

DISTRICT MUNICIPAL CORPORATION MALIR KARACHI

Main Kalaboard Bus Stop, Behind Saudabad Police Station, Malir Town, Karachi

No.B&R/MZ/Malir/2016/

Dated: March, 2016.

NOTICE INVITING TENDER

1. District Municipal Corporation, Malir Karachi invites sealed tenders under Sindh Public Procurement Regulatory Authority Rules-2010 (Amended 2013) from the interested contractors/firms in respect of following works:

S. #	Name of Work	Estimated Cost	Bid Security	Tender Fee	Time for completion
1.	Providing and Fixing Doors, Windows, Aluminum and Wooden in Head Office Building of DMC Malir.	862722	2%	1000/-	1 month
2.	Repair / Maintenance of Head Office Building of DMC Malir.	779109 + Open Rate (within 1 million)	2%	1000/-	1 month
3.	Providing and laying wood paneling in Council Hall of Head Office of DMC Malir.	Open Rates (within 1 million)	2%	1000/-	1 month

2. Eligibility: Valid Registration with tax authorities & Sindh Revenue Board.


3. Method of Procurement: *Single Stage One Envelope*

4. Bidding/Tender Documents:

- Issuance:** Tender documents will be issued to the contractors on submission of written request on their letterhead from date of publication (**during office hours**), on payment of tender fee (*Non-refundable-mentioned against each item*) upto 16/03/2016.
- Submission:** Last date will be (16/03/2016 till 1400 hours)
- Opening:** will be opened on (16/03/2016 at 1430 hours).
- Place of issuance, submission, inquiries and opening will be -**
Address (Postal): Office of the Superintending Engineer, DMC Malir, Main Kalaboard Bust Stop, Behind Saudabad Police Station, Malir Town, Karachi. Phone: 021-99248035
- Un-responded tenders** will be again issued/ submitted/ opened on following dates -
2nd Attempt: (a) Issue date: 17/03/2016 to 17/03/2016 during office hours
(b) Submission: 17/03/2016 at 1400 hours
(c) Opening: 17/03/2016 at 1430 hours
(d) Venue: **As above.**

5. Terms & Conditions.

- Under following conditions bid will be rejected:-
 - Conditional and telegraphic bids/tenders.
 - Bids not accompanied by bid security of required amount and form.
 - Bids received after specified date and time
 - Black listed firms.
 - In case the date of opening is declared as a public holiday by the government, the next official working day shall be deemed to the date/time of submission and opening of tender
- Bid validity Period:** - (90) days
- Procuring Agency reserves the right to reject all or any bids subject to the relevant provisions of Sindh Public Procurement Rules 2010
- Responsive Bidder is required to submit following documents with bid:**
 - List of similar assignments with cost *one million* under-taken over the past (3) years.
 - Details of equipments, machineries and transport owned by firm/contractor.*
 - Financial Statement (summary) and income tax return for the last 3 years
 - Affidavit that firm has never been black listed.


SUPERINTENDING ENGINEER,
DMC MALIR

DIRECTOR (C.B) SPPRA, GOS

With a request to upload on the website of SPPRA as desired under Rule-11 & 12.

Copy to:

- The Secretary, Local Government Department, Govt of Sindh.
- The Administrator, DMC Malir Karachi.
- Municipal Commissioner, DMC Malir, Karachi.
- Executive Engineer, M&E / B&R, Malir Zone, DMC Malir, Karachi

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30-03-16

DISTRICT MUNICIPAL CORPORATION

MALIR KARACHI

Ph:021-99248035

Main Kalaboard Bus Stop, Behind Saudabad Police Station, Malir Town, Karachi

ANNUAL PROCUREMENT PLAN DISTRICT MUNICIPAL CORPORATION, MALIR ZONE, KARACHI FINANCIAL YEAR 2015-16

Sr. No.	Description of Procurement	Quantity (where applicable)	Estimated unit cost (where applicable)	Estimated total cost	Funds allocated	Source of funds (ADP / Non-ADP)	Timing of procurements				Remarks
							1 st Qtr	2 nd Qtr	3 rd Qtr	4 th Qtr	
1.	Providing and Fixing Doors, Windows, Aluminum and Wooden in Head Office Building of DMC Malir.	Not applicable	Not applicable	862722	1000000	Non-ADP		3 rd Qtr	4 th Qtr		
2.	Repair / Maintenance of Head Office Building of DMC Malir.	Not applicable	Not applicable	779109 + Open Rate (within one million)	1000000	Non-ADP		3 rd Qtr	4 th Qtr		
3.	Providing and laying wood paneling in Council Hall of Head Office of DMC Malir.	Not applicable	Not applicable	Open Rates (within one million)	1000000	Non-ADP		3 rd Qtr	4 th Qtr		



SUPERINTENDING ENGINEER,
DMC MALIR



No.RO(LG)/Malir/3/01/2016
GOVERNMENT OF SINDH
LOCAL GOVERNMENT & HOUSING TOWN
PLANNING DEPARTMENT
Karachi Dated. 26th, February, 2016

To,
The Administrator,
District Municipal Corporation, Malir,
Karachi.

**SUBJECT: CONSTITUTION OF PROCUREMENT COMMITTEE OF DMC MALIR
FOR THE YEAR 2015-2016.**

I am directed to refer to the subject noted above and invite your attention to this Department's letter of even number dated 11.02.2016, the Constitution of Committee may be read as "Constitution of Procurement Committee of DMC Malir for the year 2015-2016 instead of Constitution of Procurement Committee of DMC Malir (Bin Qasim Zone).

RESEARCH OFFICER (LG)

A copy forwarded for information to the:-

1. The Managing Director, Sindh Procurement Authority, Karachi.
2. P.S to Minister, Local Govt. & Housing Town Planning, Sindh.
3. P.S. to Secretary, local Govt. & Housing Town Planning Department.

RESEARCH OFFICER (LG)



No.RD/0-1/Malir/301/2016
GOVERNMENT OF SINDH
LOCAL GOVERNMENT AND HOUSING TOWN
PLANNING DEPARTMENT

Karachi, Dated: 27/01/2016

To

The Administrator,
District Municipal Corporation, Malir,
Karachi.

SUBJECT: CONSTITUTION OF PROCUREMENT COMMITTEE OF DMC MALIR
(BIN QASIM ZONE) FOR THE YEAR 2015-2016.

I am directed to refer to your letter No.DMC Malir B.O.
Zone Administrator:02/2016 dated 25.01.2016 on the subject captioned above and to
convey that orders of the Competent Authority for constitution of the Procurement
Committee as under:-

- | | | |
|----|--|----------|
| 1. | Superintending Engineer
District Municipal Corporation Malir. | Chairman |
| 2. | Executive Engineer Directors (Concerned)
District Municipal Corporation Malir. | Member |
| 3. | Mr. Amanullah Watio
Executive Engineer
District Municipal Corporation South. | Member |

Necessary action may please be taken after observing all codal formalities
as laid down under the Sindh Public Procurement Rule, 2008.

