

**INDIAN PLYWOOD INDUSTRIES RESEARCH AND TRAINING INSTITUTE**  
**Post Bag No.2273, Tumkur Road, Bangalore – 560 022.**

Tender No: SS/159/Vol .I

Date: 10.05.2018

**TENDER DOCUMENT FOR FABRICATION, SUPPLY, INSTALLATION AND COMMISSIONING OF 3 AXIS PROFILE CNC MACHINED MOULDING DIES FOR THE MANUFACTURE OF BAMBOO MAT TRAFFORD SHEETS AT IPIRTI BENGALURU.**

Tender Part I-Technical competence bid (**PRICE AND QUANTITY NOT TO BE QUOTED**)  
Tender Part II- Quantity and Price bid

**COST OF TENDER DOCUMENT Rs. 1000/-**

**RECEIPT NO.....**

**DATED:.....**

**Tender issued to M/s. ....**

.....

.....

**Last date for submission of Tender: on or before 04.06.2018 11.00 a.m**

**Sd/-**  
**Administrative Officer**

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**INDIAN PLYWOOD INDUSTRIES RESEARCH AND TRAINING INSTITUTE****Post Bag No.2273, Tumkur Road, Bangalore - 560 022**

Tender No: SS/159/vol. I/

Date: 10.05.2017

**Notice Inviting Tenders**

Sealed tenders are invited in two parts viz., **Part I** –Technical competence bid and **Part II**-Quantity and Price bid in two separate sealed covers duly super scribed with tender number, name of the item and Tender Part No (viz., Part I/Part II), from the reputed suppliers/fabricators for the **Fabrication, Supply, Installation and Commissioning of 3 Axis Profile CNC Machined Moulding Dies For the Manufacture Of Bamboo Mat Trafford Sheets At IPIRTI Bengaluru.** as per **Annexure I** (technical specification).

Tender Part I –Technical competence bid, consisting of only Technical Competence to undertake the work should furnish details on Work experience, past performance, infrastructure facilities, list of customers etc., along with EMD @ 2% of estimated cost. The eligibility of the tenderer will be based on the following criteria.

**Criteria I**

Preferably should have engaged in **Fabrication, Supply, Installation and Commissioning of CNC Machined Moulding Dies** Give details of the organization and work experience. Furnish list of customers as per format in **Annexure II**

- (a) Technical capabilities of the manufacturers with respect to in-house facilities such as Machinery (3 Axis Profile CNC Milling machine, Deep hole boring machine with facility to machine/drill in a single setting. Kindly provide details of these two machines in detail. If required we may visit the unit to assess the technical capability.) Tools, Precision Instruments, Design Dept., Plant/Workshop space availability, Man power and other required infrastructure facilities.

Submission of tender Part I without any of the above such documents are liable for rejection. A check list to avoid rejection of the tender (use format in Annexure III) should be compulsorily submitted along with **Part I -Technical competence bid.**

Tender **Part II** – Quantity and Price bid consisting of Schedule of quantities with price should accompany with the following documents. Design details, complete and detailed technical specifications etc., should be provided.

The offer Part II should be submitted in the following format only as given in Criteria II (Otherwise the offer will be liable for rejection)

**Criteria II**

**(1) a. Supply, Installation and Commissioning of CNC Machined Moulding Dies at IPIRTI, Bangalore**

b. Mandatory Spares, if any :

(2) Packing, forwarding and unloading charges :

(3) Insurance up to destination :

(4) Transportation Charges upto destination :

(5) Excise Duty % :

(6) Taxes % :

(7) Other charges like installation and commissioning :

**B**

(1) Guarantee/Warranty Period :

(2) After Sales Service :

(3) Delivery Period :

(4) Validity of the Offer :

(5) Payment Terms :

The tenders for the work will be received by the Administrative Officer in his/her office **up to 11.00 a.m, on 04.06.2018**. The sealed tenders Part I Technical competence bid will be opened in presence of the Director/Joint Director at **11.30 a.m.** on the same day if possible, otherwise on the next working day in the presence of the tenderers present. The tender documents can be had in person/by post from this office on any working day against written request enclosing therewith attested copy of Company Registration Certificate on **payment of Rs.1000/- by Cash / Demand draft drawn in favour of Director, IPIRTI, Bangalore -560 022** which is non-refundable. The Tender document will be sent by Speed Post/Registered Post to those who have requested by Post at their risk.

