr/m.

B= Manpower Unit Cost

31.25 Birr/m

C=Equipment Unit Cost

Total of (1:02)

Total of (1

Hourly Output: 7.73/2.6

Hourly out

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

254.75

Over head cost :

10% 25.48

P Profit Cost: \_

15% 38.21

T Total Unit Cost

318.44

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

### ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: G+1 DUPLEX **ROOFING WORKS**

WORK ITEM: ( 3.05) 20 cm. Wide Kerrero Facia Board

LABOUR HOURLY OUTPUT:

EQUIPEMENT:

RESULT: 271.19

TOTAL QANTITY OF WORK ITEM: 1 ml.

| Material Cost (1:01)   |      |       |      |               | Labour (1:02)   |     |    |                        |             |                   |
|------------------------|------|-------|------|---------------|-----------------|-----|----|------------------------|-------------|-------------------|
|                        |      |       |      |               |                 |     |    |                        |             |                   |
| Type of Material       | Unit | Qty * | Rate | Cost per Unit | Labour by Grade | No. | UF | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
| 20 cm. Wide Faciaboard | ml.  | 1.1   | 150  | 165.00        | Carpenter1      | 1   | 1  | 37.5                   | 37.50       |                   |
| Nails                  | kg.  | 0.03  | 65   | 1.95          | D/L             | 2   | 1  | 18.75                  | 37.50       |                   |
|                        |      |       |      | 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        |                   |
| Total (1:01)           |      |       |      | 166.95        | Total (1:02)    |     |    |                        | 75.00       |                   |

A= Materials Unit Cost 166.95 birr/m.

B= Manpower Unit Cost 50.00 Birr/m

C= Equipment

Total of (1:02)

Hourly Output: 10.88/7

Total of (1

Hourly out

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

216.95

Over head cost : \_

10% 21.70

P Profit Cost:

15% 32.54

T Total Unit Cost :

271.19

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

- 5 -

### ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: G+1 DUPLEX

**ROOFING WORKS**

LABOUR HOURLY OUTPUT:

WORK ITEM: ( 4.01)

10 cm. dia. Upper & Lower Chords Eucaliptus Wood.

EQUIPEMENT:

TOTAL QANTITY OF WORK ITEM: 17.89 ml. = 1 Trusse RESULT: 33.53

| Material Cost (1:01) |      |       |      |               | Labour (1:02)          |     |      |                        |             |                   |
|----------------------|------|-------|------|---------------|------------------------|-----|------|------------------------|-------------|-------------------|
| Type of Material     | Unit | Qty * | Rate | Cost per Unit | Labour by Grade        | No. | UF   | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
| O 10 cm. Upper Chord | ml.  | 9.22  | 7.5  | 69.15         | Foreman                | 1   | 0.25 | 37.5                   | 9.375       |                   |
| O 10 cm. Lower Chord | "    | 8.67  | 7.5  | 65.03         | Carpenter              | 2   | 1    | 37.5                   | 37.5        |                   |
| 10 - 12 cm. Nails    | kg.  | 1.11  | 65   | 72.15         | Helper                 | 2   | 1    | 18.75                  | 37.5        |                   |
| Fixing Bands         | "    | 1.78  | 55   | 97.90         |                        |     |      |                        | 0           |                   |
|                      |      |       |      | 0.00          |                        |     |      |                        | 0           |                   |
|                      |      |       |      | 0.00          |                        |     |      |                        | 0           |                   |
|                      |      |       |      | 0.00          |                        |     |      |                        | 0           |                   |
|                      |      |       |      | 0.00          |                        |     |      |                        | 0           |                   |
| <b>Total (1:-01)</b> |      |       |      | 304.23        | <b>Total ( 1: 02 )</b> |     |      |                        | 84.38       |                   |

A Materials Unit Cost 17.01 Birr/ml.      B= Manpower Unit Cost 9.82 Birr/ml.      C= Equipment  
Total of (1:02)      Total of (1  
 Hourly Output: \_\_\_\_\_      Hourly out  
 Direct Cost of Work Item = A+B+C = 26.83  
 Over head cost : 10% 2.68  
 P Profit Cost: 15% 4.02  
 T Total Unit Cost : 33.53

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

PROJECT: **ROOFING WORKS**

WORK ITEM: ( 3.02) G30 C I S Roofing ( Without Truss & Purlin )

TOTAL QANTITY OF WORK ITEM: 108 M<sup>2</sup>

LABOUR HOURLY OUTPUT:

EQUIPEMENT:

RESULT: 243.10

| Material Cost (1:01) |                |        |      |               | Labour (1:02)          |     |       |                        |             |                   |
|----------------------|----------------|--------|------|---------------|------------------------|-----|-------|------------------------|-------------|-------------------|
| Type of Material     | Unit           | Qty *  | Rate | Cost per Unit | Labour by Grade        | No. | UF    | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
| G32 CIS              | m <sup>2</sup> | 108.00 | 147  | 15876.00      | Foreman                | 1   | 0.167 | 37.5                   | 6.2625      |                   |
| Roofing nails.       | kg.            | 12     | 80   | 960.00        | Carpentr1              | 1   | 1     | 37.5                   | 37.5        |                   |
| Plastic Washer.      | pkt.           | 5      | 7    | 35.00         | Helper                 | 1   | 1     | 18.75                  | 18.75       |                   |
| Ridge cover.         | ml.            | 13     | 125  | 1625.00       | D/L                    | 1   | 1     | 18.75                  | 18.75       |                   |
|                      |                |        |      | 0.00          |                        |     |       |                        | 0           |                   |
|                      |                |        |      | 0.00          |                        |     |       |                        | 0           |                   |
|                      |                |        |      | 0.00          |                        |     |       |                        | 0           |                   |
|                      |                |        |      | 0.00          |                        |     |       |                        | 0           |                   |
|                      |                |        |      | 0.00          |                        |     |       |                        | 0           |                   |
| <b>Total (1:-01)</b> |                |        |      | 18496.00      | <b>Total ( 1: 02 )</b> |     |       |                        | 81.26       |                   |

A Materials Unit Cost 171.26 Birr/m<sup>2</sup>

B= Manpower Unit Cost 23.217857 Birr/m<sup>2</sup>

C= Equipme

Total of (1:02)

Total of (1

Hourly Output: \_\_\_\_\_

Hourly out

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

194.48

Over head cost :

10% 19.45

P Profit Cost:

15% 29.17

T Total Unit Cost :

243.10

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

- 7 -

### ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: G+1 DUPLEX **ROOFING WORKS**

WORK ITEM: (4.02 ) 6 cm. dia. Vertical & Diagonal Members of a Truss

ml. = 1

LABOUR HOURLY OUTPUT:

EQUIPEMENT:

RESULT: 45.98

TOTAL QUANTITY OF WORK ITEM: 8.78 Trusse

| Material Cost (1:01)    |      |       |      |               | Labour (1:02)          |     |      |                        |             |                   |
|-------------------------|------|-------|------|---------------|------------------------|-----|------|------------------------|-------------|-------------------|
| Type of Material        | Unit | Qty * | Rate | Cost per Unit | Labour by Grade        | No. | UF   | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
| O 6 cm. Eucaliptus Wood | ml.  | 8.78  | 25   | 219.50        | Foreman                | 1   | 0.25 | 37.5                   | 9.375       |                   |
| 6 - 8 cm. Nails         | kg.  | 0.56  | 65   | 36.40         | Carpenter              | 1   | 1    | 37.5                   | 37.5        |                   |
|                         |      |       |      | 0.00          | Helper                 | 1   | 1    | 18.75                  | 18.75       |                   |
|                         |      |       |      | 0.00          |                        |     |      |                        | 0           |                   |
|                         |      |       |      | 0.00          |                        |     |      |                        | 0           |                   |
|                         |      |       |      | 0.00          |                        |     |      |                        | 0           |                   |
|                         |      |       |      | 0.00          |                        |     |      |                        | 0           |                   |
|                         |      |       |      | 0.00          |                        |     |      |                        | 0           |                   |
| <b>Total (1:-01)</b>    |      |       |      | 255.90        | <b>Total ( 1: 02 )</b> |     |      |                        | 65.63       |                   |

A Materials Unit Cost 29.15 Birr/ml.

B= Manpower Unit Cost 7.64 Birr/ml.

C= Equipme

Total of (1:02)

Hourly Output: \_\_\_\_\_

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

Over head cost :

P Profit Cost:

T Total Unit Cost :

Total of (1

Hourly out

36.79

3.68

5.52

45.98

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

- 8 -

### ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: G+1 DUPLEX **ROOFING WORKS**

WORK ITEM: ( 4.03 )

5 X 7 cm. Tid Wood Roof Purlin

14.11 ml. = 1 Trusse

LABOUR HOURLY OUTPUT:

EQUIPEMENT:

RESULT:

94.74

TOTAL QANTITY OF WORK ITEM:

| Material Cost (1:01) |      |       |       |               | Labour (1:02)          |     |       |                        |             |                   |
|----------------------|------|-------|-------|---------------|------------------------|-----|-------|------------------------|-------------|-------------------|
| Type of Material     | Unit | Qty * | Rate  | Cost per Unit | Labour by Grade        | No. | UF    | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
| 5 X 7 cm. Tid Purlin | ml.  | 14.11 | 56.25 | 793.69        | Foreman                | 1   | 0.167 | 37.5                   | 6.2625      |                   |
| 6 - 8 cm. Nails      | kg.  | 0.56  | 65    | 36.40         | Carpenter2             | 1   | 1     | 37.5                   | 37.5        |                   |
|                      |      |       |       | 0.00          | Helper                 | 1   | 1     | 18.75                  | 18.75       |                   |
|                      |      |       |       | 0.00          | D/L                    | 3   | 1     | 18.75                  | 56.25       |                   |
|                      |      |       |       | 0.00          |                        |     |       |                        | 0           |                   |
|                      |      |       |       | 0.00          |                        |     |       |                        | 0           |                   |
|                      |      |       |       | 0.00          |                        |     |       |                        | 0           |                   |
|                      |      |       |       | 0.00          |                        |     |       |                        | 0           |                   |
|                      |      |       |       | 0.00          |                        |     |       |                        | 0           |                   |
|                      |      |       |       | 0.00          |                        |     |       |                        | 0           |                   |
| <b>Total (1:-01)</b> |      |       |       | 830.09        | <b>Total ( 1: 02 )</b> |     |       |                        | 118.76      |                   |

|                       |                |                                    |                |                    |
|-----------------------|----------------|------------------------------------|----------------|--------------------|
| A Materials Unit Cost | 58.83 Birr/ml. | B= Manpower Unit Cost              | 16.97 Birr/ml. | C= Equipme         |
|                       |                | <u>Total of (1:02)</u>             |                | <u>Total of (1</u> |
|                       |                | Hourly Output: _____               |                | Hourly out         |
|                       |                | Direct Cost of Work Item = A+B+C = |                | 75.80              |
|                       |                | Over head cost :                   |                | 10% 7.58           |
|                       |                | P Profit Cost:                     |                | 15% 11.37          |
|                       |                | T Total Unit Cost :                |                | 94.74              |

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

2.8 m/hr.