RESEARCH OFFICER (LG)

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1. The Managing Director, Sindh Procurement Authority, Karachi.
2. P.S to Minister, Local Govt. & Housing Town Planning, Sindh.
3. P.S to Secretary, Local Govt. & Housing Town Planning Department.

RESEARCH OFFICER (LG)



DISTRICT MUNICIPAL CORPORATION MALIR, KARACHI
OFFICE OF THE ADMINISTRATOR DISTRICT MUNICIPAL CORPORATION
MALIR, KARACHI


No.DMC Malir / Bin Qasim Zone/Administrator/36 /2015(MZ)

Dated 21-10-2015

Subject: - CONSTITUTION OF COMMITTEE FOR COMPLAIN REDRESSAL OF GRIEVANCES AND SETTLEMENT OF DISPUTES

As required under rule 31 of Sindh Public Procurement (SPP) Rules, 2010 (Amended 2013) a committee for complaint redressal of grievances and settlement of disputes is hereby constituted for District Municipal Corporation Malir (Bin Qasim Zone), Karachi for the financial year 2015-2016 consisting upon following:-

- | | |
|---|----------|
| 1. Municipal Commissioner
District Municipal Corporation Malir, Karachi | Chairman |
| 2. Accounts Officer
District Municipal Corporation Malir, Karachi | Member |
| 3. Mr. Anwar Khurshed
Contract Specialist
M/S. ECIL, Karachi | Member |


Administrator
District Municipal Corporation
Malir Karachi

Copy forwarded for information to:-

1. Director (CB) SPPRA, Karachi
2. Municipal Commissioner, District Municipal Corporation Malir, Karachi
3. Superintending Engineer, District Municipal Corporation Malir, Karachi
4. Accounts Officer District Municipal Corporation Malir, Karachi.
5. Mr. Anwar Khurshed Contract Specialist M/s. ECIL, Karachi.

Administrator
District Municipal Corporation
Malir Karachi

BIDDING DOCUMENT

Instructions to Bidders/ Procuring Agencies.

General Rules and Directions for the Guidance of Contractors.

This section of the bidding documents should provide the information necessary for bidders to prepare responsive bids, in accordance with the requirements of the Procuring Agency. It should also give information on bid submission, opening and evaluation, and on the award of contract.

Matters governing the performance of the Contract or payments under the Contract, or matters affecting the risks, rights, and obligations of the parties under the Contract are included as Conditions of Contract and *Contract Data*.

The *Instructions to Bidders* will not be part of the Contract and will cease to have effect once the contract is signed.

1. All work proposed to be executed by contract shall be notified in a form of Notice Inviting Tender (NIT)/Invitation for Bid (IFB) hoisted on website of Authority and Procuring Agency and also in printed media where ever required as per rules.

NIT must state the description of the work, dates, time and place of issuing, submission, opening of bids, completion time, cost of bidding document and bid security either in lump sum or percentage of Estimated Cost/Bid Cost. The interested bidder must have valid NTN also.

2. Content of Bidding Documents must include but not limited to: Conditions of contract, Contract Data, specifications or its reference, Bill of Quantities containing description of items with scheduled/item rates with premium to be filled in form of percentage above/ below or on item rates to be quoted, Form of Agreement and drawings.

3. **Fixed Price Contracts:** The Bid prices and rates are fixed during currency of contract and under no circumstance shall any contractor be entitled to claim enhanced rates for any item in this contract.

4. The Procuring Agency shall have right of rejecting all or any of the tenders as per provisions of SPP Rules 2010.

5. **Conditional Offer:** Any person who submits a tender shall fill up the usual printed form stating at what percentage above or below on the rates specified in Bill of Quantities for items of work to be carried out: he is willing to undertake the work and also quote the rates for those items which are based on market rates. Only one rate of such percentage, on all the Scheduled Rates shall be framed. Tenders, which propose any alternative in the works specified in the said form of invitation to tender or in the time

allowed for carrying out the work, or which contain any other conditions, will be liable to rejection. No printed form of tender shall include a tender for more than one work, but if contractor wish to tender for two or more works, they shall submit a separate tender for each.

The envelope containing the tender documents shall refer the name and number of the work.

6. All works shall be measured by standard instruments according to the rules.
7. Bidders shall provide evidence of their eligibility as and when requested by the Procuring Agency.
8. Any bid received by the Agency after the deadline for submission of bids shall be rejected and returned unopened to the bidder.
9. Prior to the detailed evaluation of bids, the Procuring Agency will determine whether the bidder fulfills all codal requirements of eligibility criteria given in the tender notice such as registration with tax authorities, registration with PEC (where applicable), turnover statement, experience statement, and any other condition mentioned in the NIT and bidding document. If the bidder does not fulfill any of these conditions, it shall not be evaluated further.
10. Bid without bid security of required amount and prescribed form shall be rejected.
11. Bids determined to be substantially responsive shall be checked for any arithmetic errors. Arithmetical errors shall be rectified on the following basis;
 - (A) In case of schedule rates, the amount of percentage quoted above or below will be checked and added or subtracted from amount of bill of quantities to arrive the final bid cost.
 - (B) In case of item rates, If there is a discrepancy between the unit rate and the total cost that is obtained by multiplying the unit rate and quantity, the unit rate shall prevail and the total cost will be corrected unless in the opinion of the Agency there is an obvious misplacement of the decimal point in the unit rate, in which case the total cost as quoted will govern and the unit rate corrected. If there is a discrepancy between the total bid amount and the sum of total costs, the sum of the total costs shall prevail and the total bid amount shall be corrected.
 - (C) Where there is a discrepancy between the amounts in figures and in words, the amount in words will govern.