- I. Name of work** : **Supply, Installation and Commissioning of CNC Machined Moulding Dies AT IPIRTI, BANGALORE**
- II. Approximate Amount Estimated** : Rs.15,00,000/-
- III. E.M.D. Amount 2%** : Rs. 30,000/-- To be submitted along with Part I.
- IV. Cost of Tender Document (Non-refundable)** : Rs.1000/- To be submitted along with Part I
- V. Issue of Tender Documents** : **upto 10.00 a.m. 04.06.2018**
- VI. Date of submission of sealed tender** : on or before **04.06.2018, 11.00 a.m.**
- VII. Date of opening of Tender** : Part I – Technical competence bid at **11 .30 a.m on 04.06.2018**  
Part II – Quantity and Price bid, will be intimated separately to Qualified Tenderers in Part I - Technical competence bid
- VIII. Date of completion of Work** : Maximum 45 days from the date of placing order

- IX.** The tenderer should deposit along with the tender (Part I) a sum of Rs. 30,000/- only by means of crossed DD in favour of Director, IPIRTI, Bangalore – 560 022 as Earnest Money Deposit (EMD). The amount will be refunded to unsuccessful tenderers after opening of the tender part II without interest therefore. The Director, IPIRTI reserves the right to accept and or reject any/all tenders without assigning reasons therefore and/or to award the work either in part or in full.
- X.** The successful tenderer shall pay the additional amount towards security deposit at the rate of 3% of the amount tendered by him after adjusting the EMD and execute an agreement within 7 days from the date of issue of the letter-communicating acceptance of the tender failing which EMD will be forfeited.

Director  
IPIRTI, Bangalore

**LETTER OF ACCEPTANCE**  
(To be submitted along with Part II)

The Director,  
IPIRTI, P.B.No.2273,  
Tumkur Road,  
Bangalore - 560 022.

Dear Sir,

I/We, hereby tender for the execution of the work specified in the under mentioned memorandum within the time specified in such memorandum at the rates specified therein and in accordance in all respects with the specification and instructions in writing which have been read by me/us, read and explained to me/us and with such materials as are provided for by and in all other respects in accordance with such conditions so far as possible.

**MEMORANDUM**

- 1. General description of work : Fabrication, Supply, Installation and Commissioning of 3 Axis Profile CNC Machined Moulding Dies For the Manufacture Of Bamboo Mat Trafford Sheets At IPIRTI Bengaluru**
- 2. Estimated cost : Rs.15,00,000/-**
- 3. EMD 2% : Rs. 30,000/-**
- 4. Security Deposit : 3% of the Tendered amount including EMD**
- 5. Tenders to be submitted on or before : 11.00 a.m. on 04.06.2018**
- 6. Time allowed for completion : Maximum 45 days from the date of of work placing order**
- 7. Specifications : The work shall be carried out as . Explained in tender document.**

Should this tender be accepted, I/we hereby agree to abide by and fulfill all the terms and provisions of the conditions contained in the articles of Agreement, Notice Inviting tenders and Conditions of Contract, etc., which have been read by me/us, and explained to me/us so far as applicable or in default thereof to forfeit and pay to the Institute or their successors in office the sums of money mentioned in the conditions of contract, articles of Agreement and Notice Inviting Tender.

Dated this .....day of ..... 2018.

.....  
Tenderer's signature with seal

Address:

Witness to Tenderer's signature

Address:

-----  
The above tender is hereby accepted by me on behalf of the Indian Plywood Industries Research and Training Institute, Bangalore.

Dated this ..... day of .....  
.....

.....  
Signature of the Officer by who accepted



**UNDERTAKING TO BE GIVEN BY THE TENDERER**  
(To be submitted along with Part II)

We, the .....having registered  
Office at .....  
.....do hereby declare and affirm the following:

1. We are aware of all statutory and legal requirements of Central and State Governments as well as local regulations applicable to the work. Consequences due to violation of these Acts, Rules and Regulations shall be borne by us and the Employer/Consultant is indemnified from any charge directly or indirectly arising there from.
2. That this undertaking forms part of the Agreement and contract documents.