Birr/m.

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
| Total (1:03)          |               | 0.00        |

t 0 Birr/m

:03)

put: \_\_\_\_\_

- Birr/m.
- Birr/m.
- Birr/m.
- Birr/m.

3.4 m/hr

Birr/m.

|              |               |             |
|--------------|---------------|-------------|
| 1:03)        |               |             |
| No.          | Hourly Rental | Hourly Cost |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
| Total (1:03) |               | 0.00        |

t 0 Birr/m

:03)

put: \_\_\_\_\_

Birr/m.

Birr/m.

Birr/m.

Birr/m.

2.6 m/hr

Birr/m.

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
| Total (1:03)          |               | 0.00        |

t 0 Birr/m

:03)

put: \_\_\_\_\_

Birr/m.

Birr/m.

Birr/m.

Birr/m.

1.5 ml./hr.

Birr/m.

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
| Total (1:03)          |               | 0.00        |

ent Unit Cost                      0 Birr/m

:03)

put: \_\_\_\_\_

Birr/m.

Birr/m.

Birr/m.

Birr/m.

8.59 ml./hr.

Birr/ml.

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
| Total (1:03)          |               | 0.00        |

ent Unit Cost

:03)

put: \_\_\_\_\_

Birr/ml.

"

"

Birr/ml.

3.5 m²/hr.

Birr/m²

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
| Total (1:03)          |               | 0.00        |

ent Unit Cost 0

:03)

put: \_\_\_\_\_

Birr/m²

"

"

Birr/m²

8.59 ml./hr.

Birr/ml.

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
|                       |               | 0.00        |
| <b>Total (1:03)</b>   |               | 0.00        |

ent Unit Cost  
:03)  
put: \_\_\_\_\_  
Birr/ml.  
"  
"  
Birr/ml.

7 ml./hr.

Birr/ml.

Equipment Cost (1:03)

| No.                 | 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        |
| <b>Total (1:03)</b> |               | 0.00        |

ent Unit Cost

:03)

put: \_\_\_\_\_

Birr/ml.

"

"

Birr/ml.

# **ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS**

PROJECT: G+1 MULTI PURPOSE **WALLING**

LABOUR HOURLY OUTPUT:

WORK ITEM: (2.01 ) 20 cm. thick HCB Wall Both Sides Left For Plastering.

EQUIPEMENT:

RESULT: 378.19

TOTAL QANTITY OF WORK ITEM: 1 m<sup>2</sup>

| Material Cost (1:01) |                |       |      |               | Labour (1:02)         |     |    |                        |             |                   |
|----------------------|----------------|-------|------|---------------|-----------------------|-----|----|------------------------|-------------|-------------------|
| Type of Material     | Unit           | Qty * | Rate | Cost per Unit | Labour by Grade       | No. | UF | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
| 15 cm.Thick HCB      | Pcs.           | 13    | 10   | 130           | Foreman               | 1   | 1  | 37.5                   | 37.50       |                   |
| Cement               | Qt.            | 0.08  | 385  | 30.8          | Mason                 | 1   | 1  | 37.5                   | 37.5        |                   |
| Sand                 | m <sup>3</sup> | 0.002 | 562  | 1.124         | D/L                   | 2   | 1  | 18.75                  | 37.5        |                   |
| Water                | m <sup>3</sup> | 0.004 | 0.75 | 0.0030        |                       |     |    |                        | 0           |                   |
|                      |                |       |      | 0             |                       |     |    |                        | 0           |                   |
|                      |                |       |      | 0             |                       |     |    |                        | 0           |                   |
|                      |                |       |      | 0             |                       |     |    |                        | 0           |                   |
| <b>Total (1:-01)</b> |                |       |      | 161.93        | <b>Total ( 1:02 )</b> |     |    |                        | 112.50      | -                 |

A Materials Unit Cost

161.93 Birr/m<sup>2</sup>

B= Manpower Unit Cost

140.63 Birr/m<sup>2</sup>

C=Equipmer

Total of (1:02)

Total of (1

Hourly Output: \_\_\_\_\_

Hourly out

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

302.55

Over head cost :

10%

30.26

Profit Cost:

15%

45.38

Total Unit Cost :

378.19

Remark : Mortar Quantity ( 1:3 ) With 15 % Wastage = 0.0138 m<sup>3</sup>/m<sup>2</sup>

UF: UTILIZATION FACTOR

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

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

### ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: G+1 MULTI PURPOSE **WALLING**

LABOUR HOURLY OUTPUT:

WORK ITEM: ( 2.02 ) 15 cm. thick HCB Wall Both Sides Left For Plastering.

EQUIPEMENT:

RESULT: 361.93

TOTAL QANTITY OF WORK ITEM: 1 m<sup>2</sup>

| Material Cost (1:01) |                |       |      |               | Labour (1:02)         |     |    |                        |             |                   |
|----------------------|----------------|-------|------|---------------|-----------------------|-----|----|------------------------|-------------|-------------------|
| Type of Material     | Unit           | Qty * | Rate | Cost per Unit | Labour by Grade       | No. | UF | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
| 15 cm. Thick HCB     | Pcs.           | 13    | 9    | 117           | Foreman               | 1   | 1  | 37.5                   | 37.50       |                   |
| Cement               | Qt.            | 0.061 | 385  | 23.485        | Mason                 | 1   | 1  | 37.5                   | 37.5        |                   |
| Sand                 | m <sup>3</sup> | 0.015 | 562  | 8.43          | D/L                   | 2   | 1  | 18.75                  | 37.5        |                   |
| Water                | m <sup>3</sup> | 0.004 | 0.75 | 0.0030        |                       |     |    |                        | 0           |                   |
|                      |                |       |      | 0             |                       |     |    |                        | 0           |                   |
|                      |                |       |      | 0             |                       |     |    |                        | 0           |                   |
|                      |                |       |      | 0             |                       |     |    |                        | 0           |                   |
| <b>Total (1:-01)</b> |                |       |      | 148.92        | <b>Total ( 1:02 )</b> |     |    |                        | 112.50      | -                 |

A Materials Unit Cost 148.92 Birr/m<sup>2</sup>

B= Manpower Unit Cost 140.63 Birr/m<sup>2</sup>

C=Equipmer

Total of (1:02)

Total of (1

Hourly Output: \_\_\_\_\_

Hourly out

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

289.54

Over head cost :

10% 28.95

Profit Cost:

15% 43.43

Total Unit Cost :

361.93

Remark : Mortar Quantity ( 1:3 ) With 15 % Wastage = 0.0138 m<sup>3</sup>/m<sup>2</sup>

UF: UTILIZATION FACTOR

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

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

0.8 m²/hr.

Birr/m²

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
| Total (1:03)          |               | 0.00        |

nt Unit Cost                      0 Birr/m²

:03)

put: \_\_\_\_\_

Birr/m²

"

"

Birr/m²

0.8 m²/hr.

Birr/m²

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
| Total (1:03)          |               | 0.00        |

nt Unit Cost                      0 Birr/m²

:03)

put: \_\_\_\_\_

Birr/m²

"

"

Birr/m²

# ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: **CARPENTRY & JOINERY**

LABOUR HOURLY OUTPUT:

1.13

WORK ITEM : (4 ) Framed & Panelled solid Doors & Windows .

EQUIPEMENT:

RESULT

**1161.22** Birr/m<sup>2</sup>

TOTAL QANTITY OF WORK ITEM: 1 pcs. 1.89 m<sup>2</sup>

| 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. |
| <b>Making &amp; Fixing</b> |                |       |          |               |                     |     |       |                        |             | Compinanto            | 2   |
| Tid wood frame (external)  | m <sup>3</sup> | 0.051 | 4500.00  | 229.50        | Carpenter II        | 1   | 1     | 37.5                   | 37.50       | Vice                  | 1   |
| Tid wood frame (internal)  | m <sup>3</sup> | 0.03  | 45000.00 | 1350.00       | Helper              | 1   | 1     | 37.5                   | 37.50       |                       |     |
| T & G Tidwood panel.       | m <sup>2</sup> | 1.26  | 650.00   | 819           | Foreman             | 1   | 0.167 | 37.5                   | 6.26        |                       |     |
| Door list.                 | ml.            | 5.1   | 36.00    | 183.6         | Carpenter I         | 1   | 1     | 37.5                   | 37.50       |                       |     |
| Cylindrical Lock(Hungary)  | Pcs.           | 1     | 150.00   | 150           | Helper              | 1   | 1     | 18.75                  | 18.75       |                       |     |
| Hinges                     | "              | 3     | 30.00    | 90            |                     |     |       |                        | 0.00        |                       |     |
| Screw                      | "              | 10    | 2.00     | 20            |                     |     |       |                        | 0.00        |                       |     |
| Colla                      | lit.           | 0.4   | 140.00   | 56            |                     |     |       |                        | 0.00        |                       |     |
| Nails of diff. Sizes.      | kg.            | 0.2   | 65.00    | 13            |                     |     |       |                        | 0.00        |                       |     |
| <b>Total (1:-01)</b>       |                |       |          | 2911.10       | <b>Total (1:02)</b> |     |       |                        | 137.51      | <b>Total (1:03)</b>   |     |

A= Material unit cost **1540.2646** Birr/m<sup>2</sup>.

B=Manpower Unit Cost

**121.69** Birr/m<sup>2</sup>

C=Equipment Unit Cost

Total of (1:02)

Total of (1:03)

Hourly Output

Hourly output:

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

**1755.76** Birr/pcs.

Overhead Cost :

10%

175.58

"

Profit Cost:

15%

263.36

"

Total Unit Cost :

**2194.70** Birr/pcs.

UF: UTILIZATION FACTOR

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

pcs./hr.

| Hourly Rental | Hourly Cost |
|---------------|-------------|
| 40.00         | 80.00       |
| 26.00         | 26.00       |
|               | 0.00        |
|               | 0.00        |
|               | 0.00        |
|               | 0.00        |
|               | 0.00        |
|               | 0.00        |
|               | 0.00        |
|               | 0.00        |
|               | 0.00        |
|               | 106.00      |

93.81 Birr/m²

# **ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS**

PROJECT: G+1 MULTIPURPOSE **GLAZING WORKS**  
 WORK ITEM: (8.01) Fixing 4mm clear glass.