BIDDING DATA

Work No.1

- (a). **Name of Procuring Agency:** MALIR ZONE, DISTRICT MUNICIPAL CORPORATION, KARACHI.
- (b). **Brief Description of Works:** PROVIDING AND FIXING DOORS, WINDOWS, ALUMINUM AND WOODEN IN HEAD OFFICE BUILDING OF DMC MALIR.
- (c). **Procuring Agency's address:-**MAIN KALABOARD BUS STOP, BEHIND SAUDABAD POLICE STATION, MALIR TOWN, KARACHI.
- (d). **Estimated Cost:-** 862722
- (e). **Amount of Bid Security:-** 2% OF ESTIMATED COST
- (f). **Period of Bid Validity (days):-** 90 Days
- (g). **Security Deposit:-** (i). **(bid security):-** 02% of Contract/Sanction Amount
(ii) 8% Retention money of bill amount will be deducted from Running Bill
- (h). **Percentage, if any, to be deducted from bills:** 7.5% Income Tax
- (i). **Deadline for Submission of Bids along with time:** 14 - 11 - 2016 (1400 hours)
- (j). **Venue, Time, and Date of Bid Opening:** 16 - 11 - 2016 (1430 hours) at the Office of Superintending Engineer, DMC Malir, Main Kalaboard Bust Stop, Behind Saudabad Police Station, Malir Town, Karachi.
- (k). **Time for Completion from written order of commence:** One month
- (L). **Liquidity damages:-** Rs.1000/- Per Day
(0.05 of Estimated Cost or Bid cost per day of delay, but total not exceeding 10%).
- (m). **Deposit Receipt No:** _____ **Date:** _____
- Amount:(in words & figures)** Rs.1000/= (Rupees one thousand only)

ASSISTANT EXECUTIVE ENGINEER (B&R)

BIDDING DATA

Work No.2

- (a). **Name of Procuring Agency:** MALIR ZONE, DISTRICT MUNICIPAL CORPORATION, KARACHI.
- (b). **Brief Description of Works:** REPAIR / MAINTENANCE OF HEAD OFFICE BUILDING OF DMC MALIR.
- (c). **Procuring Agency's address:-**MAIN KALABOARD BUS STOP, BEHIND SAUDABAD POLICE STATION, MALIR TOWN, KARACHI.
- (d). **Estimated Cost:-** 779109 + Open Rate (within one million)
- (e). **Amount of Bid Security:-** 2% OF ESTIMATED COST
- (f). **Period of Bid Validity (days):-** 90 Days
- (g). **Security Deposit:-** (i). **(bid security):-** 02% of Contract/Sanction Amount
(ii) 8% Retention money of bill amount will be deducted from Running Bill
- (h). **Percentage, if any, to be deducted from bills:** 7.5% Income Tax
- (i). **Deadline for Submission of Bids along with time:** 14-08-2016 (1400 hours)
- (j). **Venue, Time, and Date of Bid Opening:** 14-08-2016 (1430 hours) at the Office of the Superintending Engineer, DMC Malir, Main Kalaboard Bust Stop, Behind Saudabad Police Station, Malir Town, Karachi.
- (k). **Time for Completion from written order of commence:** One month
- (L). **Liquidity damages:-** Rs.1000/- Per Day
(0.05 of Estimated Cost or Bid cost per day of delay, but total not exceeding 10%).
- (m). **Deposit Receipt No:** _____ **Date:** _____
- Amount:(in words & figures)** Rs.1000/= (Rupees one thousand only)

ASSISTANT EXECUTIVE ENGINEER (B&R)

BIDDING DATA

Work No.3

- (a). Name of Procuring Agency: MALIR ZONE, DISTRICT MUNICIPAL CORPORATION, KARACHI.
- (b). Brief Description of Works: PROVIDING AND LAYING WOOD PANELING IN COUNCIL HALL OF HEAD OFFICE OF DMC MALIR.
- (c). Procuring Agency's address:-MAIN KALABOARD BUS STOP, BEHIND SAUDABAD POLICE STATION, MALIR TOWN, KARACHI.
- (d). Estimated Cost:- _____ Open Rate _____ (within one million)
- (e). Amount of Bid Security:- _____ 2% OF ESTIMATED COST
- (f). Period of Bid Validity (days):- 90 Days
- (g). Security Deposit:- (i). (bid security):- 02% of Contract/Sanction Amount
(ii) 8% Retention money of bill amount will be deducted from Running Bill
- (h). Percentage, if any, to be deducted from bills: _____ 7.5% Income Tax
- (i). Deadline for Submission of Bids along with time: _____ 2016 (1400 hours)
- (j). Venue, Time, and Date of Bid Opening: _____ 2016 (1430 hours) at the Office of the Superintending Engineer, DMC Malir, Main Kalaboard Bust Stop, Behind Saudabad Police Station, Malir Town, Karachi.
- (k). Time for Completion from written order of commence: _____ One month
- (L). Liquidity damages:- _____ Rs.1000/- Per Day
(0.05 of Estimated Cost or Bid cost per day of delay, but total not exceeding 10%).
- (m). Deposit Receipt No: _____ Date: _____
- Amount:(in words & figures) _____ Rs.1000/= (Rupees one thousand only)

ASSISTANT EXECUTIVE ENGINEER (B&R)

Conditions of Contract

Clause – 1: Commencement & Completion Dates of work. The contractor shall not enter upon or commence any portion or work except with the written authority and instructions of the Engineer-in-charge or of in subordinate-in-charge of the work. Failing such authority the contractor shall have no claim to ask for measurements of or payment for work.

The contractor shall proceed with the works with due expedition and without delay and complete the works in the time allowed for carrying out the work as entered in the tender shall be strictly observed by the contractor and shall reckoned from the date on which the order to commence work is given to the contractor. And further to ensure good progress during the execution of the wok, contractor shall be bound, in all in which the time allowed for completion of any work exceeds one month, to achieve progress on the prorate basis.

Clause – 2: Liquidated Damages. The contractor shall pay liquidated damages to the Agency at the rate per day stated in the bidding data for each day that the completion date is later than the Intended completion date; the amount of liquidated damage paid by the contractor to the Agency shall not exceed 10 per cent of the contract price. Agency may deduct liquidated damages from payments due to the contractor. Payment of liquidated damages does not affect the contractor's liabilities.

Clause – 3: Termination of the Contract.

- (A) Procuring Agency/Executive Engineer may terminate the contract if either of the following conditions exists:-
- (i) contractor causes a breach of any clause of the Contract;
 - (ii) the progress of any particular portion of the work is unsatisfactory and notice of 10 days has expired;
 - (iii) in the case of abandonment of the work owing to the serious illness or death of the contractor or any other cause.
 - (iv) contractor can also request for termination of contract if a payment certified by the Engineer is not paid to the contractor within 60 days of the date of the submission of the bill;
- (B) The Executive Engineer/Procuring Agency has power to adopt any of the following courses as may deem fit:-
- (i) to forfeit the security deposit available except conditions mentioned at A (iii) and (iv) above;
 - (ii) to finalize the work by measuring the work done by the contractor.

(C) In the event of any of the above courses being adopted by the Executive Engineer/Procuring Agency, the contractor shall have:-

- (i) no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials, or entered into any engagements, or made any advances on account of, or with a view to the execution of the work or the performance of the contract,
- (ii) however, the contractor can claim for the work done at site duly certified by the executive engineer in writing regarding the performance of such work and has not been paid.

