



**CHENNAI.**

**TENDER FOR INTERIOR, ELECTRICAL & AIR-CONDITIONING  
WORKS IN TRAINING CENTRE AT REGIONAL OFFICE,  
UNITED INDIA INSURANCE COMPANY LTD  
CHENNAI.**

**PART – A – Technical bid**

**CONSULTANTS : FOARCONS**

Forum Architectural Consultants  
Ganga flats, no-3/2 Nakkirar street,  
West mambalam, Chennai – 600 033.  
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**THE NOTICE OF INVITATION TO TENDER**

To:

Sir,

**TENDER FOR INTERIOR, ELECTRICAL & AIR-CONDITIONING WORKS IN TRAINING CENTRE  
AT REGIONAL OFFICE, UNITED INDIA INSURANCE COMPANY LTD CHENNAI.**

Sealed tenders on item rate basis are invited from reputed contractors, who have qualified in the eligibility criteria as per tender documents, for comprehensive Interior, electrical & Ac works at TRAINING CENTRE AT REGIONAL OFFICE, UNITED INDIA INSURANCE COMPANY LTD, GROUND FLOOR, 134, SILINGI BUILDINGS, GREAMS ROAD, CHENNAI- 6.

The work comprises of Interior, electrical & air-conditioning work.

The Tender for such works will be prepared and issued in two parts.

- Part A comprise of General Rules & Instruction for the Guidance of tenderness, technical specification, Eligibility criteria, Special Instruction to Tender, General Specification, Article of Agreement, Mode of Measurement, General scope of work, List of approved make & materials Bill of quantities – duplicate and Drawings etc.
- Part B comprise of bill of Quantities.

Part A & B of the tender should be submitted in **separate sealed covers (both in same cover shall be rejected)** each with the super scribing the Name of the work. EMD and cost of the documents DD's shall be attached in the part A cover. Without EMD & cost of the documents will be rejected

Earnest Money	:	<b>Rs.16,000/-</b> (Rupees Sixteen Thousand Only) by Crossed demand draft Payable at Chennai drawn In favor of " <b>United India Insurance Co. Ltd</b>
Document Charges	:	<b>Rs. 1000/-</b>
Time of completion	:	<b>30</b> (Thirty) Days
Issuing Date	:	<b>23/1/2015 to 02/02/2015</b>
Issuing Office	:	Tender documents can be collected from M/s. United India insurance co. Ltd (Estates Dept.,) No.134, Greams road "Silingi building" Chennai – 600 006 working hours.

Time and Date of Submission : Before **05:00 pm on 02/02/2015** as per instructions in Tender documents (to reach the issuing office).

Time and Date of Opening : Part A with EMD @ **12.00 pm on 03/02/2015.** (At issuing office)

Time and date of opening of Part B of the tender will be decided after opening the Part A of the tender documents.

Tender documents can also be downloaded from the Tender tab in the Company's website 'www.uiic.co.in'. Those who download the tender documents from the Company's website also shall submit a separate DD for **Rs.1,000/-** (Rupees One Thousand only) (non-refundable) in the name of United India Insurance Co. Ltd, payable at Chennai. Tender documents without the above fee will be rejected.

The Company will not be bound to accept the lowest tender and reserves the right to accept or reject any or all the tender without assigning any reason whatsoever.