LABOUR HOURLY OUTPUT:  
 EQUIPEMENT:

RESULT: 567.29

TOTAL QANTITY OF WORK

ITEM: 1 m<sup>2</sup>

| Material Cost (1:01) |      |       |      |               | Labour Cost (1:02) |     |       |                        |             |                   |
|----------------------|------|-------|------|---------------|--------------------|-----|-------|------------------------|-------------|-------------------|
| Type of Material     | Unit | Qty * | Rate | Cost per Unit | Labour by Grade    | No. | UF    | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
| 4 mm. clear glass    | m²   | 1.1   | 365  | 401.5         | Foreman            | 1   | 0.167 | 37.5                   | 6.2625      |                   |
| Putty                | kg   | 0.4   | 30   | 12            | Glazer             | 1   | 1     | 37.5                   | 37.5        |                   |
|                      |      |       |      | 0             | DL                 | 1   | 1     | 18.75                  | 18.75       |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    |     |       |                        |             |                   |
|                      |      |       |      | 0             |                    | </  |       |                        |             |                   |

A Materials Unit Cost

413.5 Birr/m<sup>2</sup>

B= Manpower Unit Cost

40.33 Birr/m<sup>2</sup>

C= Equipme

Total of (1:02)

5.23

Total of (1

Hourly Output: \_\_\_\_\_

1.55

Hourly out

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

453.83

Over head cost :

10%

45.38

Profit Cost:

15%

68.07

Total Unit Cost : \_

567.29

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

### ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: G+1 MULTIPURPOSE **GLAZING WORKS**  
 WORK ITEM: \_ (8.02) Fixing 4 mm. Frosted glass

LABOUR HOURLY OUTPUT:

EQUIPEMENT:

RESULT: 710.66

TOTAL QUANTITY OF WORK

ITEM: 1 m<sup>2</sup>

| Material Cost (1:01) |      |       |      |               | Labour Cost (1:02) |     |       |                        |             |                   |
|----------------------|------|-------|------|---------------|--------------------|-----|-------|------------------------|-------------|-------------------|
| Type of Material     | Unit | Qty * | Rate | Cost per Unit | Labour by Grade    | No. | UF    | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
| 4mm frosted glass    | m²   | 1.1   | 470  | 517           | Foreman            | 1   | 0.167 | 37.5                   | 6.2625      |                   |
| Putty                | kg   | 0.4   | 30   | 12            | Glazer             | 1   | 1     | 37.5                   | 37.5        |                   |
|                      |      |       |      | 0             | D/L                | 1   | 1     | 17.5                   | 17.5        |                   |
|                      |      |       |      | 0             |                    |     |       |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |       |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |       |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |       |                        | 0           |                   |
|                      |      |       |      | 0             |                    |     |       |                        | 0           |                   |
|                      |      |       |      | 529           | Total (1:02)       |     |       |                        | 61.2625     |                   |

A Materials Unit Cost

529 Birr/m<sup>2</sup>

B= Manpower Unit Cost

39.52 Birr/m<sup>2</sup>

C= Equipme

Total of (1:02)

5.23

Total of (1

Hourly Output: \_\_\_\_\_

1.55

Hourly out

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

568.52

Over head cost : \_

10%

56.85

Profit Cost:

15%

85.28

Total Unit Cost : \_

710.66

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

**ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS**

PROJECT: G+1 MULTIPURPOSE **FINISHING WORKS.**

WORK ITEM: (6.1) 3 Coats of cement plastering ( 1:3 )

LABOUR HOURLY OUTPUT:

EQUIPEMENT:

RESULT : 354.83

TOTAL QANTITY OF WORK

ITEM: 1 m<sup>2</sup>

| Material Cost (1:01) |                |        |      |               | Labour Cost (1:02)  |     |       |                        |             |                   |
|----------------------|----------------|--------|------|---------------|---------------------|-----|-------|------------------------|-------------|-------------------|
| Type of Material     | Unit           | Qty *  | Rate | Cost per Unit | Labour by Grade     | No. | UF    | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
| cement               | qt.            | 0.14   | 385  | 53.9          | Foreman             | 1   | 0.167 | 37.5                   | 6.26        |                   |
| sand                 | m <sup>3</sup> | 0.036  | 464  | 16.704        | Plasterer           | 1   | 1     | 37.5                   | 37.5        |                   |
| water                | m <sup>3</sup> | 0.0065 | 10   | 0.065         | Chilser             | 1   | 1     | 31.25                  | 31.25       |                   |
|                      |                |        |      | 0             | D/L                 | 2   | 1     | 18.75                  | 37.5        |                   |
|                      |                |        |      | 0             |                     |     |       |                        | 0           |                   |
|                      |                |        |      | 0             |                     |     |       |                        | 0           |                   |
|                      |                |        |      | 0             |                     |     |       |                        | 0           |                   |
|                      |                |        |      | 0             |                     |     |       |                        | 0           |                   |
|                      |                |        |      | 0             |                     |     |       |                        | 0           |                   |
| <b>Total (1:01)</b>  |                |        |      | 70.67         | <b>Total (1:02)</b> |     |       |                        | 112.51      | -                 |

A= Materials Unit C 70.669 Birr/m<sup>2</sup>

B= Manpower Unit Cost

225.03 Birr/m<sup>2</sup>

C= Equipme

Total of (1:02)

Hourly Output: \_\_\_\_\_

Total of (1

Hourly out

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

295.69

Over head cost : \_

10%

29.57

Profit Cost:

10%

29.57

Total Unit Cost : \_

354.83

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

### ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: G+1 MULTIPURPOSE **FINISHIN**

WORK ITEM: (6.1d) 2 Coats of cement plastering to soffit ceiling.

LABOUR HOURLY OUTPUT:

EQUIPEMENT:

RESULT : 222.29

TOTAL QUANTITY OF WORK

ITEM: 1 m<sup>2</sup>

| Material Cost (1:01) |                |        |      |               | Labour Cost (1:02)  |     |       |                        |             |                   |
|----------------------|----------------|--------|------|---------------|---------------------|-----|-------|------------------------|-------------|-------------------|
| Type of Material     | Unit           | Qty *  | Rate | Cost per Unit | Labour by Grade     | No. | UF    | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
| cement               | qt.            | 0.076  | 385  | 29.26         | Foreman             | 1   | 0.167 | 37.5                   | 6.26        |                   |
| sand                 | m <sup>3</sup> | 0.0186 | 464  | 8.6304        | Plasterer           | 1   | 1     | 37.5                   | 37.5        |                   |
| water                | m <sup>3</sup> | 0.0007 | 0.75 | 0.001         | Chilser             | 1   | 1     | 31.25                  | 31.25       |                   |
|                      |                |        |      | 0             | D/L                 | 1   | 1     | 18.75                  | 18.75       |                   |
|                      |                |        |      | 0             |                     |     |       |                        | 0           |                   |
|                      |                |        |      | 0             |                     |     |       |                        | 0           |                   |
|                      |                |        |      | 0             |                     |     |       |                        | 0           |                   |
|                      |                |        |      | 0             |                     |     |       |                        | 0           |                   |
| <b>Total (1:01)</b>  |                |        |      | 37.89         | <b>Total (1:02)</b> |     |       |                        | 93.76       | -                 |

A Materials Unit Cost

37.89 Birr/m<sup>2</sup>

B= Manpower Unit Cost

139.94 Birr/m<sup>2</sup>

C= Equipme

Total of (1:02)

Total of (1

Hourly Output: \_\_\_\_\_

Hourly out

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

177.83

Over head cost : \_

10% 17.78

Profit Cost:

15% 26.68

Total Unit Cost : \_

222.29

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

CT: G+1 MULTIPURPOSE **FINISHING WC**

WORK ITEM : 6.01 2 Coats of cement plastering to exposed beams and columns.

LABOUR HOURLY OUTPUT:

EQUIPEMENT:

RESULT : 276.42

TOTAL QANTITY OF WORK

ITEM: 1 m<sup>2</sup>

| Material Cost (1:01) |                |        |      |               | Labour Cost (1:02)  |     |       |                        |             |                   |
|----------------------|----------------|--------|------|---------------|---------------------|-----|-------|------------------------|-------------|-------------------|
| Type of Material     | Unit           | Qty *  | Rate | Cost per Unit | Labour by Grade     | No. | UF    | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
| cement               | qt.            | 0.097  | 385  | 37.345        | Foreman             | 1   | 0.167 | 37.5                   | 6.26        |                   |
| sand                 | m <sup>3</sup> | 0.024  | 464  | 11.136        | Plasterer           | 1   | 1     | 37.5                   | 37.5        |                   |
| water                | m <sup>3</sup> | 0.0045 | 0.75 | 0.003         | Chilser             | 1   | 1     | 31.25                  | 31.25       |                   |
|                      |                |        |      | 0             | D/L                 | 1   | 1     | 18.75                  | 18.75       |                   |
|                      |                |        |      | 0             |                     |     |       |                        | 0           |                   |
|                      |                |        |      | 0             |                     |     |       |                        | 0           |                   |
|                      |                |        |      | 0             |                     |     |       |                        | 0           |                   |
|                      |                |        |      | 0             |                     |     |       |                        | 0           |                   |
| <b>Total (1:01)</b>  |                |        |      | 48.48         | <b>Total (1:02)</b> |     |       |                        | 93.76       | -                 |

A Materials Unit Cost 48.48 Birr/m<sup>2</sup>

B= Manpower Unit Cost

156.27 Birr/m<sup>2</sup>

C= Equipme

Total of (1:02)

Total of (1

Hourly Output: \_\_\_\_\_

Hourly out

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

204.76

Over head cost : \_

10%

20.48

Profit Cost:

25%

51.19

Total Unit Cost : \_

276.42

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: G+1 MULTIPURPOSE **FINISHING WORKS.**

LABOUR HOURLY OUTPUT:

WORK ITEM: (6.06) 1 coat (final coat) gypsum plastering .