**WITNESS:**

Signature of the Tenderer with seal

**GENERAL INFORMATION TO TENDERERS**

1. The supplier shall make all provisions for safety of his men and materials including insurance for fire and accidents. An indemnity bond in the form appended shall be submitted indicating clearly that the Employers are free from such responsibility and encumbrances.
2. No sub-letting and sub-contracting in any form is allowed.
3. Quality of work and quantities shall be notified to the Employer whose technical personnel or of consultant will certify the work. Any defect or shortcoming in the work shall be made good by the supplier to the full satisfaction of the Employer.
4. Working hours of the Institute are normally from **9.00 a.m. to 5.30 p.m.** Monday to Friday. If the supplier wishes to deploy his workmen beyond working hours and on holidays, prior permission of the Employer shall be taken.
5. The time allotted for supply the equipment is **45 days** from the date of placing order.

@ @ @

**ARTICLE OF AGREEMENT**

ARTICLE OF AGREEMENT made at Bangalore this day  
.....  
.....between the INDIAN PLYWOOD INDUSTRIES RESEARCH AND TRAINING INSTITUTE registered under the Karnataka Societies Registration Act 1960, having registered office at Tumkur Road, Bangalore (hereinafter referred to as the EMPLOYER which expression shall include its successors and assignees) of the ONE part and.....  
.....(herein after called the CONTRACTOR) of the OTHER part.

WHEREAS the Employer is desirous of getting done the work **SUPPLY AND INSTALLATION OF BMCS DIE AT IPIRTI, BANGALORE**

AND WHEREAS the Contractor has agreed to execute the aforesaid work on terms and conditions mentioned herein and subject to the conditions of contract, schedule of quantities, specifications, etc. (all of which are collectively hereinafter referred to as the said conditions).

Now it is hereby agreed and declared by and between the parties hereto as follows:

- 1) In consideration of the payment to be made to them as hereinafter provided the contractor shall, subject to schedules such as the conditions of contract, specifications, schedule of quantities, etc. execute and complete the work within maximum of 45 days from the date of placing order.
- 2) The employer shall pay to the contractor such sums as shall become payable hereunder at the time and in the manner specified in the conditions of contract.
- 3) Time is the essence of this Agreement and the Contractor shall pay or allow the Institute to deduct @ 0.5% per week of the contracted amount as a Liquidated damages. If sufficient justification is not made regarding the delay, the employer may deduct such damages from any amount due to the contractor under this Agreement or any other Agreement that may subsequently entered into between the parties. The order is liable to be cancelled if the accumulated penalty exceeds 5% of contracted amount. EMD & Security Deposits will also be forfeited.
- 4) The schedules above mentioned shall form an integral part of this Agreement and the decision of the employer in reference to all matters of dispute as to material and workmanship shall be final and binding on both the parties.

- 5) The employer reserves to themselves the rights of altering the drawings of the works and of adding to or omitting any item of work from or of having portions of the same carried out departmentally or otherwise and such alterations or variations shall not vitiate this Agreement.
- 6) The security deposit of the Contractor shall be forfeited if he fails to comply with any of the conditions of the contract.
- 7) This Agreement comprises the works above and all subsidiary works connected therewith, even though such works may not be shown on the schedules appended herewith.
- 8) Notwithstanding anything contained in the tender submitted by the Contractor, all the clauses of this Agreement shall be binding on both the parties.
- 9) If any dispute shall arise between the parties touching these presents or any of the matter covered by the schedule herewith appended or the construction of operation thereof or the rights, duties or liabilities of either party hereunder, such dispute shall be referred to two arbitrators, one to be appointed by each party or in the event of their not agreeing then to the award of an Umpire to be appointed by them in writing before entering on the reference and the decision of the arbitrator or the Umpire as the case may be and shall be final and binding on both the parties. Such arbitration shall be governed in all respects by the provisions of the Indian Arbitration Act 1940, as amended from time to time and the Rules thereunder.

IN WITNESS WHEREOF the Parties hereto have set their respective hands the day and the year hereinabove written.

Signed by, for and on behalf of the Institute in the presence of .....

