



**Name of Work: Aluminum work in student activity centre at VLTC
Building & in INSTRON MECHANIC TESTING LAB at
Metallurgy Department, MNIT campus JAIPUR**

NIT NO. -MNIT/NIT/E/17-18/40

TENDER DOCUMENT

Registrar, Malaviya National Institute of Technology, Jaipur (Raj)

Malaviya National Institute of Technology Jaipur

PRESS NOTE

The Registrar, Malaviya National Institute of Technology, Jaipur, invites sealed item rate tenders from the reputed contractors registered in CPWD, PWD, MES, PSUs and other Govt. / semi govt organizations under valid category for the following work:

1.	Name of work	Aluminum work in student activity centre at VLTC Building & in INSTRON MECHANIC TESTING LAB at Metallurgy Department, MNIT campus JAIPUR
2.	Estimated cost	Rs.2,48,000.00
3.	Earnest Money	Rs.4,960.00
4.	Cost of tender Documents	Rs.500.00 to be deposited in the form of separate DD with EMD. Document is available on institute web site www.mnit.ac.in
5.	Period for completion	60 Days
6.	Last Date & time for submission of tender	19.02.2018 Up to 2:00 PM
7.	Opening of tender	19.02.2018 at 3:30 PM

The contractors registered in CPWD, PWD, MES, PSUs, other Government and semi Government organization under appropriate category to participate in the tender of above description may apply. The registration / enlistment of the contractors shall be valid on the last date of submission of tender. In case the last date of submission is extended, the enlistment/registration of contractor shall also be valid upto extended date of submission.

The tenderer shall submit self attested copied of their registration/enlistment certificate along with tender document. The original copies of registration/enlistment certificate might be called upon by the Registrar, MNIT at any time after the opening of tender. The Registrar reserves the right to verify the documents for his full satisfaction including sending of the same to respective issuing department for verification of authenticity. Any information furnished by tenderer found incorrect will attract stringent legal action against him upto the extent to debar him from tendering in future and forfeiture of entire EMD and performance security.

Earnest money shall be deposited at the time of submission of tender documents. The earnest money shall be in the form of Demand Draft/ Banker's cheque of a scheduled bank issued in favour of Registrar, MNIT, Jaipur.

The successful tenderer shall have to submit a performance guarantee of 5% (Five percent) of the composite tendered amount in the appropriate form as given in PWD-6 attached with tender document within 7 days of issue of letter of acceptance.

The complete set of tender documents is available at MNIT's website www.mnit.ac.in and may be downloaded from there.

1. ELIGIBILITY OF BIDDERS

This invitation for tender is open to authorized contractors of CPWD, PWD, MES, PSUs, other Government and semi Government organization under appropriate category to participate in the tender of above description.

The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or submission of a bid not substantially responsive to the bidding documents in every respect will be at the Bidder's risk and may result in rejection of its bid.

2. LANGUAGE OF BID:

The bid prepared by the Bidder, as well as all correspondence and documents relating to the bid and exchanged by the Bidder and the client, shall be written in English language.

3. DOCUMENTS COMPRISING BID:

The bid is required to be submitted in two parts with the bid letter.

Part-1 contain The registration/enlistment certificates, DD/Bankers' cheque of tender fee and the earnest money shall be kept in an envelope and marked as "EMD & Registration", Sales Tax clearance certificate, Permanent Account Number of the Firm, work experience certificate.

Part-2 contain The tender document shall be placed in another envelop marked as "TENDER". Tenders received not marked as above shall not be opened and summarily rejected without assigning any reason.

Both of these two envelopes shall be submitted together in another sealed envelope marked **with name of work, date & time of opening** and shall be submitted to Registrar, MNIT addressing "**The Registrar, Malaviya National Institute of Technology, JLN marg, Jaipur (Raj.)-302017**" Upto 2:00 pm on 19.02.2018 and will be opened by him or his authorized representative in his office on the same day at 3:30 PM.

The envelope marked as "TENDER" of only those tenderers shall be opened, whose earnest money and registration certificates, placed in other envelope, is found correct.

The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the Contract. All pages of the bid, except for un-amended printed literature, shall be initiated by the person or persons signing the bid with their firm's seal. Any interlineations, erasures or overwriting shall be valid only if the persons or persons signing the bid initial them.