EQUIPEMENT:

RESULT : 53.28

TOTAL QANTITY OF WORK

ITEM: 1 m<sup>2</sup>

| Material Cost (1:01) |                |       |      |               | Labour Cost (1:02)  |     |      |                        |             |                   |
|----------------------|----------------|-------|------|---------------|---------------------|-----|------|------------------------|-------------|-------------------|
| Type of Material     | Unit           | Qty * | Rate | Cost per Unit | Labour by Grade     | No. | UF   | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
| gypsum               | qt.            | 0.048 | 500  | 24            | Foreman             | 1   | 0.25 | 5                      | 1.25        | Tools             |
| sand                 | m <sup>3</sup> | 0.012 | 464  | 5.568         | Plasterer           | 1   | 1    | 25                     | 25          |                   |
| water                | m <sup>3</sup> | 0.002 | 10   | 0.020         | helper              | 1   | 1    | 1.9                    | 1.9         |                   |
|                      |                |       |      | 0             |                     |     |      |                        | 0           |                   |
|                      |                |       |      | 0             |                     |     |      |                        | 0           |                   |
|                      |                |       |      | 0             |                     |     |      |                        | 0           |                   |
|                      |                |       |      | 0             |                     |     |      |                        | 0           |                   |
| <b>Total (1:01)</b>  |                |       |      | 29.59         | <b>Total (1:02)</b> |     |      |                        | 28.15       |                   |

A Materials Unit Cost 29.59 Birr/m<sup>2</sup>

B= Manpower Unit Cost

11.26 Birr/m<sup>2</sup>

C= Equipme

Total of (1:02)

Hourly Output: \_\_\_\_\_

Total of (1

Hourly out

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

42.62

Over head cost : \_

10% 4.26

Profit Cost:

15% 6.39

Total Unit Cost : \_

53.28

Remark 3.Coats of rendering ( 3+4 )

53.28

UF: UTILIZATION FACTOR

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

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

7

### ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: G+1 MULTIPURPOSE **FINISHING WORKS.**

LABOUR HOURLY OUTPUT:

WORK ITEM: (6.01) 1 coat (final coat) cement rendering.

EQUIPEMENT:

RESULT : 45.12

TOTAL QANTITY OF WORK

ITEM: 1 m<sup>2</sup>

| Material Cost (1:01) |              |       |      |               | Labour Cost (1:02) |     |      |                        |             |                   |
|----------------------|--------------|-------|------|---------------|--------------------|-----|------|------------------------|-------------|-------------------|
| Type of Material     | Unit         | Qty * | Rate | Cost per Unit | Labour by Grade    | No. | UF   | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
| cement               | qt.          | 0.048 | 360  | 17.28         | Foreman            | 1   | 0.25 | 5                      | 1.25        | Tools             |
| sand                 | m³           | 0.012 | 480  | 5.76          | Plasterer          | 1   | 1    | 25                     | 25          |                   |
| water                | m³           | 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       |                   |

A Materials Unit Cost 23.06 Birr/m<sup>2</sup>

B= Manpower Unit Cost

11.26 Birr/m<sup>2</sup>

C= Equipme

Total of (1:02)

Total of (1

Hourly Output: \_\_\_\_\_

Hourly out

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

36.10

Over head cost : \_

10% 3.61

Profit Cost:

15% 5.41

Total Unit Cost : \_

45.12

Remark 3.Coats of rendering ( 3+4 )

321.54

UF: UTILIZATION FACTOR

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

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

- 8 -

### ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: G+1 MULTIPURPOSE **FINISHING WORKS.**

LABOUR HOURLY OUTPUT:

WORK ITEM: (3.01) 3cm. Thick cement screed flooring (1:3).

EQUIPEMENT:

TOTAL QANTITY OF WORK

RESULT : 177.12

ITEM: 1 m<sup>2</sup>

| Material Cost (1:01) |                |       |      |               | Labour Cost (1:02)  |     |       |                        |             |                   |
|----------------------|----------------|-------|------|---------------|---------------------|-----|-------|------------------------|-------------|-------------------|
| Type of Material     | Unit           | Qty * | Rate | Cost per Unit | Labour by Grade     | No. | UF    | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
| cement               | qt.            | 0.168 | 385  | 64.68         | Foreman             | 1   | 0.167 | 37.5                   | 6.26        |                   |
| sand                 | m <sup>3</sup> | 0.041 | 464  | 19.024        | Plasterer           | 2   | 1     | 37.5                   | 75          |                   |
| water                | m <sup>3</sup> | 0.01  | 0.75 | 0.008         | D/L                 | 2   | 1     | 18.75                  | 37.5        |                   |
| cement grout         | qt.            | 0.021 | 385  | 8.085         |                     |     |       |                        | 0           |                   |
|                      |                |       |      | 0             |                     |     |       |                        | 0           |                   |
|                      |                |       |      | 0             |                     |     |       |                        | 0           |                   |
|                      |                |       |      | 0             |                     |     |       |                        | 0           |                   |
| <b>Total (1:01)</b>  |                |       |      | 91.80         | <b>Total (1:02)</b> |     |       |                        | 118.76      | -                 |

A Materials Unit Cost 91.80 Birr/m<sup>2</sup>

B= Manpower Unit Cost

49.90 Birr/m<sup>2</sup>

C= Equipment

Total of (1:02)

Total of (1:02)

Hourly Output: \_\_\_\_\_

Hourly out

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

141.70

Over head cost : \_

10% 14.17

Profit Cost:

15% 21.25

Total Unit Cost : \_

177.12

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

- 9 -

### ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: G+1 MULTIPURPOSE **FINISHING WORKS.**  
 WORK ITEM: 5cm. Thick cement screed flooring (1:3).

LABOUR HOURLY OUTPUT:

EQUIPEMENT:

RESULT : 294.86

TOTAL QUANTITY OF WORK

ITEM: 1 m<sup>2</sup>

| Material Cost (1:01) |                |       |      |               | Labour Cost (1:02)  |     |       |                        |             |                   |
|----------------------|----------------|-------|------|---------------|---------------------|-----|-------|------------------------|-------------|-------------------|
| Type of Material     | Unit           | Qty * | Rate | Cost per Unit | Labour by Grade     | No. | UF    | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
| cement               | qt.            | 0.28  | 385  | 107.8         | Foreman             | 1   | 0.167 | 37.5                   | 6.26        |                   |
| sand                 | m <sup>3</sup> | 0.068 | 464  | 31.552        | Plasterer           | 2   | 1     | 37.5                   | 75          |                   |
| water                | m <sup>3</sup> | 0.01  | 0.75 | 0.008         | D/L                 | 2   | 1     | 18.75                  | 37.5        |                   |
| cement grout         | qt.            | 0.035 | 385  | 13.475        |                     |     |       |                        | 0           |                   |
|                      |                |       |      | 0             |                     |     |       |                        | 0           |                   |
|                      |                |       |      | 0             |                     |     |       |                        | 0           |                   |
|                      |                |       |      | 0             |                     |     |       |                        | 0           |                   |
|                      |                |       |      | 0             |                     |     |       |                        | 0           |                   |
|                      |                |       |      | 0             |                     |     |       |                        | 0           |                   |
| <b>Total (1:01)</b>  |                |       |      | 152.83        | <b>Total (1:02)</b> |     |       |                        | 118.76      | -                 |

A Materials Unit Cost 152.83 Birr/m<sup>2</sup>

B= Manpower Unit Cost

83.05 Birr/m<sup>2</sup>

C= Equipment

Total of (1:02)

Total of (1:02)

Hourly Output: \_\_\_\_\_

Hourly out

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

235.89

Over head cost : \_

10% 23.59

Profit Cost:

15% 35.38

Total Unit Cost : \_

294.86

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

- 10 -

### ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: G+1 MULTIPURPOSE **FINISHING WORKS.**

LABOUR HOURLY OUTPUT:

WORK ITEM: (6.10) 20 x 20cm. terrazzo tile flooring(1:3).

EQUIPEMENT:

TOTAL QANTITY OF WORK

RESULT :

541.24

ITEM: 1 m<sup>2</sup>

| Material Cost (1:01) |  |  |  |  | Labour Cost (1:02) |  |  |  |  |  |
|----------------------|--|--|--|--|--------------------|--|--|--|--|--|
|----------------------|--|--|--|--|--------------------|--|--|--|--|--|

| Type of Material          | Unit | Qty * | Rate | Cost per Unit | Labour by Grade     | No. | UF   | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
|---------------------------|------|-------|------|---------------|---------------------|-----|------|------------------------|-------------|-------------------|
| cement                    | qt.  | 0.168 | 385  | 64.68         | Foreman             | 1   | 0.25 | 5                      | 1.25        |                   |
| sand                      | m³   | 0.041 | 464  | 19.024        | mason ii            | 1   | 1    | 3.75                   | 3.75        |                   |
| water                     | m³   | 0.008 | 385  | 3.080         | D/L                 | 1   | 1    | 1.25                   | 1.25        |                   |
| cement grout              | qt.  | 0.014 | 385  | 5.39          | helper              | 1   | 1    | 1.9                    | 1.9         |                   |
| 20 x 20 cm. terrazzo tile | no   | 25.5  | 13   | 331.5         |                     |     |      |                        | 0           |                   |
| polish                    | lit  | 0.1   | 28   | 2.80          |                     |     |      |                        | 0           |                   |
|                           |      |       |      | 0             |                     |     |      |                        | 0           |                   |
|                           |      |       |      | 0             |                     |     |      |                        | 0           |                   |
| <b>Total (1:01)</b>       |      |       |      | 426.47        | <b>Total (1:02)</b> |     |      |                        | 8.15        | -                 |

A Materials Unit Cost 426.47 Birr/m²

B= Manpower Unit Cost

6.52 Birr/m²

C= Equipment

Total of (1:02)

Total of (1:02)

Hourly Output: \_\_\_\_\_

Hourly out

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

432.99

Over head cost : \_

10% 43.30

Profit Cost:

15% 64.95

Total Unit Cost : \_

541.24

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

- 11 -

### **ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS**

PROJECT: G+1 MULTIPURPOSE **FINISHING WORKS.**

LABOUR HOURLY OUTPUT:

WORK ITEM: (6.13) 2cm thick Harar marble flooring (1:3).

EQUIPEMENT:

RESULT : 1599.35

TOTAL QUANTITY OF WORK

ITEM: 1 m²

|                      |                    |  |
|----------------------|--------------------|--|
| Material Cost (1:01) | Labour Cost (1:02) |  |
|----------------------|--------------------|--|

| Type of Material         | Unit           | Qty * | Rate | Cost per Unit | Labour by Grade     | No. | UF | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
|--------------------------|----------------|-------|------|---------------|---------------------|-----|----|------------------------|-------------|-------------------|
| cement                   | qt.            | 0.097 | 385  | 37.345        | Foreman             | 1   | 1  | 37.5                   | 37.50       | grinder           |
| sand                     | m <sup>3</sup> | 0.024 | 464  | 11.136        | tiler               | 1   | 1  | 37.5                   | 37.5        |                   |
| water                    | m <sup>3</sup> | 0.005 | 0.75 | 0.004         | D/L                 | 1   | 1  | 18.75                  | 18.75       |                   |
| cement grout             | qt.            | 0.014 | 385  | 5.39          | helper              | 2   | 1  | 18.75                  | 37.5        |                   |
| 2 cm. thick harar marble | no             | 1.02  | 1050 | 1071          |                     |     |    |                        | 0           |                   |
| polish                   | lit            | 0.1   | 12   | 1.20          |                     |     |    |                        | 0           |                   |
|                          |                |       |      | 0             |                     |     |    |                        | 0           |                   |
|                          |                |       |      | 0             |                     |     |    |                        | 0           |                   |
|                          |                |       |      | 0             |                     |     |    |                        | 0           |                   |
| <b>Total (1:01)</b>      |                |       |      | 1126.07       | <b>Total (1:02)</b> |     |    |                        | 131.25      | -                 |

A Materials Unit Cost 1126.07 Birr/m<sup>2</sup>

B= Manpower Unit Cost

149.15 Birr/m<sup>2</sup>

C= Equipment

Total of (1:02)

Total of (1:02)

Hourly Output: \_\_\_\_\_

Hourly out

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

1279.48

Over head cost : \_

10% 127.95

Profit Cost:

15% 191.92

Total Unit Cost : \_

1599.35

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

12

PROJECT: G+1 MULTIPURPOSE **FINISHING WORKS.**

WORK ITEM: (6.09) Ceramic tile flooring (1:3).