## GENERAL RULES AND INSTRUCTION FOR THE GUIDANCE OF TENDERERS

- Tenders are hereby invited on behalf of United India insurance co. ltd for the interior, electrical & Air-conditioning works at Training centre at Regional office Chennai.
- Contractors Documents consisting of the plans, complete specification, the schedule of the quantities of the various classes of work to be done, and the set of conditions of contract to be qualified with by the person whose tenders may be accepted, and which will also be found in the form of tenders, can be collected from M/s. United India insurance co. ltd, Chennai. No.134, Greams road “Silingi building” Chennai – 600 006.
- Tenders which should always be placed in two separate sealed cover, with the name of the project part A&B Written on the envelop will be received by, THE REGIONAL MANAGER NO.134, GREAMS ROAD “SILINGI BUILDING” CHENNAI – 600 006 **Upto 05.00 pm on 02/02/2015** and will be opened by him in his office at **12.00 pm on 03/02/2015**
- In case of two part tenders, date of submission opening of the tenders and the parts there of along with the superscription of the packers be as per specific instruction on the tender notice/form.
- When a Contractor signs a tender in an Indian language the tendered amount and the total amount tendered should also be written in the same language. In case of illiterate contractors, the rates or the amounts tendered should be attested by witness.
- Earnest money amounting to **Rs.16,000/-**(Rupees Sixteen Thousand Only) in the form of Bank Draft drawn in favour of “**United India Insurance Co. Ltd**” Payable at Chennai must accompany each tender in two separate sealed cover superscripting “TENDER FOR INTERIOR, ELECTRICAL & AIR-CONDITIONING WORKS IN TRAINING CENTRE AT REGIONAL OFFICE, UNITED INDIA INSURANCE COMPANY LTD CHENNAI. PART A – cover one & PART B –cover two Addressed to “The Regional Manager,United India Insurance Co. Ltd., Regional office, No.134, Greams road “Silingi building” Chennai – 600 006” EMD Amount will not carry interest. Unless the rate is in the whole rupees and followed by the words “only” it should invariably be up to two decimal places. While quoting the rate in schedule of qualities, the word “only” should be written closely following the amount and it should not be written in next line.
- The company does not bind itself to accept the lowest or any tender and reserves to itself the right of accepting the whole or any part of the tenderer Shall Be bound to perform the same at the rate quoted.
- The rate quoted by the contractor shall be net, up to the stage of incorporation and handling over site. All taxes including Sales Tax any other tax on material or on finished works like work’s contract tax, Turn-over Tax, including taxes that may be newly introduced subsequent to the tender etc. in respect of this contract shall be payable by the contractor and the company will not entertain any Claim whatsoever in this respect.
- The Contractor shall give a list of his relatives working with the united India insurance company ltd along with their designations and addresses.

- No employee of the company is allowed to work as a contractor for a period of two years of his retirement from company service, without the previous permission of the company. The contract is liable to be cancelled if either the contractor or any of his employees is found at any time to be such a person who had not obtained the permission of the company as foresaid before submission of the tender or engagement in the contractor's service.
- The tender for works shall remain open for acceptance for a period **7 days** from the date of opening of part II price bid. If any tenderer withdraws his tender before the said period, then the Company shall be at liberty to forfeit Earnest Money paid along with the tender.
- The tender for the work shall not be witnessed by a contractor or contractors who himself/themselves has/have tendered or who may and had/have tendered for the same work. Failure to observe this condition would render tenders of the contracts tendering as well as witnessing the tender liable to summary rejection.
- The tendered apart from being a competent contract must associate himself with specialized agencies competent on the respective field for service like Electrical, Air conditioning etc.,
- The contractor, whose tender is accepted will be required to furnish by way of Initial security deposit (ISD) for the due fulfillment of his contract, such sum amounting to 2% of the accepted tender cost less EMD
- The EMD of the contractor, whose tender accepted, shall be forfeited in full in case he does not remit the initial security deposit within the stipulated period or start the work by stipulated date mentioned in the award letter.
- The retention amount at **10%** on the value of the bill will be paid held by the company and will be released at the end of Defects liability period, subject to satisfactory rectification of defects noticed, if any, and against consultant's certificate EMD, ISD & retention amount held in our company's books will not carry any interest.
- The acceptance of a tender will rest with the united Indian insurance company ltd and the company reserves to itself the authority to reject any or all of the tenders received without the assignment of reason. All tenders in which any of the prescribed conditions are not fulfilled (or) are incomplete in any respect are liable to be reject. The company reserves the right to accept the tender in full or part and the tenderer shall have no claim for revision of rates or other conditions if his tender is accepted in parts.
- All rates shall be quoted on the proper form of the tender alone.

- An item rate tender containing percentage below / above will be summarily rejected. However, where a tender voluntarily offers a rebate payment along with sealed tender, this may be considered.
- On acceptance of the tender the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from the Employer / Architects shall be communicated to the Employer.
- Special care should be taken to write the rates in figures as well as in words and the amounts in figures only, in such a way that interpolations is not possible. The Total amount should be written both in words and in figures.