- (i) The rate (s) shall be quoted in decimal coinage. Contractor must ensure to quote rate of each item clearly. If the column / space specified to quote the rate found blank and no rate is quoted by the bidder, the rate of such item shall be treated as "0" (Zero).
- (i) The price should be inclusive of all taxes and duties which will be payable after successful completion of work insurance and other local costs incidental to delivery, installation/demonstration and onsite preparation of the goods to their final destination. Under no circumstances shall claim for any additional taxes, levies, etc., be entertained once the final contract is awarded on the basis of the rates quoted. Prices will remain firm till complete execution of the order.
- (ii) Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected. If there is a discrepancy between words and figures, the amount in words will prevail. If the bidder does not accept the correction of the errors, its bid will be rejected, and its EMD shall be forfeited.

4. REJECTION OF BID:

The Registrar reserves the rights to reject any bid or to disqualify any or all the bidders, without assigning any reasons at any stage.

The Registrar, MNIT, Jaipur does not bind himself to accept the lowest or any other tender and reserves to himself the authority to reject any or all the tenders received without the assignment of any reason. All tenders in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidders shall be summarily rejected.

- (i) If Bid is not accompanied with the requisite documents mentioned in bid document or is not in accordance with procedure specified in para 3 above, or is not accompanied with Bid Security & registration of contractor in required category, it would be liable for rejection.
- (ii) Furnishing of incorrect or incomplete or concealment of any information required in the bid documents would render the bid liable for rejection.
- (iii) If all the copies enclosed in support or affidavit is not duly attested then bid of the bidder is to be rejected.

5. BID VALIDITY:

Bids shall remain valid for a period of not less than 90 days after opening of the Tender. A bid valid for a shorter period shall be rejected by the Registrar as non-responsive.

6. PERFORMANCE SECURITY:

- (i) The Contractor, whose bid is accepted, will be required to furnish performance guarantee of 5% (Five Percent) of the composite tendered amount within the period specified in "Letter of Acceptance" valid for a period of three months initially, that may be extended by the Registrar if seems necessary to keep the contract valid till the time of actual completion of work.
- (ii) This guarantee shall be in any form from banker's cheque, Demand Draft, Pay order, Guarantee Bonds of any scheduled in accordance with the prescribed form. In case the contractor fails to

deposit the said performance guarantee within the period as indicated in Letter of Acceptance, including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor.

7. SECURITY DEPOSIT:

- (i) Security Deposit @5% (five percent) of the gross amount of bill shall be deducted from each running bill of the contractor till the sum along with the sum already deposited as earnest money amounts to security deposits @5% of accepted composite tendered amount of the work.
- (ii) The Security deposit so deducted shall be refundable to contractor on successful completion of defect liability period of six months that will be commenced from the date of completion as recorded by the Registrar or his representative after the satisfactory completion & commissioning of work.

8. COMPUTERIZED MEASUREMENT BOOK:

All measurement of all items having financial value shall be entered by the contractor and compiled in the shape of the Computerized Measurement Book having pages of A-4 size as per the format of the department so that a complete record is obtained of all the items of works performed under the contract.

All such measurement and levels recorded by the contractor or his authorized representative from time to time, during the progress of the work, shall be got checked by the contractor from the Engineer-in-Charge or his authorized representative as per interval or program fixed in consultation with Engineer-in-Charge or his authorized representative. After the necessary corrections made by the Engineer-in-Charge, the measurement sheets shall be returned to the contractor for incorporating the corrections and for resubmission to the Engineer-in-Charge for the dated signatures by the Engineer-in-Charge and the contractor or their representatives in token of their acceptance.

The final fair computerized measurement book given by the contractor, duly bound with its pages machine numbered should be 100% correct and no cutting or over-writing in the measurements would thereafter be allowed. If at all any error is noticed, the contractor shall have to submit a fresh computerized MB with its pages duly machine numbered and bound the Divisional Office records, and allotted a number as per the Register of Computerized MBs. This should be done before the corresponding bill is submitted to the Division Office for payment. The contractor shall submit two spare copies of such computerized MB's for the purpose of reference and record by the various officers of the department.

The contractor shall also submit to the department separately his computerized Abstract of Cost and the bill based on these measurements, duly bound, and its pages machine numbered along with two spare copies of the bill. Thereafter this bill will be processed by the Division Office and allotted a number as per the computerized record in the same way as done for the measurement book meant for measurements.