LABOUR HOURLY OUTPUT:

EQUIPEMENT:

RESULT : 632.55

TOTAL QUANTITY OF WORK

ITEM: 1 m<sup>2</sup>

|                      |                    |  |
|----------------------|--------------------|--|
| Material Cost (1:01) | Labour Cost (1:02) |  |
|----------------------|--------------------|--|

| Type of Material       | Unit | Qty * | Rate | Cost per Unit | Labour by Grade     | No. | UF   | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
|------------------------|------|-------|------|---------------|---------------------|-----|------|------------------------|-------------|-------------------|
| cement                 | qt.  | 0.101 | 385  | 38.885        | Foreman             | 1   | 0.17 | 37.5                   | 6.38        |                   |
| sand                   | m³   | 0.025 | 464  | 11.6          | tiler               | 1   | 1    | 37.5                   | 37.5        |                   |
| water                  | m³   | 0.005 | 0.75 | 0.004         | D/L                 | 1   | 1    | 18.75                  | 18.75       |                   |
| cement grout           | qt.  | 0.014 | 385  | 5.39          | helper              | 2   | 1    | 18.75                  | 37.5        |                   |
| 7mm thick ceramic tile | m²   | 1.02  | 342  | 348.84        |                     |     |      |                        | 0           |                   |
| polish                 | lit  | 0.1   | 12   | 1.20          |                     |     |      |                        | 0           |                   |
|                        |      |       |      | 0             |                     |     |      |                        | 0           |                   |
|                        |      |       |      | 0             |                     |     |      |                        | 0           |                   |
|                        |      |       |      | 0             |                     |     |      |                        | 0           |                   |
| <b>Total (1:01)</b>    |      |       |      | 405.92        | <b>Total (1:02)</b> |     |      |                        | 100.13      | -                 |

A Materials Unit Cost 405.92 Birr/m²

B= Manpower Unit Cost

100.13 Birr/m²

C= Equipment

Total of (1:02)

Total of (1:02)

Hourly Output: \_\_\_\_\_

Hourly out

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

506.04

Over head cost : \_

10% 50.60

Profit Cost:

15% 75.91

Total Unit Cost : \_

632.55

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

- 13-

### **ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS**

PROJECT: G+1 MULTIPURPOSE **FINISHING WORKS.**

LABOUR HOURLY OUTPUT:

WORK ITEM: (6.13) 2mm. thick PVC flooring. (Ethiopia)

EQUIPEMENT:

RESULT : 620.61

TOTAL QUANTITY OF WORK

ITEM: 1 m²

|                      |                    |  |
|----------------------|--------------------|--|
| Material Cost (1:01) | Labour Cost (1:02) |  |
|----------------------|--------------------|--|

| Type of Material    | Unit | Qty * | Rate | Cost per Unit | Labour by Grade     | No. | UF   | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
|---------------------|------|-------|------|---------------|---------------------|-----|------|------------------------|-------------|-------------------|
| PVC tile            | m²   | 1.02  | 380  | 387.6         | Foreman             | 1   | 0.17 | 37.5                   | 6.38        |                   |
| adhesive glue       | gal  | 0.11  | 750  | 82.5          | tiler               | 1   | 1    | 37.5                   | 37.5        |                   |
| polish              | lit  | 0.1   | 28   | 2.80          | D/L                 | 2   | 1    | 18.75                  | 37.5        |                   |
|                     |      |       |      | 0             |                     |     |      |                        | 0           |                   |
|                     |      |       |      | 0             |                     |     |      |                        | 0           |                   |
|                     |      |       |      | 0             |                     |     |      |                        | 0           |                   |
|                     |      |       |      | 0             |                     |     |      |                        | 0           |                   |
| <b>Total (1:01)</b> |      |       |      | 472.90        | <b>Total (1:02)</b> |     |      |                        | 81.38       |                   |

|                       |                            |                                    |                           |                    |
|-----------------------|----------------------------|------------------------------------|---------------------------|--------------------|
| A Materials Unit Cost | 472.90 Birr/m <sup>2</sup> | B= Manpower Unit Cost              | 23.59 Birr/m <sup>2</sup> | C= Equipme         |
|                       |                            | <u>Total of (1:02)</u>             |                           | <u>Total of (1</u> |
|                       |                            | Hourly Output: _____               |                           | Hourly out         |
|                       |                            | Direct Cost of Work Item = A+B+C = |                           | 496.49             |
|                       |                            | Over head cost : _                 | 10%                       | 49.65              |
|                       |                            | Profit Cost:                       | 15%                       | 74.47              |
|                       |                            | Total Unit Cost :                  |                           | 620.61             |

Remark

UF: UTILIZATION FACTOR

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

\*\* INCLUSIVE OF BENEFITS, TRAVEL SUBSIDIES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

- 14 -

## ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: : G+1 MULTIPURPOSE **FINISHING WORKS.**

WORK ITEM: (6.10) Parquet flooring with all accessories .

LABOUR HOURLY OUTPUT:

EQUIPEMENT:

RESULT : 1714.44

TOTAL QANTITY OF WORK

ITEM: 1 m<sup>2</sup>

|  |                      |  |                    |  |
|--|----------------------|--|--------------------|--|
|  | Material Cost (1:01) |  | Labour Cost (1:02) |  |
|--|----------------------|--|--------------------|--|

| Type of Material    | Unit | Qty * | Rate | Cost per Unit | Labour by Grade     | No. | UF   | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
|---------------------|------|-------|------|---------------|---------------------|-----|------|------------------------|-------------|-------------------|
| parque              | m²   | 1.03  | 1300 | 1339          | Foreman             | 1   | 0.17 | 37.5                   | 6.38        |                   |
|                     |      |       |      | 0             | carpenter           | 1   | 1    | 37.5                   | 37.5        |                   |
|                     |      |       |      | 0             | D/L                 | 2   | 1    | 18.75                  | 37.5        |                   |
|                     |      |       |      | 0             |                     |     |      |                        | 0           |                   |
|                     |      |       |      | 0             |                     |     |      |                        | 0           |                   |
|                     |      |       |      | 0             |                     |     |      |                        | 0           |                   |
|                     |      |       |      | 0             |                     |     |      |                        | 0           |                   |
| <b>Total (1:01)</b> |      |       |      | 1339.00       | <b>Total (1:02)</b> |     |      |                        | 81.38       | -                 |

A Materials Unit Cost 1339.00 Birr/m²

B= Manpower Unit Cost

32.55 Birr/m²

C= Equipme

Total of (1:02)

Hourly Output: \_\_\_\_\_

Total of (1

Hourly out

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

1371.55

Over head cost : \_

10%

137.16

Profit Cost:

15%

205.73

Total Unit Cost : \_

1714.44

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

- 15 -

### ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: G+1 MULTIPURPOSE **FINISHING WORKS.**

LABOUR HOURLY OUTPUT:

WORK ITEM: (6.11) 15 x 75mm. Marble skirting ( 1: 3 ).

EQUIPEMENT:

TOTAL QANTITY OF WORK

RESULT :

355.01

ITEM: 1 ml

|                      |                    |  |
|----------------------|--------------------|--|
| Material Cost (1:01) | Labour Cost (1:02) |  |
|----------------------|--------------------|--|

| Type of Material    | Unit | Qty * | Rate | Cost per Unit | Labour by Grade     | No. | UF   | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
|---------------------|------|-------|------|---------------|---------------------|-----|------|------------------------|-------------|-------------------|
| marble slate        | ml   | 1.05  | 235  | 246.75        | Foreman             | 1   | 0.25 | 37.5                   | 9.38        | grinder           |
| polish              | lit  | 0.003 | 0.28 | 0.00          | mason ii            | 1   | 1    | 37.5                   | 37.5        |                   |
| cement              | qt   | 0.004 | 385  | 1.540         | helper I            | 1   | 1    | 18.75                  | 18.75       |                   |
| sand                | m³   | 0.001 | 464  | 0.464         | D/L                 | 1   | 1    | 18.75                  | 18.75       |                   |
| water               | m³   | 0.001 | 0.75 | 0.001         |                     |     |      |                        | 0           |                   |
|                     |      |       |      | 0             |                     |     |      |                        | 0           |                   |
|                     |      |       |      | 0             |                     |     |      |                        | 0           |                   |
|                     |      |       |      | 0             |                     |     |      |                        | 0           |                   |
| <b>Total (1:01)</b> |      |       |      | 248.76        | <b>Total (1:02)</b> |     |      |                        | 84.38       | -                 |

A= Materials Unit Cost 248.76 Birr/ml

B= Manpower Unit Cost

33.75 Birr/ml

C= Equipme

Total of (1:02)

Hourly Output: \_\_\_\_\_

Total of (1

Hourly out

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

284.01

Over head cost : \_

10% 28.40

Profit Cost:

15% 42.60

Total Unit Cost : \_

355.01

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

- 16 -

### **ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS**

PROJECT: : G+1 MULTIPURPOSE **FINISHING WORKS.**

LABOUR HOURLY OUTPUT:

WORK ITEM: (6.12) ceramic tile skirting (1:3).

