



"SAY NO TO CORRUPTION"
PAKISTAN MINERAL DEVELOPMENT
CORPORATION
HEAD OFFICE, 13-H-9, ISLAMABAD, 44790

Invitation of E-BID

Pakistan Mineral Development Corporation is an autonomous corporation under the administrative control of Ministry of Energy (Petroleum Division), Government of Pakistan invites electronic bids (Lot – Wise) from the interested Parties/contractors having valid registration with PEC (Pakistan Engineering Council) & Federal Board of Revenue (FBR)/Respective Revenue Boards for income tax & sales tax and who are on active taxpayer list (Income & Sales Tax) of the Federal Board of Revenue (FBR)/Respective Revenue Boards for following works at PMDC Salt Mines, Khewra :-

Lot No.	Detail of Works	Bid Security
1.	Repair/Renovation of office building at PMDC Salt Mines, Khewra.	Rs.400,000/-
2.	Providing/Laying of RCC Slab Lintel & Repair/Renovation of 03 Nos. Bungalow (officers colony) at PMDC Salt Mines, Khewra.	Rs.200,000/-
3.	Providing/Laying of RCC Slab Lintel & Repair/Renovation of PMDC Hospital building at PMDC Salt Mines, Khewra.	Rs.150,000/-

E-Bidding documents containing detailed terms and conditions, method of procurement, bid security, opening of bid, etc. are available electronically and can be downloaded from EPADS-PPRA Website: <https://eprocure.gov.pk> free of cost. Single Stage, Single Envelope with least cost method.

The electronic bids, prepared in accordance with the instructions in the bidding document along with bid money as stated above in the shape of demand draft/pay order in the name of Pakistan Mineral Development Corporation on account of bidder must be submitted by using EPAD on or before **27.02.2026 at 11:00 AM**. Tenders will be opened on EPAD on the same date at **11:30 AM** in the presence of participants who may desire to attend the tender opening.

Note:-

1. Original Bid Security Instrument Must be submitted to undersigned, before the online submission deadline of the bid; otherwise, respective bid will not be opened.
2. In case of any technical difficulty in using EPADS, prospective bidders may contact PPRA Office, 1st Floor, FBC building Sector G-5/2, Islamabad. Contact Number 051-111-137-237.

(Project Manager)
PMDC Salt Mines Khewra
Phone: 0544-231137





**Tender Enquiry No. Ref: No. PMDC/Pro/Civil Works(Office, Hospital/KHW/
DUE FOR OPENING ON: 27.02.2026 AT 11.30 AM**

Electronic bids (Lot - Wise) are invited from the interested parties/contractors registered with PEC (Pakistan Engineering Council) & Federal Board of Revenue (FBR)/Respective Revenue Boards for income tax & sales tax and who are on active taxpayer list (Income & Sales Tax) of the Federal Board of Revenue (FBR)/Respective Revenue Boards for following works at PMDC Salt Mines, Khewra as per BOQ/Technical Specs given below :-

SUMMARY OF COST

Lot No.	Detail of Works	Total Cost in PKR (inclusive of all taxes)
LOT NO. 1	Repair/Renovation of office building at PMDC Salt Mines, Khewra. Specifications/Bill of Quantities as per Annex - A	
LOT NO. 02	Providing/Laying of RCC Slab Lintel & Repair/Renovation of 03 Nos. Bungalow (officers colony) at PMDC Salt Mines, Khewra. Specifications/Bill of Quantities as per Annex - B	
LOT NO. 03	Providing/Laying of RCC Slab Lintel & Repair/Renovation of PMDC Hospital building at PMDC Salt Mines, Khewra. Specifications/Bill of Quantities as per Annex - C	

GENERAL TERMS AND CONDITION:

1. Firms registered with Pakistan Engineering Council should only submit tenders.
2. Electronic Bid must be submitted on EPAD on or before **27.02.2026 at 11:00 AM** which will be opened on the same day at **11:30 AM** in the presence of tenderers or their representatives who desire to participate.
3. Bid Money as per following detail in the form of pay order/demand draft made in the name of Pakistan Mineral Development Corporation on account of bidder from any scheduled bank shall accompany the bid/tender. Tender with less or without bid money (in the form of pay order/demand draft) or pay order/demand draft without the name of bidder shall not be considered:-