Procuring Agency/Engineer may invite fresh bids for remaining work.

Clause 4: Possession of the site and claims for compensation for delay. The Engineer shall give possession of all parts of the site to the contractor. If possession of site is not given by the date stated in the contract data, no compensation shall be allowed for any delay caused in starting of the work on account of any acquisition of land, water standing in borrow pits/ compartments or in according sanction to estimates. In such case, either date of commencement will be changed or period of completion is to be extended accordingly.

Clause –5: Extension of Intended Completion Date. The Procuring Agency either at its own initiatives before the date of completion or on desire of the contractor may extend the intended completion date, if an event (which hinders the execution of contract) occurs or a variation order is issued which makes it impossible to complete the work by the intended completion date for such period as he may think necessary or proper. The decision of the Executive Engineer in this matter shall be final; where time has been extended under this or any other clause of this agreement, the date for completion of the work shall be the date fixed by the order giving the extension or by the aggregate of all such orders, made under this agreement.

When time has been extended as aforesaid, it shall continue to be the essence of the contract and all clauses of the contract shall continue to be operative during the extended period.

Clause –6: Specifications. The contractor shall execute the whole and every part of the work in the most substantial and work-man-like manner and both as regards materials and all other matters in strict accordance with the specifications lodged in the office of the Executive Engineer and initialed by the parties, the said specification being a part of the contract. The contractor shall also confirm exactly, fully and faithfully to the designs, drawing, and instructions in writing relating to the work signed by the Engineer-in-charge and lodge in his office and to which the contractor shall be entitled to have access at such office or on the site of work for the purpose of inspection during office hours and the contractor shall, if he so requires, be entitled at his own expense to make or cause to be made copies of the specifications, and of all such designs, drawings, and instructions as aforesaid.

Clause – 7: Payments.

- (A) **Interim/Running Bill.** A bill shall be submitted by the contractor as frequently as the progress of the work may justify for all work executed and not included in any previous bill at least once in a month and the Engineer-in-charge shall take or cause to be taken the requisite measurements for the purpose of having the same verified and the claim, as far as admissible, adjusted, if possible before the expiry of ten days from the presentation of the bill, at any time depute a subordinate to measure up the said work in the presence of the contractor or his authorized agent, whose countersignature to the measurement list will be sufficient to warrant and the Engineer-in-charge may prepare a bill from such list which shall be binding on the contractor in all respects.

The Engineer /Procuring Agency shall pass/certify the amount to be paid to the contractor, which he considers due and payable in respect thereof, subject to deduction of security deposit, advance payment if any made to him and taxes.

All such intermediate payment shall be regarded as payments by way of advance against the final payment only and not as payments for work actually done and completed, and shall not preclude the Engineer-in-charge from recoveries from final bill and rectification of defects and unsatisfactory items of works pointed out to him during defect liability period.

- (B) **The Final Bill.** A bill shall be submitted by the contractor within one month of the date fixed for the completion of the work otherwise Engineer-in-charge's certificate of the measurements and of the total amount payable for the works shall be final and binding on all parties.

Clause – 8: Reduced Rates. In cases where the items of work are not accepted as so completed, the Engineer-in-charge may make payment on account of such items at such reduced rates as he may consider reasonable in the preparation of final or on running account bills with reasons recorded in writing.

Clause – 9: Issuance of Variation and Repeat Orders.

- (A) Agency may issue a Variation Order for procurement of works, physical services from the original contractor to cover any increase or decrease in quantities, including the introduction of new work items that are either due to change of plans, design or alignment to suit actual field conditions, within the general scope and physical boundaries of the contract.
- (B) Contractor shall not perform a variation until the Procuring Agency has authorized the variation in writing subject to the limit not exceeding the contract cost by of 15% on the same conditions in all respects on which he agreed to do them in the

work, and at the same rates, as are specified in the tender for the main work. The contractor has no right to claim for compensation by reason of alterations or curtailment of the work.

- (C) In case the nature of the work in the variation does not correspond with items in the Bill of Quantities, the quotation by the contractor is to be in the form of new rates for the relevant items of work, and if the Engineer-in-charge is satisfied that the rate quoted is within the rate worked out by him on detailed rate analysis, and then only he shall allow him that rate after approval from higher authority.
- (D) The time for the completion of the work shall be extended in the proportion that the additional work bear to the original contract work.
- (E) In case of quantities of work executed result the Initial Contract Price to be exceeded by more than 15%, and then Engineer can adjust the rates for those quantities causing excess the cost of contract beyond 15% after approval of Superintending Engineer.
- (F) **Repeat Order:** Any cumulative variation, beyond the 15% of initial contract amount, shall be subject of another contract to be tendered out if the works are separable from the original contract.

Clause-10: Quality Control.

- (A) **Identifying Defects:** If at any time before the security deposit is refunded to the contractor/during defect liability period mentioned in bid data, the Engineer-in-charge or his subordinate-in-charge of the work may instruct the contractor to uncover and test any part of the works which he considers may have a defect due to use of unsound materials or unskillful workmanship and the contractor has to carry out a test at his own cost irrespective of work already approved or paid.
- (B) **Correction of Defects:** The contractor shall be bound forthwith to rectify or remove and reconstruct the work so specified in whole or in part, as the case may require. The contractor shall correct the notified defect within the Defects Correction Period mentioned in notice.
- (C) **Uncorrected Defects:**
 - (i) In the case of any such failure, the Engineer-in-charge shall give the contractor at least 14 days notice of his intention to use a third party to correct a defect. He may rectify or remove, and re-execute the work or remove and replace the materials or articles complained of as the case may be at the risk and expense in all respects of the contractor.

- (ii) If the Engineer considers that rectification/correction of a defect is not essential and it may be accepted or made use of; it shall be within his discretion to accept the same at such reduced rates as he may fix therefore.

Clause – 11:

- (A) **Inspection of Operations.** The Engineer and his subordinates, shall at all reasonable times have access to the site for supervision and inspection of works under or in course of execution in pursuance of the contract and the contractor shall afford every facility for and every assistance in obtaining the right to such access.
- (B) **Dates for Inspection and Testing.** The Engineer shall give the contractor reasonable notice of the intention of the Engineer-in-charge or his subordinate to visit the work shall have been given to the contractor, then he either himself be present to receive orders and instructions, or have a responsible agent duly accredited in writing present for that purpose, orders given to the contractor's duly authorized agent shall be considered to have the same force an effect as if they had been given to the contractor himself.

Clause – 12: Examination of work before covering up.