- 1) .....
- 2) .....

Signed by, for and on behalf of the said contractor(s) by their partners..... in the presence of

- 1) .....
- 2) .....

### **Terms and Conditions of contract**

1. The tenderer is required to examine carefully - the form of tender showing Technical Specification, nature of work, indicative drawings and the Articles of Agreement before pricing the quantities.
2. The quantities set out in the tender form are only approximate. However Design details, Technical Specifications etc., are to be submitted along with the tender.
3. The tenderer whose tender is accepted will be required to sign an agreement for the due fulfillment of the contract. A copy of agreement is attached. If the successful tenderer default in signing the articles of agreement on a stamp paper of Rs.250/- within seven days of issue of the letter awarding the contract, the deposited Earnest Money Deposit will be forfeited and his tender will be treated as cancelled.
4. Alterations in the tender document by the tenderer will render the tender to be rejected. No subsequent correspondence regarding price will be entertained, once the tender is opened.
5. Time is the essence of contract and design, fabrication, supply, installation, commissioning is time bound under the project. The work should be completed on turnkey basis within a maximum period of 30 days from the date of order. Penalty clause will be enforced for non-completion of work within the stipulated period.
6. No 'C' or 'D' form will be issued by us. However the concessional rate of Central Sales Tax admissible to Research Institutions on purchase of Scientific Instruments/equipment, etc., from certain States like Maharashtra, Delhi, West Bengal, Tamilnadu, etc., is applicable to this Institute.
7. The offer should be for the **Fabrication, Supply, Installation and Commissioning of 3 Axis Profile CNC Machined Moulding Dies For the Manufacture Of Bamboo Mat Trafford Sheets At IPIRTI Bengaluru**. A high standard of workmanship is required. Final payment will be made only after the completion of work to the entire satisfaction of the authority.

8. As this Institute is an autonomous body of the Ministry of Environment, Forests, & Climate change Govt. of India, discount applicable should be shown separately.
9. Your rates should be valid at least for a minimum period of **SIX months**.
10. You may contact representatives authorized by the Director IPIRTI for any Technical clarifications.
11. The Manufacturers have to procure materials from their own source provided they are in accordance with specification. Tests certificates are required to be produced for the materials used whenever required.
12. Income-tax will be deducted at source as per rules. Retention amount at 6% of the bill will be deducted from the final bill. The said amount will be refunded after the completion of defects liability of period of 1 year.
13. Security deposit 3% will be refunded along with final payment.
14. Security Deposit of the successful tenderer will be forfeited if he fails to comply with any of the conditions of the contract.
15. Your bill in triplicate should be submitted along with completion certificate for making payment.
16. Successful tenderer shall submit Articles of Agreement on Non-judicial Stamp paper of Rs.250/- before commencement of work and should deposit 3% of the Tendered amount towards security deposit for executing the work adjusting with EMD. Director, IPIRTI reserves right to accept any or reject all quotations without assigning any reasons thereon.
17. The quoted price in Tender Part II - Quantity and Price bid should not be specified in anywhere in Tender document Part I - Technical competence bid, if mentioned, tender is liable to be treated unqualified.
18. The tenderers are requested to submit the price quoted and technical specification of the work in Part II – Quantity and Price bid, super scribing, the cover with Tender No, Name of the item and Tender Part No(viz., Part I/Part II)
19. Any conditional tenders will not be accepted.

- 20. Tender document may be down loaded from the website [www.ipirti.gov.in](http://www.ipirti.gov.in) the cost of tender document may be remitted at the time of submission of your tender. Omission/addition/deletion in the tender document is found will be treated as unqualified tender.**
21. The tenderer should have sufficient working capital for carrying out the work.
22. Technical Specification and Nature of Work to be carried out is as per **Annexure-I** of the tender document which is approximate and liable for alteration, omission, deduction and addition at the discretion of the Director, IPIRTI
23. Tender Documents Part I – Technical competence bid and Part II – Quantity and Price bid should be submitted in separate covers only. Tender Part II - Quantity and Price bid will be opened only if the tenderer qualifies the conditions in Part I - Technical competence bid. The date of opening of the same will be intimated separately and will be opened in front of the qualified tenderers present.
24. The Director, IPIRTI, at his discretion may make payment upto 50% against bank guarantee.
25. The work shall not be considered as completed until the employer has certified in writing that they have been completed in all respects and the defects liability period shall commence from the date of such certificate and satisfactory report by the representatives authorized by the Director IPIRTI.
26. Liquidated damages for Non-completion of work within stipulated period may be charged @ 0.5% per week for the delayed period, till the penalty accumulates upto 5 % of the contracted amount and thereafter the contract is liable for cancellation.
27. The decision of the Director, IPIRTI, Bangalore, shall be final conclusive and binding on the supplier/tenderer.
28. All disputes shall be subject to the jurisdiction of the Courts in the City of Bangalore, Karnataka, India.