EQUIPEMENT:

TOTAL QANTITY OF WORK

RESULT : 157.64

ITEM: 1 ml

|                      |                    |  |
|----------------------|--------------------|--|
| Material Cost (1:01) | Labour Cost (1:02) |  |
|----------------------|--------------------|--|

| Type of Material      | Unit | Qty * | Rate | Cost per Unit | Labour by Grade     | No. | UF   | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
|-----------------------|------|-------|------|---------------|---------------------|-----|------|------------------------|-------------|-------------------|
| ceramic tile skirting | pc   | 5     | 15   | 75.00         | Foreman             | 1   | 0.25 | 37.5                   | 9.38        | grinder           |
| cement                | qt   | 0.04  | 385  | 15.40         | masonii             | 1   | 1    | 37.5                   | 37.5        |                   |
| sand                  | m³   | 0.001 | 464  | 0.464         | helper I            | 1   | 1    | 18.75                  | 18.75       |                   |
| water                 | m³   | 0.002 | 0.75 | 0.002         | D/L                 | 1   | 1    | 18.75                  | 18.75       |                   |
|                       |      |       |      | 0             |                     |     |      |                        | 0           |                   |
|                       |      |       |      | 0             |                     |     |      |                        | 0           |                   |
|                       |      |       |      | 0             |                     |     |      |                        | 0           |                   |
| <b>Total (1:01)</b>   |      |       |      | 90.87         | <b>Total (1:02)</b> |     |      |                        | 84.38       | -                 |

A Materials Unit Cost 90.87 Birr/ml

B= Manpower Unit Cost

33.75 Birr/ml

C= Equipme

Total of (1:02)

Total of (1

Hourly Output: \_\_\_\_\_

Hourly out

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

126.12

Over head cost : \_

10% 12.61

Profit Cost:

15% 18.92

Total Unit Cost : \_

157.64

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

- 18 -

### **ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS**

PROJECT: G+1 MULTIPURPOSE

**FINISHING WORKS.**

LABOUR HOURLY OUTPUT:

WORK ITEM: (6.14)

8cm.high PVC tile skirting.( ETHIOPIA)

EQUIPEMENT:

RESULT :

107.95

TOTAL QANTITY OF WORK

ITEM: 1 ml

|                      |                    |  |
|----------------------|--------------------|--|
| Material Cost (1:01) | Labour Cost (1:02) |  |
|----------------------|--------------------|--|

| Type of Material    | Unit | Qty * | Rate | Cost per Unit | Labour by Grade     | No. | UF   | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
|---------------------|------|-------|------|---------------|---------------------|-----|------|------------------------|-------------|-------------------|
| 2mm pvc skirting    | ml   | 1.02  | 35   | 35.70         | Foreman             | 1   | 0.83 | 37.5                   | 31.13       |                   |
| adhesive glue       | gal  | 0.009 | 750  | 6.75          | tiler               | 1   | 1    | 37.5                   | 37.5        |                   |
| polishing           | lit  | 0.008 | 28   | 0.224         | D/L                 | 1   | 1    | 18.75                  | 18.75       |                   |
|                     |      |       |      | 0             |                     |     |      |                        | 0           |                   |
|                     |      |       |      | 0             |                     |     |      |                        | 0           |                   |
|                     |      |       |      | 0             |                     |     |      |                        | 0           |                   |
|                     |      |       |      | 0             |                     |     |      |                        | 0           |                   |
| <b>Total (1:01)</b> |      |       |      | 42.67         | <b>Total (1:02)</b> |     |      |                        | 87.38       |                   |

A Materials Unit Cost 42.67 Birr/ml

B= Manpower Unit Cost

43.69 Birr/ml

C= Equipme

Total of (1:02)

Total of (1

Hourly Output: \_\_\_\_\_

Hourly out

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

86.36

Over head cost : \_

10% 8.64

Profit Cost:

15% 12.95

Total Unit Cost : \_

107.95

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

- 19 -

### ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: G+1 MULTIPURPOSE **FINISHING WORKS.**

LABOUR HOURLY OUTPUT:

WORK ITEM: (6.17) 30mm. thick white marble window cill (1:3)on HCE

EQUIPEMENT:

RESULT : 103.33

TOTAL QANTITY OF WORK

ITEM: 1 ml

|                      |                    |  |
|----------------------|--------------------|--|
| Material Cost (1:01) | Labour Cost (1:02) |  |
|----------------------|--------------------|--|

| Type of Material     | Unit           | Qty *  | Rate | Cost per Unit | Labour by Grade     | No. | UF   | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
|----------------------|----------------|--------|------|---------------|---------------------|-----|------|------------------------|-------------|-------------------|
| white marble cill fo | m <sup>2</sup> | 0.204  | 360  | 73.44         | Foreman             | 1   | 0.83 | 5                      | 4.15        | grinder           |
| cement               | qt             | 0.02   | 60   | 1.20          | masonii             | 1   | 1    | 3.75                   | 3.75        |                   |
| sand                 | m <sup>3</sup> | 0.005  | 95   | 0.48          | D/L                 | 2   | 1    | 1.25                   | 2.5         |                   |
| water                | m <sup>3</sup> | 0.01   | 0.75 | 0.008         |                     |     |      |                        | 0           |                   |
| cement grout         | qt             | 0.0003 | 60   | 0.018         |                     |     |      |                        | 0           |                   |
|                      |                |        |      | 0             |                     |     |      |                        | 0           |                   |
|                      |                |        |      | 0             |                     |     |      |                        | 0           |                   |
|                      |                |        |      | 0             |                     |     |      |                        | 0           |                   |
| <b>Total (1:01)</b>  |                |        |      | 75.14         | <b>Total (1:02)</b> |     |      |                        | 10.40       | -                 |

A Materials Unit Cost 75.14 Birr/ml

B= Manpower Unit Cost

5.53 Birr/ml

C= Equipme

Total of (1:02)

Total of (1

Hourly Output: \_\_\_\_\_

Hourly out

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

82.66

Over head cost : \_

10% 8.27

Profit Cost:

15% 12.40

Total Unit Cost : \_

103.33

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

- 20 -

### **ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS**

PROJECT G+1 MULTIPURPOSE: **FINISHING WORKS.**

LABOUR HOURLY OUTPUT:

WORK ITEM: (6.17) 30mm. thick HARAR marble window cill (1:3)on HCB .

EQUIPEMENT:

RESULT : 417.23

TOTAL QANTITY OF WORK

ITEM: 1 ml

|                      |                    |  |
|----------------------|--------------------|--|
| Material Cost (1:01) | Labour Cost (1:02) |  |
|----------------------|--------------------|--|



| Type of Material    | Unit | Qty *  | Rate | Cost per Unit | Labour by Grade     | No. | UF   | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
|---------------------|------|--------|------|---------------|---------------------|-----|------|------------------------|-------------|-------------------|
| 30mm white marble   | m²   | 0.306  | 1050 | 321.30        | Foreman             | 1   | 0.83 | 37.5                   | 31.13       | grinder           |
| cement              | qt   | 0.03   | 385  | 11.55         | masonii             | 1   | 1    | 37.5                   | 37.5        |                   |
| sand                | m³   | 0.008  | 464  | 3.71          | D/L                 | 2   | 1    | 18.75                  | 37.5        |                   |
| water               | m³   | 0.01   | 0.75 | 0.008         |                     |     |      |                        | 0           |                   |
| cement grout        | qt   | 0.0003 | 385  | 0.115         |                     |     |      |                        | 0           |                   |
|                     |      |        |      | 0             |                     |     |      |                        | 0           |                   |
|                     |      |        |      | 0             |                     |     |      |                        | 0           |                   |
|                     |      |        |      | 0             |                     |     |      |                        | 0           |                   |
| <b>Total (1:01)</b> |      |        |      | 336.69        | <b>Total (1:02)</b> |     |      |                        | 106.13      |                   |

### A Materials Unit Cost

336.69 Birr/ml

B= Manpower Unit Cost

120.60 Birr/ml

C= Equipme

Total of (1:02)

Total of (1

Hourly Output:

Hourly out

$$\text{Direct Cost of Work Item} = A+B+C =$$

468.65

Over head cost : \_\_\_\_\_

46.86

Profit Cost:

70.30

Total Unit Cost : \_

585.81

Remark

UF: UTILIZATION FACTOR

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

\*\* INCLUSIVE OF BENEFITS, TRAVEL SUBSIDIES AND COST OF OVERTIME RELATED TO TARGETED OUTPUT.

- 22 -

### ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: G+1 MULTIPURPOSE **FINISHING WORKS.**

LABOUR HOURLY OUTPUT:

WORK ITEM: (6.15) 20mm. thick white marble riser. (1:3).

EQUIPEMENT:

RESULT : 409.06

TOTAL QANTITY OF WORK

ITEM: 1 ml

|  |                      |                    |  |
|--|----------------------|--------------------|--|
|  | Material Cost (1:01) | Labour Cost (1:02) |  |
|--|----------------------|--------------------|--|

| Type of Material    | Unit           | Qty *  | Rate | Cost per Unit | Labour by Grade     | No. | UF   | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
|---------------------|----------------|--------|------|---------------|---------------------|-----|------|------------------------|-------------|-------------------|
| white marble        | m <sup>2</sup> | 0.204  | 1050 | 214.20        | Foreman             | 1   | 0.83 | 37.5                   | 31.13       | grinder           |
| cement              | qt             | 0.02   | 385  | 7.70          | masonii             | 1   | 1    | 37.5                   | 37.5        |                   |
| sand                | m <sup>3</sup> | 0.0053 | 464  | 2.46          | D/L                 | 2   | 1    | 18.75                  | 37.5        |                   |
| water               | m <sup>3</sup> | 0.01   | 0.75 | 0.008         |                     |     |      |                        | 0           |                   |
| cement grout        | qt             | 0.0003 | 385  | 0.115         |                     |     |      |                        | 0           |                   |
|                     |                |        |      | 0             |                     |     |      |                        | 0           |                   |
|                     |                |        |      | 0             |                     |     |      |                        | 0           |                   |
|                     |                |        |      | 0             |                     |     |      |                        | 0           |                   |
| <b>Total (1:01)</b> |                |        |      | 224.48        | <b>Total (1:02)</b> |     |      |                        | 106.13      | -                 |

A= Materials Unit C 224.48 Birr/ml

B= Manpower Unit Cost

93.92 Birr/ml

C= Equipme

Total of (1:02)

Total of (1

Hourly Output: \_\_\_\_\_

Hourly out

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

327.25

Over head cost : \_

32.72

Profit Cost:

49.09

Total Unit Cost : \_

409.06

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

- 23 -

### ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS

PROJECT: G+1 MULTIPURPOSE **FINISHING WORKS.**

LABOUR HOURLY OUTPUT:

WORK ITEM: (6.08)

20x20 cm. Ceramic wall tile.(1:3).

