**Volume-II**

**CENTER OF INNOVATIVE & APPLIED**

**BIOPROCESSING DEPARTMENT OF BIOTECHNOLOGY**

**(Govt. of India)**

**Knowledge City, Sector‐81, Mohali**

## FINANCIAL BID DOCUMENT



**Provision of Acoustic treatment work at Main Campus, CIAB, Knowledge City, Sector-81, Mohali.**

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**TECHNICAL SPECIFICATIONS**

### 1.0 STANDARD SPECIFICATIONS TO BE FOLLOWED

The work should be executed as per following CPWD specification and also the specification laid in tender document. In case, above specifications are not available for certain item, then the material should conform to ISI and BIS standards.

### Civil Engineering Works

CPWD Specification 2009 Vol. I & II along with latest correction slips. These Specifications have replaced CPWD Specifications 1996 along with Correction Slips issued on them. These Specifications cover all types of Works. The specifications are available as a printed document issued by CPWD and also in soft copy PDF Format in CPWD website.

### Electrical Engineering Works

* + 1. [CPWD General Specifications for Electrical Works Part I Internal - 2013.](http://www.cpwd.gov.in/Publication/Internal2013.pdf)
    2. [CPWD General Specifications for Electrical Works Part II External - 1994.](http://www.cpwd.gov.in/Publication/Internal2013.pdf)
    3. [CPWD General Specifications for Electrical Works Part IV Sub Stations – 2013.](http://www.cpwd.gov.in/Publication/SubStationsFinal2013.pdf) The above specifications shall be read with upto date correction slips (if any).

#### CIVIL WORKS

**WORKMANSHIP FOR THE ENTIRE PLUMBING WORK.**

The workmanship shall be best of its kind and shall conform to the specifications, as below or Indian Standard Specifications in every respect or latest trade practices and shall be subject to approval of the Engineer-in- Charge. All materials and/or Workmanship which in the opinion of the Engineer-in- Charge is defective or unsuitable shall be removed immediately from the site and shall be substituted with proper materials and/or workmanship forthwith.

* 1. **Wooden panelling of perforated panels: -** Providing and Fixing channelled wooden panelling of perforated panels of minimum thickness of 15mm, standard length & width of 2400 mm, 125 mm or as per site, made of a high-density fiber board with minimum NRC value of 0.55, minimum density of 800 Kg/M3 density substrate with a laminated facing / wood veneer as per the approved shade/ species & finish and a melamine balancing layer on the reverse side. The boards shall have a perforation pattern perforation of 2mm & width of minimum 14mm of visible panel each. The panels shall provide a fire reaction of Class of 1 as per Part 7 of BS 476. The panels shall be “tongue-and-grooved or interlocking” with each other for intermediate fixing & suitable approved colure powder coated aluminium beading/moulding at ends, top as per site requirement. The back of the perforated panel shall have sound absorbing non-woven acoustical fleece. The panels shall be mounted on aluminium splines/channels using clips-section of appropriate size as per recommendation by manufacturer & Engineer-in-Charge. 2mm thick pvc sheets

shall be fixed on walls prior to fixing of panels. Suitable powder coated aluminium profiles shall be fixed at ends, of panelling and also at top where panelling is of mid height/sill levels etc. The work should be executed in proper level, alignment, plumb and neatly. Any cutting for accommodation of sockets, switches etc shall be made by contractor free of cost. The rate should be inclusive of all taxes, wastage, labour, profit scaffolding etc. After award of work, contractor shall provide a sample of showing colour for approval of Institute before implementation at site

2. **Fabric Wall Panelling**: - Providing and supplying of acoustic fabric panelling with square edges made of fiber glass substrate of minimum 25mm thickness wrapped on the front side with an acoustically transparent and classified for Fire reaction of minimum Class B-s1, d1 as per EN13501, fabric with approved combination of colour, size. The fabric panelling shall be having a minimum sound absorption level of 0.90 NRC to be affixed to wall using Wall panel impalers/aluminium section, studs, accessories as recommended by manufacturer along with 2mm thick pvc sheet on existing brick/rcc walls complete in all aspects including the cost of taxes, wastage, labor profits, scaffolding etc. The work should be executed in proper level, alignment, plumb and neatly. Any cutting for accommodation of sockets, switches etc. shall be made by contractor free of cost. The fabric wall panelling shall be covered in suitable protective poly sheets till the handing over to prevent any damage, dusts etc. After award of work, contractor shall provide a sample of fabric acoustics showing colour combinations for approval of Institute before implementation at site. The fabric wall panelling shall be consisting of combinations of 2-3 or more colours as per approved pattern, colours, sizes etc.

#### WARRANTY AND HANDOVER

The Contractor shall warrant that all plant, materials and equipment supplied and all workmanship performed by him to be free from defects of whatsoever nature before handover to the Engineer-in-Charge. All the Guarantee/Warranty certificates of all the items shall be in the name of Institute i.e., CENTER OF INNOVATIVE & APPLIED BIOPROCESSING (CIAB), Mohali.

#### HANDING OVER OF DOCUMENTS

All testing and commissioning shall be done by the Contractor to the entire satisfaction of the Engineer-in- Charge and all testing and commissioning documents shall be handed over to the Engineer-in-Charge.