The contractor shall without extra charge, provide all assistance with every appliance, labour and other things necessary for checking of measurements/levels by the Engineer-in-Charge or his representative.

Engineer-in-Charge or his authorized representative may cause either themselves or through another officer of the department to check the measurements recorded by contractor and all provisions stipulated herein above shall be applicable to such checking of measurements or levels.

It is also a term of this contract that checking and / or test checking the measurements of any item of work in the measurement book and / or its payment in the interim, on account of final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the contractor from liabilities from any over measurement or defects noticed till completion of the defects liability period.

9. TIME FOR COMPLETION:

- (i) The time allowed for carrying out the work will be 60(SIXTY) Days from the date of start to be intimated vide "Letter of Acceptance" or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the bid documents.
- (ii) The site for the work is available.

10. LIQUIDATED DAMAGES:

- (i) If the contractor fails to complete the work as per time schedule specified in the bid, the Registrar shall, without prejudice to its other remedies under the contract, deduct from the contract Price, as liquidated damages, a sum equivalent to 1.00% percent of the delivered price of the delayed goods for each week of delay upto maximum 10% of contract value until actual delivery or performance up to a maximum is reached, Registrar may consider termination of the contract also.
- (ii) The contractor shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, it's delay in performance or other failure to perform its obligations under the contract is the result of an event of Force Majeure.
- (iii) For purposes of this clause, "Force Majeure" means an event beyond the control of the contractor and not involving the client's fault or negligence. Such events may include, but are not restricted to, acts of MNIT either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- (iv) If a Force Majeure situation arises, the contractor shall promptly notify Registrar in writing of such condition and the cause thereof. Unless otherwise directed by Registrar in writing, the contractor shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

11. OTHER CONDITIONS OF CONTRACT:

- (i) Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary

information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The tenderer shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.

- (ii) Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable for rejection.
- (iii) The Registrar, MNIT, Jaipur reserves the right of accepting the whole or any part of the bid and the bidders shall be bound to perform the same at the rate quoted.
- (iv) The contractor shall not be permitted to bid for works in the MNIT responsible for award and execution of contracts, in which his near relative is posted a Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any gazetted officer in the MNIT or in the Ministry of Human Resources & Development. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of MNIT.
- (v) The bid for the works shall remain open for acceptance for a period of Ninety (90) days from the date of opening of eligibility bid. If any bidder withdraws his bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to the department, then the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the bidders shall not be allowed to participate in the rebidding process of the work.
- (vi) Registrar may waive any minor informality, nonconformity, or irregularity in a bid which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any bidder.
- (vii) The Registrar as per the requirement will call the contractor to get the material tested at any time, before or during the execution time from any reputed laboratory as deemed suitable to carry out such test. Samples of materials required for testing shall be provided free of cost by the contractor. Testing charges, if any, shall be borne by the MNIT in case the test results are satisfactory, and shall be borne by the contractor if the results are not satisfactory, except where-ever specifically mentioned otherwise in the Bid. All other expenditure to be incurred for taking samples, conveyance, packing etc. shall be borne by the contractor.
- (viii) The contractor shall submit a detailed program of work within 5 days of the date of issue of letter of intent. Detailed program should include all the mile stones, cash flow, material procurement, manpower deployment. Program must show clearly the critical path to complete the project in time.
- (ix) The Registrar can modify the program and the contractor shall have to work accordingly. During review of work progress, Registrar can ask to modify the program. Contractor shall resubmit the modified program in 2 days.

- (x) Statutory deductions on account of GST/VAT, income tax, Labour CESS and surcharge as applicable shall be made from the gross amount of the bill.
- (xi) The contractor shall make his own arrangements for obtaining electric connection, if required and make necessary payments directly to the department concerned.
- (xii) The contractor shall make his own arrangement of water for construction and drinking purpose as well for electricity and its distribution at his own cost. The department will render only assistance to the contractor for making application to authorized Electric supply agency, if required. All the fees and charges including consumption charges shall be borne by the contractor.
- (xiii) Water Charges @1% shall be deducted from the contractor's bill payments on pro rata basis on account of supply of water from the institute.
- (xiv) No payment shall be made to the contractor for any damage caused by rain, snow fall, floods or any other natural causes whatsoever during the execution of work. The damage caused to work shall have to be made good by the contractor at his own cost and no claim on this account shall be entertained.
- (xv) Other agencies may also simultaneously be executing the work of painting, wood work, electrification, Horticulture or external services and other building works for the same building along with this work. The contractor shall afford necessary facilities for the same and no claim in the matter shall be entertained. The contractor shall especially co-ordinate with the other agency carrying out his work.
- (xvi) The contractor shall take all precautions to avoid accidents by exhibiting necessary caution boards. He shall be responsible for all damages and accidents caused due to negligence on his part. No hindrance shall be caused to traffic during the execution of the work by storing materials on the road.
- (xvii) The malba /garbage generated at site due to construction activities shall be removed from the site immediately & shall be disposed off by the contractor to the approved dumping site identified by the Engineer-in-charge. The surplus soil/earth shall be disposed of as per the directions of Registrar separately.
- (xviii) The contractors are advised to ensure the availability of the required materials in the market and then offer their rates.