- (A) No part of the works shall be covered up or put out of view/beyond the reach without giving notice of not less than five days to the Engineer whenever any such part of the works or foundations is or are ready or about to be ready for examination and the Engineer shall, without delay, unless he considers it unnecessary and advises the contractor accordingly, attend for the purpose of examining and measuring such part of the works or of examining such foundations;
- (B) If any work is covered up or placed beyond the reach of measurement without such notice having been given, the same shall be uncovered at the contractor's expense, and in default thereof no payment or allowance shall be made for such work, or for the materials with which the same was executed.

Clause – 13: Risks. The contractor shall be responsible for all risks of loss of or damage to physical property or facilities or related services at the premises and of personal injury and death which arise during and in consequence of its performance of the contract. if any damage is caused while the work is in progress or become apparent within three months of the grant of the certificate of completion, final or otherwise, the contractor shall make good the same at his own expense, or in default the Engineer may cause the same to be made good by other workmen, and deduct the expenses from retention money lying with the Engineer.

Clause-14: Measures for prevention of fire and safety measures. The contractor shall not set fire to any standing jungle, trees, bush-wood or grass without a written permit from the Executive Engineer. When such permit is given, and also in all cases when destroying, cutting or uprooting trees, bush-wood, grass, etc by fire, the contractor shall take necessary measures to prevent such fire spreading to or otherwise damaging surrounding property. The contractor is responsible for the safety of all its activities including protection of the environment on and off the site. Compensation of all damage done intentionally or unintentionally on or off the site by the contractor's labour shall be paid by him.

Clause-15:Sub-contracting. The contractor shall not subcontract the whole of the works, except where otherwise provided by the contract. The contractor shall not subcontract any part of the works without the prior consent of the Engineer. Any such consent shall not relieve the contractor from any liability or obligation under the contract and he shall be responsible for the acts, defaults and neglects of any subcontractor, his agents, servants or workmen as if these acts, defaults or neglects were those of the contractor, his agents' servants or workmen. The provisions of this contract shall apply to such subcontractor or his employees as if he or it were employees of the contractor.

Clause – 16: Disputes. All disputes arising in connection with the present contract, and which cannot be amicably settled between the parties, , the decision of the Superintending Engineer of the circle/officer/one grade higher to awarding authority shall be final, conclusive and binding on all parties to the contract upon all questions relating to the meaning of the specifications, designs drawings, and instructions, hereinbefore mentioned and as to the quality of workmanship, or materials used on the work or as to any other questions, claim, right, matter, or thing whatsoever in any way arising out of, or relating to the contract design, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the' works, or the execution, of failure to execute the same, whether arising, during the progress of the work, or after the completion or abandonment thereof.

Clause –17: Site Clearance. On completion of the work, the contractor shall be furnished with a certificate by the Executive Engineer (hereinafter called the Engineer in-charge) of such completion, but neither such certificate shall be given nor shall the work be considered to be complete until the contractor shall have removed all temporary structures and materials brought at site either for use or for operation facilities including cleaning debris and dirt at the site. If the contractor fails to comply with the requirements of this clause then Engineer-in-charge, may at the expense of the contractor remove and dispose of the same as he thinks fit and shall deduct the amount of all expenses so incurred from the contractor's retention money. The contractor shall have no claim in respect of any surplus materials as aforesaid except for any sum actually realized by the sale thereof.

Clause –18: Financial Assistance /Advance Payment.

- (A) **Mobilization advance** is not allowed.
- (B) **Secured Advance against materials brought at site.**
- (i) Secured Advance may be permitted only against imperishable materials/quantities anticipated to be consumed/utilized on the work within a period of three months from the date of issue of secured advance and definitely not for full quantities of materials for the entire work/contract. The sum payable for such materials on site shall not exceed 75% of the market price of materials;
 - (ii) Recovery of Secured Advance paid to the contractor under the above provisions shall be affected from the monthly payments on actual consumption basis, but not later than period more than three months (even if unutilized).

Clause –19: Recovery as arrears of Land Revenue. Any sum due to the Government by the contractor shall be liable for recovery as arrears of Land Revenue.

Clause –20: Refund of Security Deposit/Retention Money. On completion of the whole of the works (a work should be considered as complete for the purpose of refund of security deposit to a contractor from the last date on which its final measurements are checked by a competent authority, if such check is necessary otherwise from the last date of recording the final measurements), the defects notice period has also passed and the Engineer has certified that all defects notified to the contractor before the end of this period have been corrected, the security deposit lodged by a contractor (in cash or recovered in installments from his bills) shall be refunded to him after the expiry of three months from the date on which the work is completed.

Divisional Accountant

Contractor

Executive Engineer/Procuring Agency

Bill Of QUANTITIES
Work No.1

Name of work: Removal & Fixing Door Windows Aluminium and Glazing in
1st Office Building of DMC Melin.

S.NO	DESCRIPTION OF WORK	QUANTITY	RATE	AMOUNT
1.	(c) Dismantling cement concrete plain 1:2:4	1051 cft	3327.50% cft	34972.00
2.	Providing and laying 2" topping cement concrete 1:2:4 i/c surface finishing and dividing into panels.	3780 sft	3275.50% sft	123814.00
3.	Cleaning and washing mosaic of marble floor with caustic soda mixture.	4965 sft	194.43% sft	9653.00
4.	Rubbing and polishing old mosaic floor.	4965 sft	1228.92% sft	61016.00
5.	Supplying and fixing in position Aluminum channels framing for hinged doors of Alcop made with 5 mm thick tinted glazing (Belgium) and Alpha (Japan) lock including handles stopper etc. (a) Double model (white).	28 sft	1450.76 p-sft	40621.00
6.	Supplying and fixing in position Aluminum channels framing for sliding windows and ventilators of Alcop made with 5 mm thick tinted glazing (Belgium) and Aluminum fly screen including handles stopper and locking arrangement etc. complete. (a) Double model (white).	24 sft	1592.69 p-sft	38224.00
7.	Providing and fixing in position door and windows and ventilators for 1 st class deodar wood frame 1 1/2" thick and teak wood ply shutter for 1 st class deodar wood skeleton (solid) stilled and plywood stilled and rail core of partial wood and teak plywood (3 ply) on both sides i/c hold fast hinges al drops iron tower bolt handle cleats with cord etc. complete.	168 sft	1245.96 p-sft	209321.00
8.	Removing cement or lime plaster from wall.	5375 sft	121% sft	6504.00
9.	Cement plaster 1:4 upto 12" height. (a) 1/2" thick.	6394 sft	3015.76% sft	192828.00
10.	Providing and laying 1:3:6 cement concrete solid block masonry walls 6" below in in thickness set in 1:6 cement mortar in ground floor super structure i/c racking out joints and curing etc. complete.	50 cft	15771.01% cft	7885.00
11.	Dismantling glazed or encaustic tiles etc.	421 sft	786.50% sft	3311.00
12.	Laying floor of approved coloured glazed tiles 5/8" thick laid in white cement and pigment on a bed of 3/4" thick cement mortar 1:2.	485 sft	27747.00% sft	134573.00

Rs 862722.00

DETAIL OF MEASUREMENTS

1. Dismantling cement concrete plain
1:2:4.

2 (100+25.0) 8.0 x 0.17	=	340 cft
1 x 25.0 x 7.0 x 0.17	=	30 cft
1 x 32.0 x 7.0 x 0.17	=	38 cft
1 (100+35.0) 28.0 x 0.17	=	<u>643 cft</u>
		1051 cft

2. 2" thick topping C.C 1:2:4 etc

1 (100+35.0) 28.0	=	3780 sft
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3. Cleaning and washing mosaic floor etc.