**PAYMENT AND PENALTY**  
(To be submitted along with Part II)

1. Name of work : **Fabrication, Supply, Installation and Commissioning of 3 Axis Profile CNC Machined Moulding Dies For the Manufacture Of Bamboo Mat Trafford Sheets At IPIRTI Bengaluru**
2. Date of completion of work : The work should be completed on turnkey basis within a maximum of 30 days from the date of order
3. Defects Liability Period : One year from the date of commissioning
4. Security Deposit to be deposited before commencement of work : 3% of the tendered amount including EMD
5. Liquidated damages for non-completion of work in time : 0.5% per week will be charged for the delayed period up to 5% of the contracted amount and there after it is liable for cancellation.
6. Retention amount. : Retention amount at 6% of the bill amount.
7. Release of Security deposit : Security deposit 3% will be refunded along with final payment.
8. Release of Retention amount : Retention amount will be deducted at 6% from the final bill. The said amount will be refunded after the completion of defects liability of period of 1 year.

Place:

Date:

Signature of Tenderer with seal



**TECHNICAL SPECIFICATION AND NATURE OF WORK****Fabrication, Supply, Installation and Commissioning of CNC machined moulding Dies for the manufacture of Bamboo Mat Trafford Sheets at IIRTI Bengaluru.**

1	Type the press available and details	Manual/automatic with contact manometer and synchronous timer. With dual cycle pressing facilities.
	Press frame	Window opening construction
	No. of daylight	One
	Specific pressure (Max.)	25 kg/cm <sup>2</sup> (approximately)
2	Type of Dies to be fabricated:	One set of Male and Female moulding dies for making <b>Bamboo Mat Trafford Sheets</b> as per indicative drawings from I to III
3	Size of the <b>Bamboo Mat Trafford Sheets</b> after trimming:	Length : 1950mm Width : 1070 mm Thickness : 3.5 mm
4	Size of Male and Female Dies:	Length : 2000 mm Width : 1120 mm Thickness : 80 mm
5	No. of Dies	One pair. (2 Number)
6	Material for Dies:	Structural grade steel [Heat resistant as specified by BIS specification, IS:2062, 1992, relevant certificate should be produced for the material used]
7	Profiling of Dies:	3 Axis Profile CNC milling is to be done for profiles on male and female dies in one setting (Bed size should be greater than die size) to an accuracy of $\pm 0.05$ mm & surface finish of 1.6.
8	Chrome plating and Buffing:	High wear resistant, Hard chrome plating is to be done on surface of the dies to a coating thickness of 50 microns. Buffing is to be carried out for mirror finish.
9	Drilling of holes:	Holes for flow of thermic fluid are to be drilled in lengthwise and widthwise directions as shown in indicative drawings by deep hole boring system to a hole dia of 25 mm for a straight and smooth finish. The allowable temperature variations of thermic fluid should be within $\pm 5^{\circ}\text{C}$