**NOTE: In case of any contradiction between the specifications, the contractor shall take the prior approval of the Engineer- In – Charge before executing the same at site.**

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### LIST OF MAKES TO BE ADOPTED

|  |  |  |
| --- | --- | --- |
| S. No | Item | Make |
| 1. | Wooden Panelling | Anutone/ Armstrong |
| 2. | Aluminium | Jindal, Hindalco (Indal)/ Gulf extrusion/ Alualpha |

**Note: -** Any other material makes not mentioned above shall be ISI marked & got approved from Engg-in-charge

S/D Manjeet Singh

AE (C)

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**NAME OF WORK:** - **PROVISION OF ACOUSTIC TREATMENT WORK AT MAIN CAMPUS OF CIAB**

**ABSTRACT SHEET**

|  |  |  |
| --- | --- | --- |
| **S.NO** | **PARTICULARS** | **AMOUNT (In INR)** |
| 1 | **ESTIMATED VALUE OF WORK (INCLUSIVE OF TAXES, LABOUR**  **CESS ETC)** | **Rs 29,60,836/-** |
| 2 | **PERCENTAGE (% AGE) QUOTE**  **PLUS/MINUS (+/ -) BY BIDDER ON ESTIMATED AMOUNT (IN FIGURES)** |  |
| 3 | **PERCENTAGE (% AGE) QUOTE**  **PLUS/MINUS (+/ -) BY BIDDER ON ESTIMATED AMOUNT (IN WORDS)** |  |
| 4 | **NET AMOUNT AFTER UN-**  **CONDITIONAL PERCENTAGE REBATE OR QUOTE ABOVE ESTIMATED VALUE ((IN FIGURES)** |  |
| 5 | **NET AMOUNT AFTER UN-**  **CONDITIONAL PERCENTAGE REBATE OR QUOTE ABOVE ESTIMATED VALUE ((IN WORDS)** |  |

Stamp & Signatures of bidder

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|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Provision of Acoustic treatment work in CIAB Campus** | | | |  |  |
| **S.N.** | **Description of Item** | **Unit** | **Quantity** | **Rate** | **Amount** |
| **1** | Providing and Fixing channelled wooden panelling of perforated panels of minimum thickness of 15mm, standard length & width of 2400 mm, 125 mm or as per site, made of a high density fibre board with minimum NRC value of 0.55, minimum density of 800 Kg/M3 density substrate with a laminated facing / wood veneer as per the approved shade/ species & finish and a melamine balancing layer on the reverse side. The boards shall have a perforation pattern perforation of 2mm & width of minimum 14mm of visible panel each. The panels shall provide a fire reaction of Class of 1 as per Part 7 of BS 476. The panels shall be “tongue-and-grooved or interlocking” with each other for intermediate fixing & suitable approved colure powder coated aluminium beading/moulding at  ends, top as per site requirement. The back of the perforated panel shall have sound absorbing non-woven acoustical fleece. The panels shall be mounted on aluminium splines/channels using clips-section of appropriate size as per recommendation by manufacturer & Engineer-in-Charge. 2mm thick pvc sheets shall be fixed on walls prior to fixing of panels. Suitable powder coated aluminium profiles shall be fixed at ends, of panelling and also at top where panelling is of mid height/sill levels etc. The sample of perforated panel Should have approved by Engineer-in-charge. The rate should be inclusive of all taxes, wastage, labour, profit scaffolding etc. After award of work, contractor shall provide a sample of Wall Panelling showing colour combinations for approval of Institute before implementation at site. |  |  |  |  |
|  |  | **Sqm** | **407.18** | **5194.32** | **2114997** |
| **2** | Providing and supplying of acoustic fabric panelling with square edges made of fibre glass substrate of minimum 25mm thickness wrapped on the front side with an acoustically transparent and classified for Fire reaction of minimum Class Bs1, d1 as per EN13501, fabric with approved combination of colour, size. The fabric panelling shall be having a minimum sound absorption level of 0.90 NRC to be affixed to wall using Wall panel impalers/aluminium section, studs, accessories as recommended by manufacturer along with 2mm thick pvc sheet on existing brick/rcc walls complete in all aspects including the cost  of taxes, wastage, labor profits, scaffolding etc. After award of work, contractor shall provide a sample of fabric acoustics showing colour combinations for approval of Institute before implementation at site |  |  |  |  |
|  |  | **Sqm** | **102.92** | **6294.48** | **647828** |
| **3** | Providing and fixing of veneered skirting matching with above Panelling as per manufacturer of wooden flooring complete in all aspects as direction of Engineer-in-charge. After award of work, contractor shall provide a sample for approval of Institute before implementation at site. The rate aspects including the cost of taxes, | **Rmt** | **164** | **1028.6** | **168695** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | wastage, labor profits, scaffolding etc. |  |  |  |  |
|  | **Sub-Total** |  |  |  | **2931520** |
|  | **Add 1 % labour cess** |  |  |  | **29315** |
|  | **Net Total Amount** |  |  |  | **2960836** |
|  |  |  |  |  |  |

#### NOTE: - Payment shall be released item wise based on actual measurement examined at site by Engineer- In- Charge. Rate quoted shall be deemed to be inclusive of GST/other taxes.

**Rates quoted by bidder shall be deemed to be inclusive of all taxes, GST, profits, labour**

**etc.**

Signature/Stamp of Bidder

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