Lot No.	Detail of Works	Qty.	Bid Security
1.	Repair/Renovation of office building at PMDC Salt Mines, Khewra.	01 Job	Rs.400,000/-
2.	Providing/Laying of RCC Slab Lintel Repair/Renovation of 03 Nos. Bungalow (officers colony) at PMDC Salt Mines, Khewra.	01 Job	Rs.200,000/-
3.	Providing/Laying of RCC Slab Lintel & Repair/Renovation of PMDC Hospital building at PMDC Salt Mines, Khewra.	01 Job	Rs.150,000/-

4. Successful tender will be required to deposit security money @ 10% of the total value and bid money already deposited will be converted into security deposit while balance amount shall have to be deposited to maintain the Security deposit @ 10% of the total value which will be refunded after successful completion the DLP.
5. Bidders can bid in any of the above 03 Lots.
6. Tenders will be evaluated and awarded on a lot-wise basis. Bidders meeting the required all mandatory required documents and relevant experience, will be considered Technical responsive among the technical responsive bidders the contract will be awarded to the bidder offering the lowest evaluated price.
7. The rates should be quoted in PKR and should be inclusive of all applicable/prevaling taxes. Any increase in taxes at any stage shall not be considered.
8. The rates, prices and amounts shall be entered against each item in the Schedule of Prices/BOQ. Any item against which no rate or price is entered by the bidder will not be paid for by the Employer when executed and shall be deemed covered by the rates and prices for other items in the Schedule of Prices.
9. Interpretation of the PMDC regarding the tendered rates in case of any discrepancy regarding unit rates and total amount shall be final.
10. Escalation of cost at any circumstances will not be permitted.
11. **Bidders are requested to visit the sites before quoting rates.**
12. The bidder will be responsible to carry out the works as per detailed mentioned in BOQ and the payment to the contractor shall be made on actual work done.
13. All the materials, equipment's, workmanship, and installation practices used in civil works, electric works, plumbing works etc. strictly conforming to relevant standards, latest editions, as applicable and the respective material etc. shall be unused, of highest quality.
14. No running/interim payment will be applicable.
15. The Project Manager/Engineer may request samples of material to be installed in order to check its quality for approval purpose.
16. The quantity can be increased (upto 15% of the total contracted quantities) or decreased during the period of the contract at the sole discretion of PMDC without any prior notice to contractor.
17. No extra item shall be allowed to be executed without written orders from the concern Project Manager.



18. Concern Project Manager shall reserve the right to add/ delete any item from bill of quantities and the contractor will be responsible to execute any extra item required at site to complete the work and the payment for the same shall be made on mutually agreed rates.
19. No extra payment for water and electricity works etc. shall be claimed by the contractor.
20. The Contractor shall be responsible to make complete arrangements for the transportation/storage/security of the material etc. and the security/stay of his staff/workers.
21. Any damages to PMDC assets, HR of whatsoever nature shall be completely borne by the contractor.
22. The contractor shall execute works in a manner that daily operations/works of PMDC may not be affected.
23. Bids should remain valid for a period of 90 days from the date of opening of tenders. In case no specific date of validity is mentioned in the offer, it will be presumed to be valid for a period of 90 days from the date of opening of tender.
24. If the contractor fails to fulfill the contractual obligations of the contract, then the Security deposit will be forfeited.
25. All taxes will be applicable/deducted as per prevailing Government rules.
26. Firm/Contractor should be of sound financial health and shall provide Bank statement covering last 12 months (from the date of submission of bid).
27. Firm/Contractor must provide a list of the construction machinery and equipment available with the tenderer.
28. The tender for the supply / work will be completed / delivered at PMDC Salt Mines, Khewra.
29. Completion time period of Lot – 01 will be 04 months, whereas for Lot – 02 & 03 it will be 03 months. In case of delay, LD Charges @ rate 0.10% of total contract value will be applied per day upto 10 % of Total Contract Value.
30. Defect liability period (DLP)/warranty is 12 months, which will be start from the issuance of completion certificate.
31. If the Supplier/Contractor, having been notified, fails to remedy the defect(s) within the specified period, PMDC may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense.
32. The successful tender will have to execute a contract within the specified time, Payment will be made after satisfactorily completion work as per specifications and on submission of the bill in duplicate along with satisfactory completion certificate/report whereas security deposit will be refunded after expiry of DLP/warranty period.
33. The Firm/Contractor should have 03 years' experience in relevant Project/ work with Govt. departments and other organizations/companies. Proof of relevant experience/work order as well as satisfactory completion certificates should be attached.
34. The authorized representative of the bidder/bidding firm will only be allowed to sit in the tender opening on presentation of authority letter from the bidder/bidding firm issued in favor of representative to participate in the specific tender.