PARTICULAR SPECIFICATION

1.0 ALUMINUM WORK

Aluminum work shall be got executed from specialized agency. The specialized agency for the aluminum work shall be got approved form the Engineer-in-Charge, well before actual commencement of the item of work. Necessary performance certificates in respect of agencies proposed to be engaged shall be submitted within 30 days from the date of issue of acceptance letter to substantiate technical capability and experience of the agency for prior approval of the Chief Engineer.

Specification for Aluminum Door, Window, Ventilator

1. Extent and Intent:

The work shall be carried out through an approved specialist contractor who shall furnish all materials, labour, accessories equipment tool & plant, incidental. Required for providing and installing anodized aluminum door, windows, claddings, louvers and other items as called for on the drawings. Te drawings and specifications cover the major requirement only. The supplying of additional fastenings, accessory features and mentioned specifically herein but which are necessary to make a complete installation shall be a part of the contract.

2. General :

Aluminum doors, windows etc. shall be of sizes, section detail as shown on the drawings. The details shown on the drawings indicate generally the sizes of the components parts and general standards. These may be varied slightly to suit the standard adopted by the manufacture. Before proceeding with any manufacturing, the contractor shall prepare and submit complete manufacturing and installation drawings for approval of Engineer-in-Charge and no work shall be performed until the approval of these drawings is obtained.

3 Shop Drawings :

The contractor shall submit the shop drawings of doors, windows louvers cladding and other aluminum work, based on architectural drawings to Engineer-in-Charge for this

approval. The drawings shall show full size sections of door, window etc. thickness of metal (i.e. wall thickness) details of construction, sub frame / rough ground profile anchoring details, hardware as well as connection of windows doors, and other metal work to adjacent work. Samples of all joints and methods of fastening and joining shall be submitted to the Engineer-in-Charge for approval well in advance of commencing the work.

4 Samples :

Samples of doors, windows, louvers etc shall be fabricated assembled and submitted to the Engineer-in-Charge for his approval. They shall be sizes, types etc. as decided by Engineer-in-Charge. All samples shall be provided the cost of the contractor.

5 Sections :

Aluminum doors and windows shall be fabricated from extruded section of profiles as detailed on drawings. The sections shall be extruded by the manufacturers approved by the Engineer-in-Charge. The aluminum extruded section shall conform to IS designation 63400 WP (HV9WP old designation) with chemical composition and technical properties as per IS : 733 and 1285. The permissible dimensional tolerance of the extruded sections shall be such as not to impair the proper and smooth function / operation and appearance of doors and windows.

6 Fabrications :

Doors, window etc. shall be fabricated to sizes as shown at factory and shall be of section, sizes combinations and details as shown in the Architectural drawings, all doors, windows etc. shall have mechanical joints. The joints shall be designed to withstand a wind load of 150 kgs. Per sqm the design shall also ensure that the maximum deflection of any member shall accurately machined and fitted to form hairline joints prior to assembly. The join and accessories such as cleats brackets, etc. shall be of such materials as not to cause any bi-metallic action, the design of the joints and accessories shall be such that the accessories are fully concealed. The fabrication of doors, window etc. shall be done in suitable sections to facilitate easy transportation, handing and installation.

Adequate provision shall be made in the door and windows members for anchoring to support and fixing of hardware and other fixture as approved by the Engineer-in-Charge.