EQUIPEMENT:

TOTAL QANTITY OF WORK

RESULT :

616.83

ITEM: 1 m<sup>2</sup>

|                      |                    |  |
|----------------------|--------------------|--|
| Material Cost (1:01) | Labour Cost (1:02) |  |
|----------------------|--------------------|--|

| Type of Material    | Unit           | Qty * | Rate | Cost per Unit | Labour by Grade     | No. | UF   | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment |
|---------------------|----------------|-------|------|---------------|---------------------|-----|------|------------------------|-------------|-------------------|
| 20 x 20 cm. ceramic | pc             | 25.5  | 13.8 | 351.90        | Foreman             | 1   | 0.25 | 37.5                   | 9.38        | grinder           |
| cement              | qt             | 0.065 | 385  | 25.03         | tiler               | 1   | 1    | 37.5                   | 37.5        |                   |
| sand                | m <sup>3</sup> | 0.01  | 464  | 4.64          | D/L                 | 2   | 1    | 18.75                  | 37.5        |                   |
| water               | m <sup>3</sup> | 0.01  | 0.75 | 0.008         |                     |     |      |                        | 0           |                   |
| cement grout        | qt             | 0.014 | 385  | 5.390         |                     |     |      |                        | 0           |                   |
|                     |                |       |      | 0             |                     |     |      |                        | 0           |                   |
|                     |                |       |      | 0             |                     |     |      |                        | 0           |                   |
|                     |                |       |      | 0             |                     |     |      |                        | 0           |                   |
| <b>Total (1:01)</b> |                |       |      | 386.96        | <b>Total (1:02)</b> |     |      |                        | 84.38       |                   |

A= Materials Unit Cost 386.96 Birr/m<sup>2</sup>

B= Manpower Unit Cost

86.10 Birr/m<sup>2</sup>

C= Equipment

Total of (1:02)

Total of (1:02)

Hourly Output: \_\_\_\_\_

Hourly output

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

493.47

Over head cost : \_

10% 49.35

Profit Cost:

15% 74.02

Total Unit Cost : \_

616.83

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

1.55 m<sup>2</sup>/hr

Birr/m<sup>2</sup>

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
| Total (1:03)          |               | 0           |

ent Unit Cost                      0 Birr/m<sup>2</sup>

:03)

put: \_\_\_\_\_

Birr/m<sup>2</sup>

"

"

Birr/m<sup>2</sup>

1.55 m<sup>2</sup>/hr

Birr/m<sup>2</sup>

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
| Total (1:03)          |               | 0           |

ent Unit Cost                      0 Birr/m<sup>2</sup>

:03)

put: \_\_\_\_\_

Birr/m<sup>2</sup>

"

"

Birr/m<sup>2</sup>

0.5 m²/hr

Birr/m²

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
| Total (1:03)          |               | 0           |

ent Unit Cost                      0 Birr/m²

:03)  
put: \_\_\_\_\_

Birr/m²  
"  
"  
Birr/m²

0.67 m<sup>2</sup>/hr

Birr/m<sup>2</sup>

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
| Total (1:03)          |               | 0           |

ent Unit Cost                      0 Birr/m<sup>2</sup>

:03)

put: \_\_\_\_\_

Birr/m<sup>2</sup>

"

"

Birr/m<sup>2</sup>

0.6 m²/hr

Birr/m²

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
| Total (1:03)          |               | 0           |

ent Unit Cost                      0 Birr/m²

:03)

put: \_\_\_\_\_

Birr/m²

"

"

Birr/m²

2.5 m²/hr

Birr/m²

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
| 1                     | 4.44          | 4.44        |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
| Total (1:03)          |               | 4.44        |

ent Unit Cost            1.78 Birr/m²

:03)

put: \_\_\_\_\_

Birr/m²

"

"

Birr/m²

2.5 m²/hr

Birr/m²

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
| 1                     | 4.44          | 4.44        |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
| <b>Total (1:03)</b>   |               | 4.44        |

ent Unit Cost            1.78 Birr/m²

:03)

put: \_\_\_\_\_

Birr/m²

"

"

Birr/m²

2.38 m²/hr

Birr/m²

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
| <b>Total (1:03)</b>   |               | 0           |

ent Unit Cost                    0 Birr/m²

:03)

put: \_\_\_\_\_

Birr/m²

"

"

Birr/m²

1.43 m²/hr

Birr/m²

| Equipment Cost (1:03) |               |             |
|-----------------------|---------------|-------------|
| No.                   | Hourly Rental | Hourly Cost |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
|                       |               | 0           |
| <b>Total (1:03)</b>   |               | 0           |

ent Unit Cost                    0 Birr/m²

:03)

put: \_\_\_\_\_

Birr/m²

"

"

Birr/m²

1.25 m²/hr

Birr/m²

|                       |
|-----------------------|
| Equipment Cost (1:03) |
|-----------------------|

| No.          | Hourly Rental | Hourly Cost |
|--------------|---------------|-------------|
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
| Total (1:03) |               | 0           |

ent Unit Cost                      0 Birr/m²

:03)

put: \_\_\_\_\_

Birr/m²

"

"

Birr/m²

0.88 m²/hr

Birr/m²

Equipment Cost (1:03)

| No.          | Hourly Rental | Hourly Cost |
|--------------|---------------|-------------|
| 1            | 3.75          | 3.75        |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
| Total (1:03) |               | 3.75        |

ent Unit Cost            4.26 Birr/m²

:03)

put: \_\_\_\_\_

Birr/m²

"

"

Birr/m²

1 m²/hr                            10

Birr/m²

Equipment Cost (1:03)

| No.          | Hourly Rental | Hourly Cost |
|--------------|---------------|-------------|
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
| Total (1:03) |               | 0           |

ent Unit Cost            0.00 Birr/m²

:03)

put: \_\_\_\_\_

Birr/m²

"

"

Birr/m²

3.45 m²/hr

Birr/m²

|                       |
|-----------------------|
| Equipment Cost (1:03) |
|-----------------------|

| No.          | Hourly Rental | Hourly Cost |
|--------------|---------------|-------------|
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
| Total (1:03) |               | 0           |

ent Unit Cost            0.00 Birr/m²  
:03)

put: \_\_\_\_\_

Birr/m²

"

"

Birr/m²

2.5 m²/hr

Birr/m²

Equipment Cost (1:03)

| No.          | Hourly Rental | Hourly Cost |
|--------------|---------------|-------------|
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
| Total (1:03) |               | 0           |

ent Unit Cost        0.00 Birr/m²  
:03)

put: \_\_\_\_\_

Birr/m²

"

"

Birr/m²

2.5 ml/hr

Birr/ml

Equipment Cost (1:03)

| No.                 | Hourly Rental | Hourly Cost |
|---------------------|---------------|-------------|
| 1                   | 10            | 10          |
|                     |               | 0           |
|                     |               | 0           |
|                     |               | 0           |
|                     |               | 0           |
|                     |               | 0           |
|                     |               | 0           |
|                     |               | 0           |
| <b>Total (1:03)</b> |               | 10          |

ent Unit Cost            1.50 Birr/ml

:03)

put: \_\_\_\_\_

Birr/ml

"

"

Birr/ml

2.5 ml/hr

Birr/ml

Equipment Cost (1:03)

| No.          | Hourly Rental | Hourly Cost |
|--------------|---------------|-------------|
| 1            | 10            | 10          |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
| Total (1:03) |               | 10          |

ent Unit Cost            1.50 Birr/ml

:03)

put: \_\_\_\_\_

Birr/ml

"

"

Birr/ml

2 ml /hr

Birr/ml

Equipment Cost (1:03)

| No.          | Hourly Rental | Hourly Cost |
|--------------|---------------|-------------|
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
| Total (1:03) |               | 0           |

ent Unit Cost                      Birr/ml  
:03)  
put: \_\_\_\_\_  
Birr/ml  
"  
"  
Birr/ml

1.88 ml /hr  
  
Birr/ml  
  
Equipment Cost (1:03)

| No.          | Hourly Rental | Hourly Cost |
|--------------|---------------|-------------|
| 1            | 3.75          | 3.75        |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
| Total (1:03) |               | 3.75        |

ent Unit Cost            1.99 Birr/ml

:03)

put: \_\_\_\_\_

Birr/ml

"

"

Birr/ml

1.88 ml /hr

Birr/ml

Equipment Cost (1:03)

| No.          | Hourly Rental | Hourly Cost |
|--------------|---------------|-------------|
| 1            | 10            | 10          |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
| Total (1:03) |               | 10          |

ent Unit Cost            1.99 Birr/ml  
:03)  
put: \_\_\_\_\_  
Birr/ml  
"  
"  
Birr/ml

0.88 ml /hr  
  
Birr/ml  

Equipment Cost (1:03)

| No.          | Hourly Rental | Hourly Cost |
|--------------|---------------|-------------|
| 1            | 10            | 10          |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
| Total (1:03) |               | 10          |

ent Unit Cost        11.36 Birr/ml

:03)

put: \_\_\_\_\_

Birr/ml

"

"

Birr/ml

1.13 ml /hr

Birr/ml

Equipment Cost (1:03)

| No.          | Hourly Rental | Hourly Cost |
|--------------|---------------|-------------|
| 1            | 10            | 10          |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
| Total (1:03) |               | 10          |

ent Unit Cost            8.85 Birr/ml

:03)

put: \_\_\_\_\_

Birr/ml

"

"

Birr/ml

0.98 m² /hr

Birr/m²

Equipment Cost (1:03)

| No.          | Hourly Rental | Hourly Cost |
|--------------|---------------|-------------|
| 2            | 10            | 20          |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
|              |               | 0           |
| Total (1:03) |               | 20          |

ent Unit Cost        20.41 Birr/m²

:03)

put: \_\_\_\_\_

Birr/m²

"

"

Birr/m²

**ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS**

PROJECT: G+1 MULTIPURPOSE PAINTING.  
 WORK ITEM: ( 7.2) Three coats of plastic paint to wall.

LABOUR HOURLY OUTPUT: 1.88

EQUIPEMENT: Tool

TOTAL QANTITY OF WORK

RESULT: 64.47 Birr/m<sup>2</sup>

ITEM: 1 m<sup>2</sup>

| 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. |
| plastic paint        | lit  | 0.25  | 59.4 | 14.85         | foreman             | 1   | 0.2 | 37.5                   | 7.50        | tools               | 1   |
| stucco               | kg   | 0.05  | 8    | 0.4           | painter             | 1   | 1   | 37.5                   | 37.50       |                     |     |
| animal glue          | kg   | 0.013 | 80   | 1.04          | DL                  | 1   | 1   | 18.75                  | 18.75       |                     |     |
| brush                | pcs  | 0.01  | 65   | 0.65          |                     |     |     |                        | 0           |                     |     |
| sand paper           | pcs  | 0.01  | 7.5  | 0.075         |                     |     |     |                        | 0           |                     |     |
| gypsum               | kg   | 0.03  | 4    | 0.12          |                     |     |     |                        | 0           |                     |     |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                     |     |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                     |     |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                     |     |
| <b>Total (1:-01)</b> |      |       |      | 17.135        | <b>Total (1:02)</b> |     |     |                        | 63.75       | <b>Total (1:03)</b> |     |

A Materials Unit Cost 17.135 Birr/m<sup>2</sup>

B= Manpower Unit Cost 33.909574 Birr/m<sup>2</sup>

C= Equipment Unit Cost

Total of (1:02)

Total of (1:03)

Hourly Output:

Hourly output: \_\_\_\_\_

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

51.58 Birr/m<sup>2</sup>

Over head cost :

10% 5.16 "

Profit Cost:

15% 7.74 "

Total Unit Cost :

64.47 Birr/m<sup>2</sup>

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: : G+1 MULTIPURPOSE PAINTING

LABOUR HOURLY OUTPUT:

1.5

WORK ITEM: ( 7.2)

Three coats of plastic paint to ceiling.