35. Firm/Contractor or any its subsidiary firms or of its directors/owners or any their relatives' parents, children, brother, sister) should not be under litigation with PMDC in any local or foreign court law.
36. Firm/Contractor or any its subsidiary firms or of its directors/owners or any their relatives parents, children, brother, sister) should not have any ongoing, under resolved business dispute with PMDC, PMDC shall be sole judge of fulfillment of this requirement.
37. In case of any dispute regarding this purchase order/assignment, the same will be resolved between the relevant parties through negotiations. If negotiations shall fail, then matter will be referred to the Arbitrator. The MD, PMDC will act as sole Arbitrator as per Arbitration Act, 1940. Decision/award of Arbitrator will be final and binding on the both parties.
38. The tenderer/supplier shall appoint a representative at the project and furnish his postal address and contact number to PMDC. Any notice to be served on or document to be signed by the contractor shall be either delivered personally or through the representative and in case it is not possible it shall be treated to have delivered if it has been mailed by registered post on the Postal Address of the representative.
39. PMDC Reserved the right to accept or reject the tender of the tenderer at any time without assigning reasons and cannot be challenged in any court of law.
40. The tenderer/supplier will be blacklisted who is found to the tender process by making coercive practices, collusive practices, corrupt practices, fraudulent practices & obstructive practices.
41. I agree to the above terms and conditions and give my acceptance.
42. Checklist of documents to be attached.

Note: For any technical queries, please contact Project Manager, PMDC Salt Mines, Khewra, Ph. No. 0544-231137.

Signature of tenderer: _____

Name of tenderer: _____


(Sajid Hussain)
DGM (Procurement)
Phone No.051-9265128



SPECIFICATIONS/BILL OF QUANTITIES

NAME OF WORK: REPAIR/RENOVATION OF OFFICE BUILDING AT PMDC SALT MINES, KHEWRA.

Sr. No.	Sub-heads and items of work	Qty.	Unit Rate in PKR inclusive of all taxes	Per.	Total in PKR inclusive of all taxes
1.	Dismantling of office building Mud on roof, Tiles and wooden rafter etc. and stacking/disposal at proposed place at site including cleaning of site. Complete in all respect or as directed by Engineer.	13,904 sqft		100 sqft	
2.	Dismantling of Brick Masonry Parapet of whole building of cement sand mortar including cleaning of site. Complete in all respect or as directed by Engineer.	738 cft		100 cft	
3.	Providing and laying of reinforced cement concrete 1:2:4 (RCC) using wash crushed graded in require shape (Margala) and design in roof slab and other structure member laid in position complete in all respect or as directed by Engineer.	8,076 cft		Per cft	
4.	Providing/Fabrication of mild steel reinforcement of M/S bar 1/2"Φ@0.668 lbs. per rft (17,510 Kgs), M/S bar 3/4"Φ@1.502lbs per rft (1308 Kgs) and M/S bar 3/8"Φ@0.376lbs per rft (400 Kgs) for cement concrete including cutting bending laying in position making joint and fastening including cost of binding wire, rings etc. with concealed beam, cantilever beam and overlap with labor charges. Complete in all respect or as directed by Engineer.	19,218 kgs		100 Kgs	
5.	Providing/Laying Bricks masonry work in 1.4 cement sand mortar for parapet of office building. Complete in all respect or as directed by Engineer.	738 cft		100 cft	
6.	Providing/Laying Cement plaster (minimum 1/2" thick) with 1.4 cement sand mortar inner and outer side its shades, parapet etc., complete in all respect including damaging portion or as	12,948 sqft		100 sqft	