<u>1st and 2nd floor</u>		
2 x 37.75 x 21.0	=	1585 sft
2 x 16.75 x 14.75	=	494 sft
2 x 12.75 x 8.75	=	223 sft
<u>Verandah</u>		
2 x 83.25 x 6.83	=	1137 sft
2 x 14.75 x 12.75	=	376 sft
<u>Stairs</u>		
2 x 60 x 4.50 x 1.42	=	767 sft
<u>Sides</u>		
2 x 6 x 11.50 x $\frac{0.42+0.83}{2}$	=	86 sft
<u>Landings</u>		
2 x 3 x 11.0 x 4.50		297 sft
		4965 sft

4. Rubbing and polishing old mosaic floor etc.

Qty. same as item no 6.	=	4965 sft
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5. S/Fixing Aluminum door etc.

1 x 4.0 x 7.0	=	28 sft
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6. S/Fixing Aluminum door etc.

1 x 6.0 x 4.0	=	24 sft
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7. Ply wood shutter (Flush doors) etc.

4 x 3.50 x 7.0	=	98 sft
4 x 2.50 x 7.0	=	<u>70 sft</u>
		168 sft

8. Removing of lime or cement plaster etc.

<u>Rooms</u>		
Ceiling		
9 x 18.0 x 12.0	=	1944 sft
<u>Verandah</u>		
1 (100-25.0)8.0	=	1000 sft
1 x 25.0 x 7.0	=	175 sft
1 x 32.0 x 7.0	=	224 sft
<u>Boundary wall</u>		
1 x 2 (100+50.0) 3.0	=	900 sft
<u>Parapet wall</u>		
1 x 2 (100+25.0) 3.0	=	750 sft
1 x 60.0 x 3.0	=	180 sft
1 x 32.0 x 3.0	=	96 sft
1 x 25.0 x 3.0	=	75 sft
		<u>5375 sft</u>

9. Cement plaster 1:4 upto 12" height >7" thick etc.

<u>Walls</u>		
2 x 2 x 14.0 x 10.50	=	588 sft
2 x 2 x 12.0 x 10.50	=	<u>504 sft</u>
		1092 sft
	(-)	<u>42 sft</u>
		1050 sft
Qty. same as item no 12.	=	<u>5344 sft</u>
		6394 sft
<u>Deduction</u>		
1 x 2 x 3.0 x 7.0		42 sft

10. P/F. solid block masonry 1:3:6 etc.

5 x 5.0 x 4.0 x 0.50	=	50 cft
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11. Dismantling glazed or encaustic tiles etc.

<u>wash room</u>		
3 x 4 x 5.50 x 5.0	=	330 sft
<u>Floor</u>		
3 x 1 x 5.50 x 5.50	=	<u>91 sft</u>
		421 sft

12. Laying floor of approved glazed tiles etc.

Bath rooms

Walls

3 x 4 x 5.50 x 6.75

- 445 sft

Floor

3 x 1 x 5.50 x 5.50

" 91 sft

Deduction

3 x 1 x 2.50 x 6.75

(-) 51 sft

485 sft

Bill Of Quantities
Work No 2

Name of work: Repair/Maintenance of Head Office
Building of DAEC Malavi.

1.	Providing and fixing iron steel grill using solid square bars of size 1/2" x 1/2" placed at 4" i/c and frame of flat iron patti of 3/4" x 3/4" i/c circle shape at 1.0 apart of equivalent fitted with screws and pins i/c painting three coats with first coat of red oxide paint etc.	383 sft	194.16 p-sft	74363.00
2.	Providing and fixing iron collapsible gate with channel framing of section 3/4" x 5/16" at 4" including divided with 3/4" x 1/8" flat iron patti placed diagonally and provided with top and bottom T- section 1" x 1 1/8" along with rollers also including making arrangement and fixing in floor / ceiling or wall etc. complete.	63 sft	383.04 p-sft	24131.00
3.	Scraping rust from old rail or girders.	1810 sft	473.75% sft	8575.00
4.	Removing with caustic soda old paint from wood work.	2738 sft	250.25% sft	6852.00
5.	(d) Painting guard bars gate iron bars gratings railings including standard braces etc. and similar open work. 1 st coat Each subsequent coat 2 x 302.80% sft	1810 sft	371.80% sft 605.60% sft 977.40% sft	17691.00
6.	(C) Painting doors and windows any type. 1 st coat Each subsequent coat 2 x 502.15	2738 sft	657.91% sft 1043.30% sft 1662.21% sft	45511.00
7.	14. Kerb stone Providing and fixing pre cast edge block 3750 PSI industrial made size 6" thick x 12" long x 12" high including the cost of cartage excavation, form work for hunching, 1450 PSI lean concrete, 2250 PSI concrete for hunching, 1:4 cement sand mortar.	100 rft	297.01 p-rft	29701.00
8.	Extra for providing and fixing approved quality rim lock adjustable over the style surface.	45 nos	408.14 each	18366.00
9.	Supplying and fixing false ceiling of plaster of Paris in panels i/c making frame work of deodar wood i/c painting with solaris paint.	1421 sft	25293.42% sft	359419.00