EQUIPEMENT: Tool

TOTAL QUANTITY OF WORK

RESULT:

77.42 Birr/m<sup>2</sup>

ITEM: 1 m<sup>2</sup>

| 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. |
| plastic paint        | lit  | 0.23  | 59.4 | 13.66         | foreman             | 1   | 0.2 | 37.5                   | 7.50        | tools               | 1   |
| stucco               | kg   | 0.1   | 8    | 0.8           | painter             | 1   | 1   | 37.5                   | 37.50       |                     |     |
| animal glue          | kg   | 0.013 | 80   | 1.04          | DL                  | 1   | 1   | 18.75                  | 18.75       |                     |     |
| brush                | pcs  | 0.01  | 65   | 0.65          |                     |     |     |                        | 0           |                     |     |
| sand paper           | pcs  | 0.01  | 7.5  | 0.075         |                     |     |     |                        | 0           |                     |     |
| gypsum               | kg   | 0.04  | 4    | 0.16          |                     |     |     |                        | 0           |                     |     |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                     |     |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                     |     |
| <b>Total (1:-01)</b> |      |       |      | 16.387        | <b>Total (1:02)</b> |     |     |                        | 63.75       | <b>Total (1:03)</b> |     |

A Materials Unit Cost 16.387 Birr/m<sup>2</sup>

B= Manpower Unit Cost

42.5 Birr/m<sup>2</sup>

C= Equipment Unit Cost

Total of (1:02)

4.75

Total of (1:03)

Hourly Output:

1.5

Hourly output: \_\_\_\_\_

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

59.55 Birr/m<sup>2</sup>

Over head cost :

15%

8.93 "

Profit Cost:

15%

8.93 "

Total Unit Cost :

77.42 Birr/m<sup>2</sup>

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

**ANALYSIS SHEET FOR DIRECT & INDIRECT UNIT COSTS**

PROJECT: G+1 MULTIPURPOSE PAINTING

WORK ITEM: ( 7.1) One coat of external quartz paint

LABOUR HOURLY OUTPUT:

5.64

EQUIPEMENT: Tool

TOTAL QANTITY OF WORK

RESULT: 53.25 Birr/m<sup>2</sup>

ITEM: 1 m<sup>2</sup>

| 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. |
| quartz               | kg   | 0.12  | 190  | 22.80         | foreman             | 1   | 0.2 | 37.5                   | 7.50        | tools               | 1   |
| stucco               | kg   | 0.06  | 8    | 0.48          | painter             | 1   | 1   | 37.5                   | 37.50       |                     |     |
| animal glue          | kg   | 0.1   | 80   | 8.00          | DL                  | 1   | 1   | 17.85                  | 17.85       |                     |     |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                     |     |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                     |     |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                     |     |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                     |     |
|                      |      |       |      | 0             |                     |     |     |                        | 0           |                     |     |
| <b>Total (1:-01)</b> |      |       |      | 31.28         | <b>Total (1:02)</b> |     |     |                        | 62.85       | <b>Total (1:03)</b> |     |

A Materials Unit Cost 31.28 Birr/m<sup>2</sup>

B= Manpower Unit Cost

11.143617 Birr/m<sup>2</sup>

C= Equipment Unit Cost

Total of (1:02)

4.75

Hourly Output:

5.64

Total of (1:03)

Hourly output: \_\_\_\_\_

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

42.60 Birr/m<sup>2</sup>

Over head cost :

10%

4.26 "

Profit Cost:

15%

6.39 "

Total Unit Cost :

53.25 Birr/m<sup>2</sup>

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

m<sup>2</sup>/hr.

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

0.53 Birr/m<sup>2</sup>

\_\_\_\_\_

m<sup>2</sup>/hr.

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

0.67 Birr/m<sup>2</sup>

\_\_\_\_\_

m<sup>2</sup>/hr.

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

0.18 Birr/m<sup>2</sup>

\_\_\_\_\_

**ANALYSIS SHEET FOR DIRECT COST**PROJECT: G+1 MULTIPURPOSE **GLAZING WORKS**

WORK ITEM: (10.2) Fixing 5mm clear glass.

TOTAL QUANTITY OF WORK

ITEM: 1 m<sup>2</sup>

| Material Cost (1:01) |                |       |      |               | Labour          |     |
|----------------------|----------------|-------|------|---------------|-----------------|-----|
| Type of Material     | Unit           | Qty * | Rate | Cost per Unit | Labour by Grade | No. |
| 4 mm. clear glass    | m <sup>2</sup> | 1.1   | 365  | 401.5         | Foreman         | 1   |
| Putty                | kg             | 0.4   | 30   | 12            | Glazer          | 1   |
|                      |                |       |      | 0             | DL              | 1   |
|                      |                |       |      | 0             |                 |     |
|                      |                |       |      | 0             |                 |     |
|                      |                |       |      | 0             |                 |     |
|                      |                |       |      | 0             |                 |     |
| <b>Total (1:01)</b>  |                |       |      | 413.5         | <b>Total</b>    |     |

A= Materials Unit Cost = 413.5 Birr/m<sup>2</sup>

B= Manpower Unit Cost

Total of (1:02)

Hourly Output: \_\_\_\_\_

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

Over head cost

Profit Cost:

Total Unit Cost

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

**ANALYSIS SHEET FOR DIRECT COST**PROJECT: G+1 MULTIPURPOSE **GLAZING WORKS**

WORK ITEM: (10.4) Fixing 5 mm. Frosted glass.

TOTAL QUANTITY OF WORK

ITEM: 1 m<sup>2</sup>

| Material Cost (1:01) |                |       |      |               | Labour          |     |
|----------------------|----------------|-------|------|---------------|-----------------|-----|
| Type of Material     | Unit           | Qty * | Rate | Cost per Unit | Labour by Grade | No. |
| 4mm frosted glass    | m <sup>2</sup> | 1.1   | 470  | 517           | Foreman         | 1   |
| Putty                | kg             | 0.4   | 30   | 12            | Glazer          | 1   |
|                      |                |       |      | 0             | D/L             | 1   |
|                      |                |       |      | 0             |                 |     |
|                      |                |       |      | 0             |                 |     |
|                      |                |       |      | 0             |                 |     |
|                      |                |       |      | 0             |                 |     |

|  |                     |     |              |
|--|---------------------|-----|--------------|
|  | <b>Total (1:01)</b> | 529 | <b>Total</b> |
|--|---------------------|-----|--------------|

A= Materials U

529 Birr/m<sup>2</sup>

B= Manpower Unit Cost

Total of (1:02)

Hourly Output: \_\_\_\_\_

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

Over head cost

Profit Cost:

Total Unit Cost

Remark \_\_\_\_\_

UF: UTILIZATION FACTOR

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

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

1-

**CT & INDIRECT UNIT COSTS**

LABOUR HOURLY OUTPUT: 1.55 m<sup>2</sup>/hr  
 EQUIPEMENT:  
 RESULT: 567.29 Birr/m<sup>2</sup>

| Labour Cost (1:02) |                        |             | Equipment Cost (1:03) |     |               |             |
|--------------------|------------------------|-------------|-----------------------|-----|---------------|-------------|
| UF                 | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment     | No. | Hourly Rental | Hourly Cost |
| 0.167              | 37.5                   | 6.2625      |                       |     |               | 0           |
| 1                  | 37.5                   | 37.5        |                       |     |               | 0           |
| 1                  | 18.75                  | 18.75       |                       |     |               | 0           |
|                    |                        |             |                       |     |               | 0           |
|                    |                        |             |                       |     |               | 0           |
|                    |                        |             |                       |     |               | 0           |
|                    |                        |             |                       |     |               | 0           |
| <b>(1:02)</b>      |                        | 62.5125     | <b>Total (1:03)</b>   |     |               | 0           |

40.33 Birr/m<sup>2</sup>      C= Equipment Unit Cost      0 Birr/m<sup>2</sup>  
5.23      Total of (1:03)  
 1.55      Hourly output: \_\_\_\_\_  
                                          453.83 Birr/m<sup>2</sup>  
 :                                           45.38 "  
                                          68.07 "  
 : \_                                           567.29 Birr/m<sup>2</sup>

4 -

**CT & INDIRECT UNIT COSTS**

LABOUR HOURLY OUTPUT: 1.55 m<sup>2</sup>/hr  
 EQUIPEMENT:  
 RESULT: 710.66 Birr/m<sup>2</sup>

| Labour Cost (1:02) |                        |             | Equipment Cost (1:03) |     |               |             |
|--------------------|------------------------|-------------|-----------------------|-----|---------------|-------------|
| UF                 | ** Indexed Hourly Cost | Hourly Cost | Type of Equipment     | No. | Hourly Rental | Hourly Cost |
| 0.167              | 37.5                   | 6.2625      |                       |     |               | 0           |
| 1                  | 37.5                   | 37.5        |                       |     |               | 0           |
| 1                  | 17.5                   | 17.5        |                       |     |               | 0           |
|                    |                        | 0           |                       |     |               | 0           |
|                    |                        | 0           |                       |     |               | 0           |
|                    |                        | 0           |                       |     |               | 0           |
|                    |                        | 0           |                       |     |               | 0           |

|        |         |              |   |
|--------|---------|--------------|---|
| (1:02) | 61.2625 | Total (1:03) | 0 |
|--------|---------|--------------|---|

|     |               |                        |           |
|-----|---------------|------------------------|-----------|
|     | 39.52 Birr/m² | C= Equipment Unit Cost | 0 Birr/m² |
|     | <u>5.23</u>   | <u>Total of (1:03)</u> |           |
| -   | 1.55          | Hourly output: _____   |           |
|     |               | 568.52 Birr/m²         |           |
| : _ | 10%           | 56.85 "                |           |
|     | 15%           | 85.28 "                |           |
| : _ |               | 710.66 Birr/m²         |           |