	directed by Engineer.				
7.	Providing/Applying White washing/ Distempering (Berger, Nippon, Brighto) with 3 coats on new surface inner and outer side and old surface 2 coat i/c the cost of scrubbing, sand papering etc. complete in all respect or as directed by Engineer.	20,000 sqft		100 sqft	
8.	Removal of old wiring, points & Providing/Laying of new concealed electric wiring of light or fan points from point to switch with 7/0.29 & 3/29 Pakistan/Fast/Newage cable with all accessories such as PVC concealed conduit PPI switches, fixed on plastic sheet in plastic box, ceiling rose and holder, fan box, half switch, gang sheet etc. complete in all respect or as directed by Engineer. Electrical Works shall comply with IEC Standards i.e. IEC 60228 for Conductors, IEC 60227/60502- insulated cables, IEC 60364 for electrical installations	300 Points		Per point	
9.	Supplying and installation of powder coated main switch board for office building with following breakers. Complete in all respect or as directed by Engineer. 01 No. 04 Pole MCCB 100 Amps. 02 Nos. 02 Poles breaker 32 Amps. 30 Nos. 01 Poles breaker 16 Amps.	1 Nos		Each	
10.	Providing and fitting of 30 Watt or as directed energy saver Philips or equivalent in inner and outer side of Office Building. complete in all respect or as directed by Engineer.	8 Nos		Each	
11.	Providing and fitting of parnalas PVC Pipe 4"Φ (Dadex or Eqv.) in vertical position for drainage of rainy water from roof including clamps PVC bend and PVC Elbow etc. and making the surface good. complete in all respect or as directed by Engineer.	598 Rft		Per rft	
G. Total in PKR inclusive of all taxes (Lot – 1 Only)					



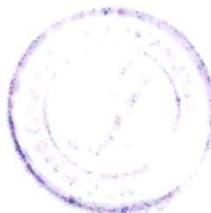
SPECIFICATIONS/BILL OF QUANTITIES

NAME OF WORK: PROVIDING/LAYING OF RCC SLAB LINTEL & REPAIR/RENOVATION OF 03 NOS. BUNGALOW (OFFICERS COLONY) AT PMDC SALT MINES, KHEWRA.

Sr. No	Sub-heads and items of work	Qty.	Unit Rate in PKR inclusive of all taxes	Per.	Total in PKR inclusive of all taxes
1.	Dismantling of Roof Bungalow No 5, Bungalow No.6 and Bungalow No.8 roof Tiles, Wooden rafters, cement concrete etc. and gathering/disposal at proposed site including cleaning of site. Complete in all respect or as directed by Engineer.	4662 sqft		100 Sft	
2.	Dismantling of Brick Masonry Parapet of whole building of cement sand mortar & disposal of surplus material at proposed place. Complete in all respect or as directed by Engineer.	178 cft		100 Cft	
3.	Providing and laying of reinforced cement concrete 1:2:4 using wash crushed graded in require shape (Margala) and design in roof slab and other structure member laid in position. Complete in all respect or as directed by Engineer.	2779 Cft		Per cft	
4.	Providing/Fabrication of mild steel reinforcement M/S bar 1/2"Φ@0.668 lbs. per rft (6742 Kgs) M/S bar 3/8"Φ 0.376lbs. per rft (204 Kgs) for cement concrete including cutting bending laying in position making joint and fastening including cost of binding wire, rings with concealed beam, cantilever beam and overlap with labor charges D/formed bars. Complete in all respect or as directed by Engineer.	6946 kgs		100 kgs	
5.	Providing/Laying Bricks masonry work 1.4 cement sand mortar for parapet etc. of verandah and Hall etc. Complete in all respect or as directed by Engineer.	180 cft		100 cft	
6.	Providing/Laying Cement plaster (minimum 1/2") with 1.4 cement sand mortar inner and outer side its shades, parapet etc., complete in all respect including damaging portion or as directed by engineer.	4268 sqft		100 sqft	
7.	Providing/Applying White washing/ Distempering (Berger, Nippon, Brighto) with 3 coats on new surface inner and outer side	10,000 sqft		100 sqft	