10.	Providing and fixing equating type white glazed earthen ware W.C pan with i/c the cost of flushing cistern with internal fitting and flush pipe with bend and making requisite no holes in walls plinth and floor for pipe connection and making good in cement concrete 1:2:4 W.C pan of not less than 23" clear opening between flushing rim and 3 gallons flushing tank with 4" dia C.I trap	04 nos	5044.60 each	20178.00
11.	Providing and fixing 24" x 18" lavatory basin in white glazed earthen ware complete with and i/c the cost of W.I or C.I cantilever brackets 6" built into wall painted white in two coats after a primary coat of red lead paint a pair of 1/2" dia rubber plug and chrome plated brass chain 1/4" dia malleable iron or C.P brass taps malleable iron or brass unions and making requisite number of holes in walls plinth and floor for pipe connection and making good in cement 1:2:4 standard patterns.	04 nos	4253.70 each	17015.00
12.	Add extra for labour for providing and fixing earthen ware pedestal white or colored glazed (Foreign or equivalent).	04 nos	2533.47 each	10134.00
13.	Providing and fixing flat back lipped from urinal basin (of not less than 17" in height) of white glazed earthen ware complete with and i/c the cost of 1 gallon C.I automatic flushing cistern with fittings a pot cock C.I or W.I brackets standard flush pipe with fitting standard waist pipe (enameled iron) connection complete and making requisite number of holes in walls plinth and floor for pipe connection in making good in cement concrete 1:2:4 (standard pattern).	06 nos	3890.70 each	23344.00
14.	<u>E-Providing laying and jointing PVC pipes with Z joints.</u> Providing laying uPVC pressure pipes of class B (Equivalent make) fixing in trench i/c cutting fitting and jointing with Z joints one rubber ring i/c testing with water to a head of 1 meter or 200 ft. 3" dia 4" dia	150 rft 50 rft	90.00 p-rft 137.00 p-rft	13500.00 6850.00
15.	Lower rail 36" long. 1/2" dia round or square (superior quality)	04 nos	1412.95 each	5652.00
16.	Providing and fixing 24" x 18" beveled edge mirror of Belgium glass complete with 1/8" thick hard board and C.P screws fit to wooden plat.	04 nos	2376.00 each	9504.00

17.	Supplying and fixing soap tray of made plastic of superior quality and design with fine finishing with C.P screws etc. complete.	04 nos	169.40 each	677.00
18.	Providing and fixing plastic flushing cistern etc.	10 nos	Open rate	00.00
19.	Supplying and fixing swan type pillar cock of superior quality single C.P head. 1 1/2" dia	08 nos	795.30 each	6362.00
20.	Supplying and fixing C.P Muslim shower with crystal head etc. complete.	04 nos	3432.00 each	13728.00
21.	Supplying and fixing in position C.P bibcock standard pattern. 1 1/2" dia	08 nos	150.92 each	1207.00
22.	Supplying and fixing windows printed blinds (horizontal / vertical) with plan design and of approved colour i.e fixing in windows with necessary accessories.	315 sft	91.11 p-sft	28700.00
23.	Constructing manhole or inspection chamber for the required diameter of circular sewer and 3'-6" depth with walls of B.B in cement sand mortar 1:3 ratio plastered 1:3 1/2" thick inside of walls and 1" thick over benching and channel fixing C.I manhole cover with frame of clear opening 1' 1/2" x 1' 1/2" of 1.75 cwt embedded in plain concrete 1:2:4 and fixing 1" dia M.S steps 6" wide projecting 4" from the face of walls 12" C.C duly painted etc.	02 nos	14748.00 each	29496.00
24.	Providing laying R.C.C pipes and collars of class B and fixing in trench i.e cutting fitting and jointing with maphalt composition and cement mortar (1:1) i.e testing with water to a head of 22.5 meter or 75 ft. 6" dia	50 rft	163.00 p-rft	8150.00
25.	Providing and fixing upvc elbow etc. 3" dia	12 nos	Open rate	00.00
26.	Providing and fixing upvc plain tee etc. 3" dia	12 nos	Open rate	00.00
27.	Providing and fixing upvc Y tee etc. 3" x 4" dia	12 nos	Open rate	00.00
28.	Providing and fixing upvc cross tee etc. 3" x 4" dia	06 nos	Open rate	00.00
29.	Supplying and fixing ceiling 56" as approved etc.	40 nos	Open rate	00.00
30.	Supplying and fixing energy savers 24/25 watts as approved etc.	150 nos	Open rate	00.00
31.	Exhaust fan medium size as approved etc.	04 nos	Open rate	00.00
32.	Providing and fixing electric switch sheet 10 amp switches as approved etc. 11 holes	08 nos	Open rate	00.00

	08 nos	12 nos	Open rate	00.00
	06 holes	20 nos	Open rate	00.00
33.	Providing and fixing Power plug as approved etc.			
	15 Amp	40 nos	Open rate	00.00
34.	Providing and fixing fancy light holders as approved etc.	70 nos	Open rate	00.00
				Rs 779106.00
				+open rate

DETAIL OF MEASUREMENTS

1. Providing and fixing iron steel grill etc.

1 x 31.50 x 6.0	=	189 sft
1 x 23.75 x 6.0	=	142 sft
1 x 6.0 x 8.67	=	<u>52 sft</u>
		383 sft

2. Providing and fixing iron collapsible door etc.

1 x 7.0 x 9.0	=	63 sft
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3. Scraping rust from old rail or girders etc.

Grills

23 x 1 x 6.0 x 4.0	=	552 sft
1 x 1 x 11.0 x 8.0	=	112 sft
1 x 8.0 x 8.0	=	64 sft
1 (100-24.0) 2.0	=	248 sft

Door grills

2 x 1 x 4.0 x 7.0	=	56 sft
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Wind grill

6 x 1 x 4.0 x 4.0	=	96 sft
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Steel gates

1 x 2 x 16.0 x 11.0	=	352 sft
1 x 2 x 6.0 x 8.0	=	96 sft
1 x 2 x 12.0 x 8.0	=	192 sft
1 x 2 x 3.0 x 7.0	=	<u>42 sft</u>
		1810 sft

4. Removing old paint from wood work etc.

Doors

24 x 2 x 4.0 x 7.0	=	1344 sft
14 x 2 x 3.50 x 7.0	=	686 sft
1 x 2 x 4.50 x 6.75	=	61 sft
4 x 2 x 3.50 x 6.75	=	189 sft
3 x 2 x 3.0 x 6.75	=	121 sft
10 x 2 x 2.50 x 6.75	=	<u>337 sft</u>
		2738 sft

5. Painting guards bars iron work etc.

Qty. same as item no 23.	=	1810 sft
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6. Painting doors and windows any type etc.		
Qty. same as item no. 21.	=	2738 sft
7. P/T kerb stone etc.		
1 x 100	=	100 rft
8. Extra for P/T app. door lock etc.		
45 nos	=	45 nos
9. Providing and fixing false ceiling of plaster of Paris etc.		
1 x 37.0 x 20.25	=	749 sft
1 x 16.0 x 14.0	=	224 sft
1 x 12.0 x 8.0	=	96 sft
4 x 14.0 x 12.0	=	<u>672 sft</u>
		1741 sft
10. Providing and fixing equating type W.C etc.		
04 nos	=	04 nos
11. Providing and fixing 22" x 18" lavatory basin etc.		
04 nos	=	04 nos
12. Providing and fixing earthen ware pedestal etc.		
04 nos	=	04 nos
13. Providing and fixing back lipid earthen ware urinals etc.		
06 nos	=	06 nos
14. Providing and laying PVC pipe etc.		
<u>3" dia</u>		
1 x 100	=	100 rft
1 x 50.0	=	<u>50 rft</u>
		150 rft
<u>4" dia</u>		
1 x 50.0	=	50 rft
15. Towel rail etc.		
04 nos	=	04 nos