.7 Anodising :

All aluminum sections shall be anodized as per IS : 7088 and to required colour as specified in the item as per IS : 1868 grading, after cutting the members to requisite sizes. Anodising shall be to the specified grade with minimum average thickness of 15 microns when measured as per IS : 6012. The anodic coating shall be properly sealed by steams or by boiling in deionized water or cold sealing process as per IS : 1868 / IS : 6057. Polythene tape protection shall be applied on the anodized sections before they are brought to site. All care shall be taken to ensure surface protection shall be removed on transportation, storage at site and installation. The tape protection shall be removed on installation. The sample will be tested in the approved laboratory and cost of samples, cost or testing shall be borne by the contractor.

8 Powder Coating :

The powder used for powder coating shall be polyster powder made by Berger or Jenson & Nicholision or equivalent. The thickness of powder coating shall not be less than 50 micron at any point measured with micrometer.

9 Protection of Finish :

All aluminum members shall be wrapped with approved self-adhesive non-staining PVC tapes.

10 Handling and stacking :

10.1 Fabricated materials shall be carted in an approved manner to protect the material against any damage during transportation. The loading and unloading shall be carried out with utmost care. On receipt of materials at site, they shall be carefully examined to detect any damaged pieces. Arrangements shall be made for expeditious replacement of damaged pieces / parts. Material found to be acceptable on inspections shall be repacked in crates and stored safely.

.10.2 In the case of composite windows, and doors the different units are to be assembled first. The assembled composite units should be checked for line, level and plumb before final fixing is done. Unit may be serial numbered and identified as how to be assembled in their final location of situation so warrants.

510.3 Where aluminum comes in to contact with masonry brick work / concrete / plaster or dissimilar metals. It shall be coated with approved insulation lacquer paint or plastic tape to ensure that electro chemical corrosion is avoided. Insulation materials shall trimmed off to clear flush line on completion.

10.4 Silicon Sealant :

The peripheral gaps between plastered faces / RCC and aluminum sections shall be sealed both from inside and out side to make the windows watertight. Gaps upto 10mm between the peripheral aluminum member and masonry /RCC/ Stone shall be sealed by inserting. Backer Rod manufactured by HT TROPLAST or Supreme Industries and by application of weather silicon / sealant of DOW corning / GE silicon make.

10.5 The contractor shall be responsible for assembling composite, bedding set straight plumb, level and for their satisfactory operation after fixing is complete.

11 Installation :

11.1 Just prior to installation the doors, windows etc. shall be uncrated and stacked on edge on level bearers and supported evenly. The frame shall be fixed in to position true to line and level using adequate number of expansion machine bolts, anchor fasteners of approved size and manufacture and in an approved manner. The holes in concrete / masonry members for housing anchor bolts shall be drilled with an electrical drill.

11.2 The doors windows assembled as shown on drawings shall be placed in correct final position in this opening and marks made on concrete members at jambs, sills and heads against the holes provided in frames for anchoring. The frame shall then be removed the n the opening and laid aside. Neat holes with parattle sides of appropriate size shall then be drilled in the concrete members with an electric drill at the marking to house the expansion bolts. The expansion bolts shall then be inserted in the holes, struck with a light hammer till the nut is forced in to the anchor shall. The frame shall then be placed in

final position. In the opening and anchored to the support through cadmium plated machine screws of required sized threaded to expansion bolts. The frame shall be set in the opening by using wooden wedges at supports and be plumbed in position. The wedges shall invariably be place at meeting points of glazing bars and frames.

11.3 Neoprene Gaskets :

The E.P.D.M. gasket of suitable profile as manufactured by HANU INDUSTRIES, ANNAND LESCUYER make shall be provided at all required positions to make the glazing airtight. The contractor shall provide and install Neoprene Gaskets of approved size and profile at all locations as shown and as called for to render the doors windows etc. absolutely air tight and weather tight. The contractor shall submit samples of the gaskets for approval and procure after approval only.

11.4 Fittings :

The contractor shall cut the floor properly with stone cutting machine to exact size and shape. The spindle of suitable length to accommodate the floor finish shall be used. The contractor shall give the guarantee duly supported by the company for proper functioning of floor springs at least for 10 years.

Hinges, stays handles, tower bolts, locks and other fittings shall be of quality and manufacturer as approved by the Engineer-in-Charge.

12 Manufacture's Attendances :

The manufacture immediately proper to the commencement of glazing shall adjust and set all windows and foors and accept responsibility for the satisfactory working of the opening frames.

13 Details of Test :

13.1 The various tests on aluminum sections shall be conducted in accordance with the relevant IS codes.

13.2 The minimum number of each unit of doors/ windows shall be selected at random by Engineer-in-Charge as such that all the aluminum section shall be got tested.