	and old surface 2 coat including well scrubbing, sand papering. Complete in all respect or as directed by Engineer.				
8.	Removal of old wiring, points & Providing/Laying of new concealed electric wiring of light or fan points from point to switch with 7/0.29 & 3/29 Pakistan/Fast/Newage cable with all accessories such as PVC concealed conduit PPI switches, fixed on plastic sheet in plastic box, ceiling rose and holder, fan box, half switch, gang sheet etc. complete in all respect or as directed by Engineer. Electrical Works shall comply with IEC Standards i.e. IEC 60228 for Conductors, IEC 60227/60502- insulated cables, IEC 60364 for electrical installations	75 Points		Per point	
9.	Supplying and installation of powder coated main switch board with following breakers. Complete in all respect or as directed by Engineer. 03 Nos. 02 Pole 32 Amps. 30 Nos. 01 Poles breaker 16 Amps.	3 Nos		Each	
10.	Providing and fixing of W.C Full with tankey (three star or eqv.) or size white glazed including 4 Gallons capacity cistern flushing tank. Complete in all respect or as directed by Engineer.	04 Nos		Each	
11.	Providing and fixing of English commode (three star or eqv.) in bath complete set in all respect with flush tank including accessories. Complete in all respect or as directed by Engineer.	04 Nos		Each	
12.	Providing and fixing in position wash hand basin (three star or eqv.) with pedestal single hole including bracket pillar, cock, stop cock c-p connection, rubber plug with washroom mutts, flush pipe, waste coupling etc., Complete in all respect or as directed by Engineer.	04 Nos		Each	
13.	Providing and fitting of energy saver 30 watts or as directed Philips or equivalent in inner and outer side of 3 Nos Bungalows. Complete in all respect or as directed by Engineer.	8 Nos		Each	
14.	Providing and fitting of parnalas PVC Pipe (dadex or eqv.) 4"Φ in vertical position for drainage of rainy water from roof including clamps PVC bend and PVC Elbow etc. complete in all respect	130 rft		Per rft	
G. Total in PKR inclusive of all taxes (Lot - 02 only)					



LOT - 03

SPECIFICATIONS/BILL OF QUANTITIES

NAME OF WORK: PROVIDING/LAYING OF RCC SLAB LINTEL & REPAIR/RENOVATION OF WHOLE PMDC HOSPITAL BUILDING AT PMDC SALT MINES, KHEWRA.

Sr. No.	Sub-heads and items of work	Qty	Unit Rate in PKR inclusive of all taxes	Per.	Total in PKR inclusive of all taxes
1.	Dismantling of Hospital Building Mud-roof, Tiles Wooden Rafters and gathering/disposal at proposed site including cleaning of site. Complete in all respect or as directed by Engineer.	3276 sqft		100 Sft	
2.	Dismantling of Brick Masonry Parapet of whole building of cement sand mortar and gathering/disposal at proposed site including cleaning of site. Complete in all respect or as directed by Engineer.	412 Cft		100 Cft	
3.	Providing and laying of reinforced cement concrete 1:2:4 using wash crushed graded in require shape (Margala) and design in roof slab and other structure member laid in position. Complete in all respect or as directed by Engineer.	2276 cft		Per cft	
4.	Providing/Fabrication of mild steel reinforcement M/S bar 1/2"Φ@0.668 lbs. per rft (4415 kgs) M/S bar 3/8"Φ @0.376lbs per rft-(288 kgs) for cement concrete including cutting bending laying in position making joint and fastening including cost of binding wire with concealed beam, cantilever beam and overlap with labor charges D/formed bars. Complete in all respect or as directed by Engineer.	4700 kgs		100 Kgs	
5.	Providing/Laying Bricks masonry work 1.4 cement sand mortar for parapet of verandah and Hall. Complete in all respect or as directed by Engineer.	325 cft		100 Cft	
6.	Providing/Laying Cement plaster with 1.4 cement sand mortar inner and outer side its shades, parapet etc., complete in all respect including damaging portion of (minimum thick 1÷2 inch) Complete in all respect or as directed by Engineer.	5740 sqft		100 Sft	
7.	Providing/Applying White washing/ Distempering (Berger, Nippon, Brighto) with 3 coats on new surface inner and outer side and old surface 2 coat including well scrubbing, sand papering. Complete in all respect or as directed by Engineer.	10,000 sqft		100 Sft	