10	Plugging of hole:	Holes are to be suitably plugged to change the flow direction of thermic fluid as indicated. All external openings are to be plugged by external plugs with counter sunk heads with tight seating arrangement and threaded and fitted precisely to prevent oil leakage. Internal plugs are to be provided as indicated in the drawings for changing flow direction of thermic fluid.
11	Testing for oil/air leakage:	Compressed air testing is to be done for checking oil/air leakage.
12	Closure of dies	Uniform closure of gap between male and female dies for pressing 3-4 mm thick Bamboo mat. Manufacturer should ensure correct alignment of dies, parallelism and uniformity and accuracy for perfect matching of profiles at the time of closing for the required thickness of 3-4 mm, Mill boards (insulation boards) of 50 mm thickness should be provided to prevent heat loss for the top most and bottom most die.
13	Thermic fluid to be supplied	210 liters (Hytherm 500)
14	Maximum temperature to be attained	160 <sup>o</sup> C
15	Mode of heating	Thermic fluid inlet and outlet connections to dies through S.S. wire braided hoses,
16	Transportation, installation and commissioning of press with all necessary civil, mechanical and electrical works, including thermic fluid connection. The machine will be tested for satisfactory performance by conducting production trials for one a week.	
17	Material used in fabrication: The electrical, electronic hydraulic, pneumatic and mechanical parts used in the manufacture should be of standard make and as per relevant IS specifications	
18	Finishing: The welded or brazed joints should be free from cracks/holes and should be neatly ground to a smooth surface. The steel sections, sheets, flats, etc., should be free from defects such as bent, dent, blow holes, etc. A good workmanship is desired to provide aesthetic appearance.	
19	Overall cost for dies and accessories (including freight, insurance, installation, commissioning in all respects) should be specified along with all types of duties, taxes, levies, etc., as additional.	
20	Period of completion is 150 days.	
21	The concerned official should be apprised of any modification/alteration/addition/deletion during the fabrication and installation work and consent obtained for the same.	

**FORMAT FOR FURNISHING THE DETAILS OF PREVIOUS EXPERIENCE OF  
THE TENDERER**

(To be submitted along with Part I)

---

Details of Previous experience in Manufacture and supply installation and  
commissioning of BMCS DIE

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<b>Sl. No.</b>	<b>Description of the Equipment</b>	<b>Name, Address, Telephone, E-mail and Fax of the Organization to whom supplied</b>	<b>Details of order &amp; Value</b>	<b>REMARKS</b>
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**INDIAN PLYWOOD INDUSTRIES RESEARCH AND TRAINING INSTITUTE**

**Post Bag No.2273, Tumkur Road, Bangalore - 560 022**

**CHECK LIST TO AVOID REJECTION OF THE TENDER**

(To be submitted along with Part I)

- 1) Have you submitted your Tender Document, Part I-Technical competence Bid and Part II-Quantity and Price Bid in two separate Sealed Covers “**DULY SUPERSCRIBED WITH TENDER NUMBER, NAME OF THE ITEM AND TENDER PART I-Technical competence bid OR PART II-Quantity and Price bid?**”

**YES/NO**

- 2) Have you submitted your offer under Part I-Technical competence bid as per format given in a Annexure II

**YES/NO**

- 3) Have you submitted the EMD amount as specified in the tender specification along with Part I?

**YES/NO**

- 4) Have you answered all the points mentioned in Criteria I (a) to (c) under Part I – Technical competence bid and Criteria II (A) and (B) under Part II – Quantity and Price bid as described in Notice Inviting Tenders and enclosing copies of the documentary evidence wherever required?

**YES/NO**

- 5) Have you furnished Design details, Technical Specifications etc. along with Part II-Quantity and Price bid?

**YES/NO**

- 6) Have you duly filled in and submitted **1.Letter of acceptance 2.Under taking to be given by the tenderer 3.Payment and Penalty in Part II?**