S.No.	Details	No. of Tests
1.	Doors, windows and Ventilators	5% of Nos. manufactured

13.3 The sample of major member of each unit of doors / windows shall be selected at random by Engineer-in-Charge as such that all the aluminum section shall be got tested.

13.4 The cost of sample carriage of the samples shall be borne by the contractor. Testing charges shall be born by department, but if a sample fails in testing, complete cost or testing charges shall be born by the contractor.

14 Acceptance Criteion :

The aluminum sections shall conform to the provisions of the relevant items. For payment purpose only actual weight of sections shall be taken into account. If however, the sectional weight of any aluminum section is higher than the permissible variation then the weight payable shall be restricted to the weight of the section including permissible variation.

15 Measurement :

Payment by weight shall be made for aluminum sections including beading only and all fixing angles cleats fittings and fixtures such as handles and hinges etc., shall not be included in the weight to be paid.

16 Rates :

The rates of the items shall include the cost of all materials, labors and inputs required and all the above operations.

17. LIST OF APPROVED PRODUCTIS FOR WORKS

S.No.	Description	Approved Manufacturer / Brand Name
1	Aluminium sections (Anodising by approved anodizing firm)	Hindalco, Jindal, Indian Aluminum Co.
2	Clear Glass	Modiguard, Saint Gobain, Jolly
3	Particle board i/c laminated	NOVAPAN. DECO, BHUTAN, CEO BOARD

Malaviya National Institute of Technology Jaipur

Estate section

G-Schedule

Name of Work:- Aluminum work in student activity centre at VLTC Building & in INSTRON MECHANIC TESTING LAB at Metallurgy Department, MNIT campus JAIPUR

NIT NO. -MNIT/NIT/E/17-18/40

SLNo	Description	Qty	Unit	Rate	Amount
1	WOOD AND P.V.C. WORK				
1.1	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :				
1.1.1	150x10 mm	4	each		
1.1.2	100x10 mm	8	each		
1.2	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :				
1.2.1	125 mm	8	each		
2	REPAIRS TO BUILDINGS				
2.1	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq. meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground, all complete as per directions of Engineer-In-Charge.				
2.1.1	With cement mortar 1:4 (1 cement : 4 fine sand)	2.02	sqm		

3	DISMANTLING & DEMOLISHING				
3.1	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.				
3.1.1	In cement mortar	0.58	cum		
4	ALUMINIUM WORK				
4.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :				
4.1.1	For fixed portion				
4.1.1.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	287.59	kg		
4.1.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)				
4.1.2.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	110.2	kg		

4.2	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of Engineer-in-charge.				
4.2.1	Pre-laminated particle board with decorative lamination on both sides	36.13	sqm		
4.3	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):				
4.3.1	With float glass panes of 5.50 mm thickness	51.86	sqm		
4.4	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge.				
4.4.1	With stainless steel cover plate minimum 1.25 mm thickness	4	each		
4.5	Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete.				
4.5.1	Upto 5mm depth and 5 mm width	30	metre		

4.6	Providing and fixing aluminium tubular handle bar 32 mm outer dia, 3.0 mm thick & 2100 mm long with SS screws etc .complete as per direction of Engineer-in-Charge.				
4.6.1	Anodized (AC 15) aluminium tubular handle bar	8	each		
4.7	Providing and fixing 100mm brass locks (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	4	each		
		TOTAL Rs.			

I / We hereby agree to execute the work on the above mentioned rates and term condition, total amounting to Rs _____ for the entire work and on the enclosed terms and conditions of contract of the Institute.

Signature of the contractor with seal

Address_____

Mobile No _____

Opened by us on_____

Tender Stands total amounting to Rs_____ for the entire work

Executive Engineer

DOCUMENT CHECK-LIST FOR BIDDERS		
S.NO.	ITEM NAME	√
	Part-1(Envelope 1)	
1	Registration certificate	
2	Enlistment letter	
3	Sales Tax clearance certificate	
4	P.A.N. of Firm	
5	Similar work experience certificate	
6	Tender fee and EMD D.D.	
	PART-2(Envelope 2)	
1	TENDER DOCUMENT	
	Note:- 1. Sealed envelope 3 contains both envelope 1&2 2.Envelope 3 marked with name of work, date & time of opening	