**THE REGIONAL MANAGER,**  
M/S. United India insurance company limited,  
Regional office  
No.134, "Silingi Building" Greams Road,  
Chennai – 600 006

**FORM OF TENDER**

To,

**THE REGIONAL MANAGER,**  
M/S. United India insurance company limited,  
Regional office  
No.134, Silingi Building, Greams Road,  
Chennai – 600 006

Dear Sir/s,

**TENDER FOR INTERIOR, ELECTRICAL & AIR-CONDITIONING WORKS IN TRAINING CENTRE AT  
REGIONAL OFFICE, UNITED INDIA INSURANCE COMPANY LTD CHENNAI.**

Having duly examined the tender documents including the drawings, specifications, design bill of quantities relating to the work specified in the underwritten memorandum and having visited/inspected the site of the said work and having acquired all the requisite information relating thereto as affecting this tender, I / We hereby offer to execute the works specified therein at the rates specified in the bill of quantities and in accordance, in all respects, with the specifications, designs, drawing and instructions in writing referred to in the conditions of tender, the Articles of Agreement, Special Conditions, if any, the bill of quantities and conditions of contract and with such materials are as specified, by and in all other respect in accordance with such conditions in the bill of quantities and conditions of contract so far as applicable.

Thanking you,

Contractor Name & Signature

**MEMORANDUM**

Name of work	Interior, electrical & air-conditioning works in Training centre Regional office at United India insurance company ltd, Chennai.
Earnest Money	<b>Rs.16,000</b> /- will not carry interest
Document Charges (Non refundable)	<b>Rs. 1000/-</b>
Initial Security Deposit	<b>2%</b> of the acceptance value of tender minus Earnest Money
Percentage to be deducted from bill ( Retention Money)	<b>10%</b> in each running bill.
Time Allowed for the work	<b>30</b> (Thirty) Days

<b>ELIGIBILITY CRITERIA</b>
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**The contractor should have the following eligibility criteria:**

1. The contractor should have undertaken works in Government Departments / Public Sector Undertakings / Central Autonomous Bodies/State Autonomous Bodies / Financial Institutions and any other reputed organization during last 3 years.
2. Details of works done in last 3 years. Please mention the works which qualifies for the following. **(FILLED UP PROFORMA -A, B, C & D SHALL BE ENCLOSED).**

<p><i>Two project - each costing 80% of the class limit</i></p> <p><b>or</b></p> <p><i>Three projects - each costing 70% of the class limit</i></p>
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<b>PROFORMA - A</b>
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S.NO	DETAILS	TO BE FURNISHED BY THE CONTRACTOR
1	Name of Address of the applicant /firm	
2	PAN No, VAT No, Income Tax registration number and SSI no	
3	Type of organization & year of incorporation	
4	Correspondence address with contact person name, telephone number, mobile no., email id, etc.	
5	Turnover of the company. Please provide the details for the last 3 years (contractor to attach relevant proofs)	FY 2013-14 :  FY 2012-13 :  FY 2011-12 :
6	Other information that the applicant might like to give in support of the application	

Contractor Name & Signature

**PROFORMA-B**  
**WORK EXPERIENCE- 1**

Work experience should be accompanied by the copy of its award letter, work completion certificate and performance certificate. Company Reserves the right to verify the details furnished by the Applicant, with the Organization which awarded the contract, if it desires.

1	Details of the Organization which Awarded the Contract Work.		
a	Name of the Organization		
b	Address of the Organization		
c	Name of Contact Person(s):		
d	Contact Number(s):		
2	Name of Contract		
3	Period of Contract		
4	Nature of Contract Work in Brief		
5	Actual Value of the Contract Work:		
6	Stipulated Time for Completion:		
7	Actual Time for Completion:		
8	Whether Work Left Incomplete or Terminated?	YES	or NO
		(if yes, please furnish details / reasons below)	
9	Enclosed copy of		
	a) Work order	YES	or NO
	b) Completion certificate	YES	or NO
	c) Performance certificate	YES	or NO

Contractor Name & Signature

**PROFORMA-C**  
**WORK EXPERIENCE- 2**

Work experience should be accompanied by the copy of its award letter, work completion certificate and performance certificate. Company Reserves the right to verify the details furnished by the Applicant, with the Organization which awarded the contract, if it desires.