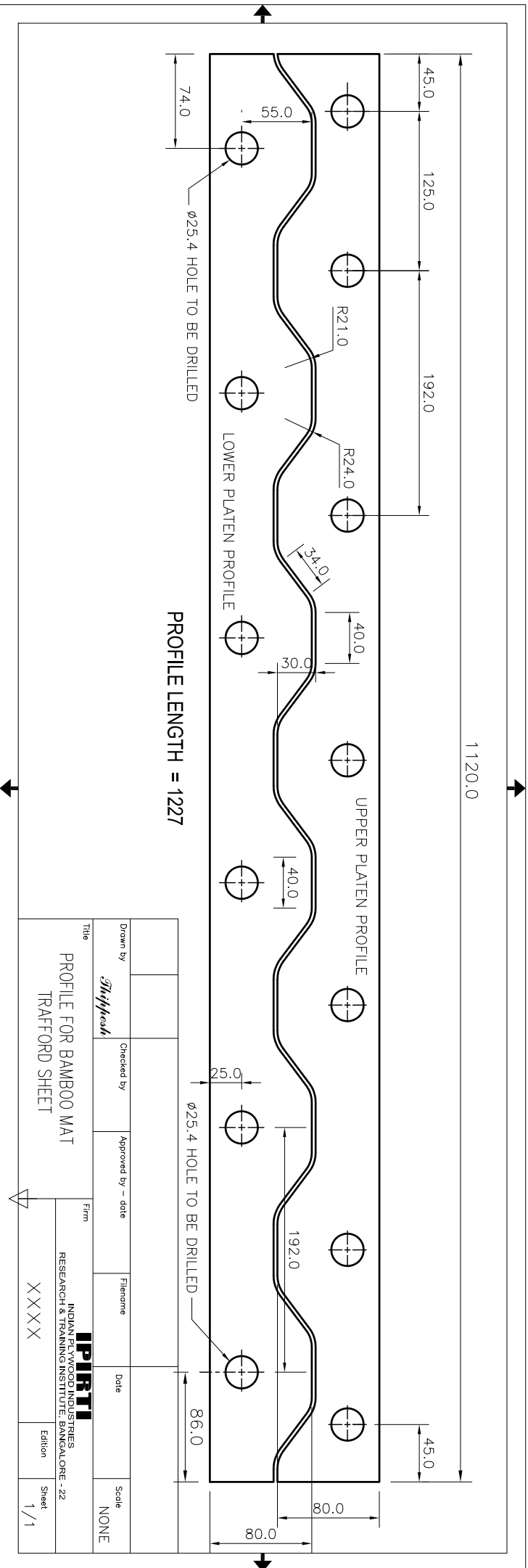
**YES/NO**

**Date:**

**Signature of the tenderer with seal**

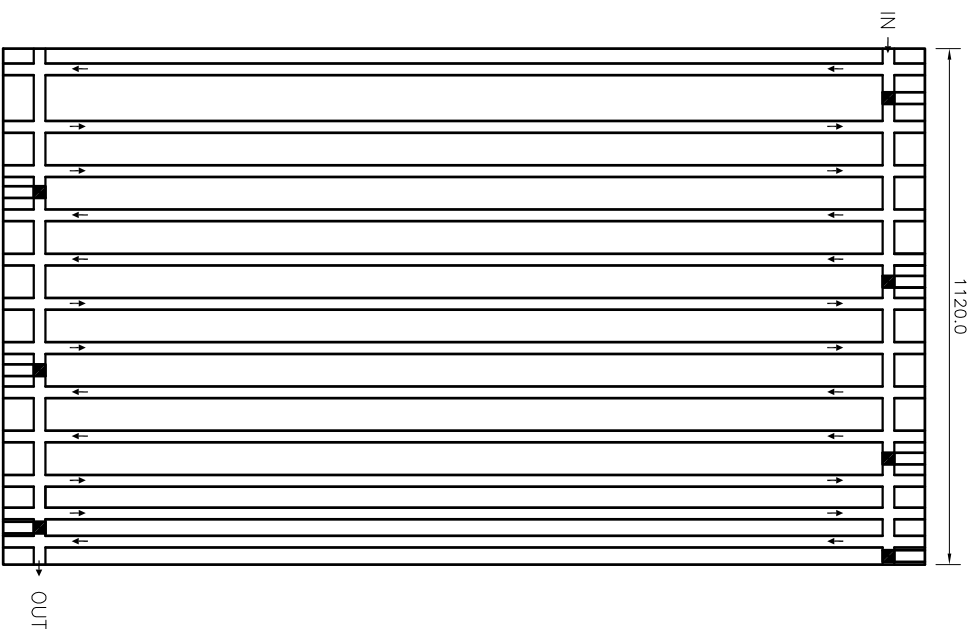
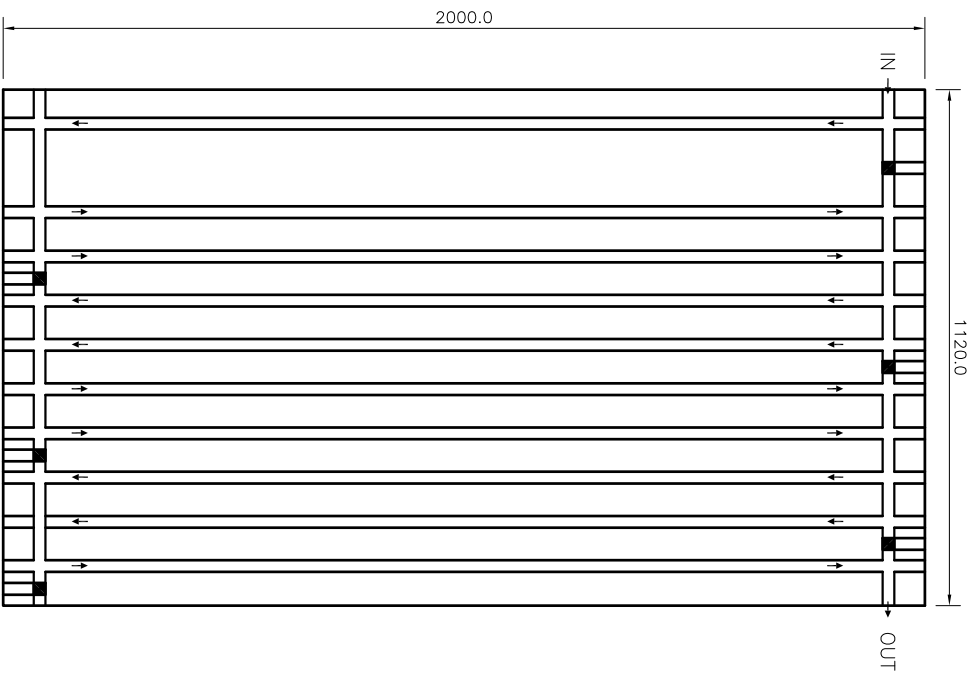
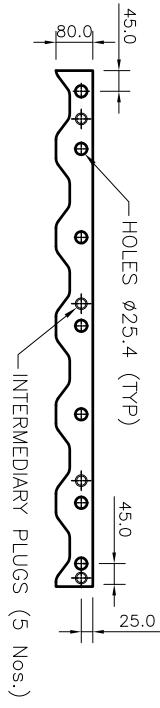
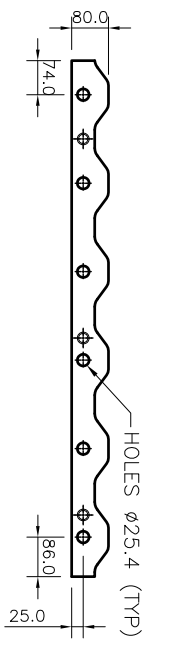
If the answer is negative for any of the above Items, your offer is liable for rejection, which may please be noted.

**NB One copy of the above checklist duly answered may please be Returned along with the offer in Part I – Technical bid**



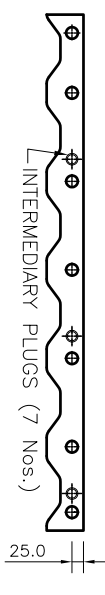
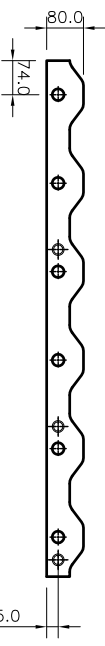
Drawn by	<i>Shubhash</i>	Checked by		Approved by - date		Firm	Indian Plywood Industries Research & Training Institute, Bangalore - 22	Scale	NONE
Title	PROFILE FOR BAMBOO MAT TRAFFORD SHEET					XXXXX		Edition	Sheet 1/1





BOTTOM PLATTEN

TOP PLATTEN



Title		Checked by		Approved by - date		Firm		Scale	
DRAWN BY		CHECKED BY		APPROVED BY - DATE		INDIAN PLYWOOD INDUSTRIES		NONE	
PLATTEN						RESEARCH & TRAINING INSTITUTE, BANGALORE - 22			
OIL FLOW DETAILS						XXXXX			
ALL PLUGS ARE 1" BSP								Sheet 1/1	