8.	Removal of old wiring/switch etc. and Providing/Laying new concealed Electric wiring of light or fan points from point to switch with 7/0.29 & 3/29 Pakistan cable with all accessories such as PVC concealed conduit PPI switches, fixed on plastic sheet in plastic box, ceiling rose and holder, fan box, half switch etc. Complete in all respect or as directed by Engineer. Electrical Works shall comply with IEC Standards i.e. IEC 60228 for Conductors, IEC 60227/60502- insulated cables, IEC 60364 for electrical installations	50 Points		Per point	
9.	Supplying and installation of powder coated main switch board for office building with following breakers. Complete in all respect or as directed by Engineer. 01 Nos. 02 Poles breaker 32 Amps. 06 Nos. 01 Pole breaker 16 Amps.	1 NO		Each	
10.	Providing and fixing of W.C Full with tankey (three star or eqv.) or size white glazed including 4 Gallons capacity cistern flushing tank. Complete in all respect or as directed by Engineer.	02 NOS		Each	
11.	Providing and fixing of English commode (three star or eqv.) in bath complete set in all respect with flush tank including accessories. Complete in all respect or as directed by Engineer.	02 NOS		Each	
12.	Providing and Fixing in position wash hand basin with pedestal (three star) single hole including bracket pillar, cock, stop cock c-p connection, rubber plug with washroom muts, flush pipe, waste coupling etc., Complete in all respect or as directed by Engineer.	02 NOS		Each	
13.	Providing and fitting of energy saver 30 watts or as directed Philips or equivalent in inner and outer side of 3 Nos Bungalows. Complete in all respect or as directed by Engineer.	10 Nos		Each	
14.	Providing and fitting of parnalas PVC Pipe (dadex or eqv.) 4"Φ in vertical position for drainage of rainy water from roof including clamps PVC bend and PVC Elbow etc. Complete in all respect or as directed by Engineer.	195 rft		Per rft	
G. Total in PKR inclusive of all taxes (Lot - 03 only)					



Check List

Sr. No.	Description	Yes	No																
1	Original Bid money as per following detail is attached/handed over to the PMDC :- <table border="1" data-bbox="363 293 1082 584"><thead><tr><th>Lot No.</th><th>Bid Security</th><th>No.</th><th>Dated</th></tr></thead><tbody><tr><td>1.</td><td>Rs.400,000/-</td><td></td><td></td></tr><tr><td>2.</td><td>Rs.200,000/-</td><td></td><td></td></tr><tr><td>3.</td><td>Rs.150,000/-</td><td></td><td></td></tr></tbody></table>	Lot No.	Bid Security	No.	Dated	1.	Rs.400,000/-			2.	Rs.200,000/-			3.	Rs.150,000/-				
Lot No.	Bid Security	No.	Dated																
1.	Rs.400,000/-																		
2.	Rs.200,000/-																		
3.	Rs.150,000/-																		
2	Copy of Valid Registration with Pakistan Engineering Council (PEC)																		
3	List of the construction machinery and equipment available with the tenderer.																		
4	Copy of CNIC and Authority Letter.																		
5	Copy of registration certificate with FBR/relevant authority department.																		
6	Copies of experience certificate, work orders as well as completion/performance certificate not less than 03 years.																		
7	List of technical staff available with the tenderer who will execute/ supervise the work.																		
8	Financial Soundness Proof (Bank Reference or Bank Statement, Audited Report / Accounts).																		
9	Affidavit of litigation																		
10	Affidavit regarding no dispute with PMDC.																		

Tenderer/Bidder Signature



DETAIL OF STEEL

FOR OFFICE:

- a) M/S bar $1/2''\Phi$ @ 0.668 lbs. per rft
Area of roof slab = 14592sqft
Required as per standard
@120kg per 100 sqft $14592 \times 120 \div 100 = 17510\text{kgs}$
- b) M/S bar $3/4''\Phi$ @ 1.502lbs per rft
Hinged beam under roof
Concealed beam
 $1920 \times 1.502\text{lbs} \div 2.204 = 1308\text{kg}$
- c) M/S bar $3/8''\Phi$ @ 0.376lbs per rft
Ring for Hinged beam under roof
Concealed beam
 $2340 \times 0.376 \div 2.204 = 400\text{kgs}$
- 17510+1308+400=19218kgs**

FOR BUNGLOW:

- a) M/S bar $1/2''\Phi$ @ 0.668 lbs. per rft
Area of roof slab = 5619sqft
Required as per standard
@120kg per 100 sqft $5619 \times 120 \div 100 = 6742\text{kg}$
- b) M/S bar $3/8''\Phi$ for concealed beam and strip.
For ring beam
 $1200\text{Rft} \times 0.376\text{lbs} \div 2.204 = 204\text{kg}$
- 6742+204=6946kgs**

FOR HOSPITAL:

- a) M/S bar $1/2''\Phi$ @ 0.668 lbs. per rft
Area of roof slab = 3836sqft
Required as per standard
@115kg per 100 sqft $3836 \times 115 \div 100 = 4415\text{kg}$
- b) M/S bar $3/8''\Phi$ for vertical position of shade and concealed beam and strips
For vertical R.C.C shade
For Horizontal position
For ring beam
 $1690\text{Rft} \times 0.376\text{lbs} \div 2.204 = 288\text{kg}$
4415+288=4700 kgs