1	Details of the Organization which Awarded the Contract Work.		
a	Name of the Organization		
b	Address of the Organization		
c	Name of Contact Person(s):		
d	Contact Number(s):		
2	Name of Contract		
3	Period of Contract		
4	Nature of Contract Work in Brief		
5	Actual Value of the Contract Work:		
6	Stipulated Time for Completion:		
7	Actual Time for Completion:		
8	Whether Work Left Incomplete or Terminated?	YES      or      NO (if yes, please furnish details / reasons below)	
9	Enclosed copy of		
	a) Work order	YES	or      NO
	b) Completion certificate	YES	or      NO
	c) Performance certificate	YES	or      NO

Contractor Name & Signature

**PROFORMA-D**  
**WORK EXPERIENCE- 3**

Work experience should be accompanied by the copy of its award letter, work completion certificate and performance certificate. Company Reserves the right to verify the details furnished by the Applicant, with the Organization which awarded the contract, if it desires.

1	Details of the Organization which Awarded the Contract Work.			
a	Name of the Organization			
b	Address of the Organization			
c	Name of Contact Person(s):			
d	Contact Number(s):			
2	Name of Contract			
3	Period of Contract			
4	Nature of Contract Work in Brief			
5	Actual Value of the Contract Work:			
6	Stipulated Time for Completion:			
7	Actual Time for Completion:			
8	Whether Work Left Incomplete or Terminated?	YES      or      NO (if yes, please furnish details / reasons below)		
9	Enclosed copy of			
	a) Work order	YES	or	NO
	b) Completion certificate	YES	or	NO
	c) Performance certificate	YES	or	NO

Contractor Name & Signature

<b>SPECIAL INSTRUCTIONS TO TENDERERS</b>
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**1. Time of completion, Extension of Time & Progress Chart**

Time of completion:

The entire work is to be completed in all respects within the stipulated period. The work shall deem to be commenced within fourteen days from the date of acceptance letter or date of handing over of site, whichever is late. Time is the essence of the contract and shall be strictly observed by the contractor.

The work shall not be considered as complete until the Architects have certified in writing that this has been completed and the Defects Liability Period shall commence from the date of such certificate.

**Extension of Time:**

If in the opinion of the Employer / Architects / PMC the works be delayed (a) by reason of any exceptionally inclement weather , or (b) by reason of instructions from the Employer in consequence of proceedings taken or threatened by or disputes, with adjoining or neighboring owners or (c) by the works, or delay, of other contractors or tradesmen engaged or nominated by the Employer and not referred to in the specification or (d) by reason of authorized extra and additions or (e) by reason of any combination of workmen strikes or lock-out affecting any of the building trades of (1) from other causes which the Employer may consider being beyond the control of the contractor, the Employer at the completion of the time allowed for the contract shall make fair and reasonable extension of time foe completion in respect there for, In the event of the Employer failing to give possession of the site upon the day specified above the time of completion shall be extended suitably.

In case of such strikes or lock-outs, as are referred to above, the contractor shall, immediately give the Employer, Written notice thereof. Nevertheless the contractor shall use his best endeavors all that to prevent delay, and shall do all that may be reasonably required to the satisfaction of the Employer to proceed with the works and on his doing so that it will be ground of consideration by the employer for a extension of time as above provided. The decision of the Employer as to the period to be allowed for an extension of time for completion hereunder (which decision shall be final and binding on the contractor) shall be promulgated at the conclusion of such strikes or lock-out and the Employer shall then, in the event of an extension being granted, determine and declare the final completion date. The provision in clause 15 respect to payment of liquidated damages shall in such case, be read and construed as if the extended dates fixed by the Employer were substituted for the damage shall be deducted accordingly.

**Progress of work:**

During the period of construction, the contractor shall maintain proportionate progress on the basis of a programmed Chart submitted by the contractor immediately before commencement of work and agreed to by Employer /Architects. Contractor should also include planning for procurement of scare material well in advance and reflect the same in the programmed chart so that there is no delay in completion of the project.

## 2. Defects Liability Period (DLP)

- a) It must be realized that this period is for exposure of “latent defects” such as settlements, shrinkages or expansion cracks, undue weathering and wear due to faulty material and workmanship.
- b) The DLP commences from the certified date of Virtual completion issued by the Architects.

C) In specialist contracts viz. for anti-termite and waterproofing treatment and the like, where the work is warranted to remain efficient and trouble-free for five to ten years

Through a specific guarantee on a stamp paper, appropriately worded amendments should be included in the contract documents to point out that the period of warranty supersedes the defects liability period stated in conditions of contract.

## 3. Date of commencement

Normally, date of commencement shall be either **7 Days** from the date of acceptance letter is issued to the contractor or the day on which contractor is instructed to take possession of the site, whichever is later. But in the instant case which being a **Snap Bid**, We have indicated the revised commencement date elsewhere in the tender.