16. P/L 24" x 18" beveled edge mirror etc.		
04 nos	=	04 nos
17. Supplying and fixing soap tray etc.		
04 nos	=	04 nos
18. Providing and fixing plastic flushing cistern etc.		
10 nos	=	10 nos
19. Providing and fixing swan type pillar cock etc.		
08 nos	=	08 nos
20. Supplying and fixing Muslim shower etc.		
04 nos	=	04 nos
21. Providing and fixing C.P bibcock etc.		
22. Supplying and fixing windows printed blinds etc.		
9 x 7.0 x 5.0	=	315 sft
23. Constructing of man hole etc.		
02 nos	=	02 nos
24. Providing and laying R.C.C pipe etc. 6" dia		
1 x 50.0	=	50 rft
25. Providing and fixing upvc elbow etc. 3" dia		
12 nos	=	12 nos
26. Providing and fixing upvc plain tee etc. 3" dia		
12 nos	=	12 nos
27. Providing and fixing upvc Y tee etc. 3" x 4" dia		
12 nos	=	12 nos

28. Providing and fixing upvc cross tee etc. 3" x 4" dia	=	06 nos
06 nos		
29. Supplying and fixing approved ceiling fans 56" etc.	=	40 nos
40 nos		
30. Supplying and fixing 24/25 watts approved energy savers etc.	=	150 nos
150 nos		
31. Supplying and fixing Exhaust fan medium as approved etc.	=	04 nos
04 nos		
32. Providing and fixing electric switch sheet etc		
<u>11</u> holes	=	08 nos
08 nos		
<u>08</u> holes	=	12 nos
12 nos		
<u>06</u> holes	=	20 nos
20 nos		
33. Providing and fixing power plug 15 Amp as approved etc.	=	40 nos
40 nos		
34. Providing and fixing fancy holders as approved etc.	=	70 nos
70 nos		

BILL OF QUANTITIES
WORK No. 3

Name of work:- To provision and Laying wood paneling in
Second Staff of Head Office of DMC Mills.

55.	Providing and fixing wood paneling i/c deodar 1 1/2" x 2" wood frame, 1/4" thick chipboard and Formica paste with approved glue complete with all respect as approved.	2809 sft	Open rate	00.00
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Rs Open rate

DETAIL OF MEASUREMENTS

I. Providing and fixing wood paneling etc.

<u>Council hall</u>		
2 x 37.0 x 8.0	=	592 sft
2 x 20.25 x 8.0	=	324 sft
<u>Columns offset</u>		
2 x 2 x 1.25 x 8.0	=	40 sft
<u>Door offset</u>		
2 x 2 x 0.17 x 6.75	=	05 sft
1 x 2 x 0.17 x 7.0	=	02 sft
 <u>Deduction</u>		
<u>Door</u>		
1 x 3.0 x 6.75		
1 x 4.50 x 6.75	(-)	20 sft
1 x 3.50 x 7.0	(-)	30 sft
	(-)	24 sft
 <u>Wind,</u>		
3 x 2 x 6.0 x 4.0	(-)	144 sft
 <u>Room 1.</u>		
2 x 16.0 x 8.0	=	256 sft
2 x 14.0 x 8.0	=	224 sft
<u>Offsets</u>		
1 x 2 x 0.17 x 7.0	=	02 sft
3 x 2 x 0.17 x 6.75	=	07 sft
2 x 2 x 0.17 x $\frac{6.0+5.75}{2}$	=	04 sft
2 x 2 x 0.17 x 4.0	=	03 sft
 <u>Deduction</u>		
<u>Doors</u>		
2 x 3.50 x 6.75	(-)	47 sft
1 x 3.0 x 7.0	(-)	21 sft
1 x 2.50 x 6.75	(-)	17 sft
<u>Wind,</u>		
1 x 6.0 x 4.0	(-)	24 sft
1 x 5.75 x 4.0	(-)	23 sft
 <u>Room 2.</u>		
2 x 12.0 x 8.0	=	192 sft
2 x 8.0 x 8.0	=	128 sft
<u>Offsets</u>		
2 x 2 x 0.17 x 6.75	=	05 sft
2 x 0.17 x 4.0	=	01 sft
1 x 2 x 4.0 x 0.17	=	01 sft

Deduction

Doors

1 x 3.50 x 6.75	(-)	24 sft
1 x 3.0 x 6.75	(-)	20 sft

Wind,

1 x 4.0 x 4.0	(-)	16 sft
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Room no 3.

2 x 14.0 x 8.0	=	224 sft
2 x 12.0 x 8.0	=	192 sft

Offsets

2 x 2 x 0.17 x 6.75	=	05 sft
2 x 2 x 0.17 x 4.0	=	03 sft
2 x 1 x 0.17 x 5.75	=	02 sft
2 x 4 x 0.17 x 1.0	=	01 sft

Deduction

Door

1 x 3.50 x 6.75	(-)	24 sft
1 x 2.50 x 6.75	(-)	17 sft

Wind,

1 x 5.75 x 4.0	(-)	23 sft
1 x 4.0 x 4.0	(-)	16 sft

Room no 4.

2 x 14.0 x 8.0	=	224 sft
2 x 12.0 x 8.0	=	192 sft

Offsets

2 x 2 x 0.17 x 6.75	=	05 sft
2 x 2 x 0.17 x 4.0	=	03 sft
2 x 1 x 0.17 x 5.75	=	02 sft
2 x 4 x 0.17 x 1.0	=	01 sft

Deduction

Door

1 x 3.50 x 6.75	(-)	24 sft
1 x 2.50 x 6.75	(-)	17 sft

Wind,

1 x 5.75 x 4.0	(-)	23 sft
1 x 4.0 x 4.0	(-)	16 sft

Room no 5.

2 x 14.0 x 8.0	=	224 sft
2 x 12.0 x 8.0	=	192 sft

Offsets

2 x 0.17 x 6.75	=	02 sft
1 x 0.17 x 4.75	=	01 sft

Deduction

Door

1 x 4.75 x 6.75 (-) 32 sft

Room no 5.

2 x 14.0 x 8.0 = 224 sft

2 x 12.0 x 8.0 = 192 sft

Offsets

3 x 2 x 0.17 x 6.75 = 07 sft

Deduction

1 x 4.75 x 6.75 (-) 32 sft

1 x 3.25 x 6.75 (-) 22 sft

1 x 2.50 x 6.75 (-) 17 sft

2809 sft