## 4. Date of completion

Date of completion shall be arrived at after adding the time allowed for the execution of the work to the date of work order.

## 5. Liquidated Damages for Delay (LD)

The entry for the quantum of LD per week of delay, appropriate for the case in hand, should be selected from the following:

For Contracts having	: 1.00%of the tender
Time for completion	amount shown in the
6 months and less	tender per week

## 6. Period of final Measurement

The Entry for the period of final measurement after completion shall be made after taking into account the complexity of the work and staff available for carrying out measurements.

All hidden works shall have already been measured as the work progressed in presence of contractors, company Architect and respective specialized consultants to check up the quality and method of installation.

It should be noted that unless a longer period is stipulated, the condition of contract generally lays down three months (maximum) from the date of completion of the contract as the period of final measurement. Even though the maximum period of three months is mentioned, it shall be endeavored to complete the measurements as expeditiously as possible

## 7. Value of work for Interim certificate

1<sup>st</sup> interim payment -75% of the material bills which is supplied to the site (Minimum value of **Rs.4,00,000/-**)

2<sup>nd</sup> interim payment - 90% of the bill value (Minimum value of the work done **Rs.8,00,000/-**) less previous advance

3<sup>rd</sup> interim payment - 90% of the bill value (Minimum value of the work done **Rs.12,00,000/-**) less previous advance

**8. Period of Honoring Interim Certificate**

The period shall be ten days, from the date of receipt of the Certificate from the Architect along with “M” Book only signed by the contractor consultants & Architect.

**9. Period of Honoring Final Certificate**

The period shall be one month from the date of receipt of the final certificate from the Architect along with “M” book duly signed by contractor, Consultant and Architects and statutory certificates wherever necessary.

**10. Total security Deposit**

The Total security Deposit on the contract is **12.00%** on the cost of work.

The Total Security Deposit shall comprise of

α) Earnest Money Deposit

β) Initial Security Deposit

χ) Retention Money

a) Earnest Money Deposit (EMD)

Earnest Money Deposit shall be calculated at the rate of **1%** of the estimated cost of work.

EMD will not carry interest. The EMD shall be accepted in demand draft.

b) Initial Security Deposit

The amount of Initial security Deposit shall be **2%** of the accepted value of the tender including the Earnest Money Deposit. The Initial Security Deposit is to be paid by the contractor to the bank within 14 (fourteen) days of intimation to him of the acceptance of his tender.

c) Retention Money

The retention percentage (i.e. deduction from interim bill) shall be **10%** of the gross value of each interim bill. The maximum amount of retention money shall be two lakhs. 50% of the total security deposit (retention amount + Initial security Deposit) will be refunded to the Contractor on the completion subject to the following:

- Issue of Virtual completion Certificate by the Architect.
- Contractor’s removal of his equipment, labor force, temporary sheds/stores etc. From the site. ( excepting for a small presence required if any for the Defect Liability period and approved by the company)

The remaining 50% of the amount may be refunded 14 (fourteen) days after the end of defects liability period provided he has satisfactorily carried out all the works and attended to all defects in accordance with the conditions of the contract, including site clearance.

**11. Receiving, Opening and Recording of Tenders**

Part-A (Technical bid) is issued with one set of drawings and Part-B

Part-A tender will be opened at **12.00 Pm 03/02/2015**. In case of postal delivery, the tenderer has to ensure that the tender is received before the due date and time. The company will not, be responsible for the damage in transit and delay in receipt of tender if any.

## GENERAL CONDITIONS OF CONTRACT

Except where provided for in the description of the individual items in the schedule of quantities and in the specifications and conditions laid down hereafter and in the Drawings, the work shall be carried out as per standard specifications and under the direction of Architects.

### 1. Interpretation

In construing these conditions, the specifications, the schedule of quantities, tender and Agreement, the following words shall have the meaning herein assigned to them except where the subject or context otherwise requires:

✕🏠 Employer: The term employer shall denote United India Insurance Co. Ltd with their Regional office at Chennai and any of its employees representative authorized on their behalf.

✕✕🏠 Architects/ Consultants: The term Architects shall mean M/s. FOARCONS. The Architect with the approval of the united India insurance company may engage a local Architect/Consulting Engineer for supervision and co-ordination of the work at the site. He will be considered a representative of the Architect. The company may also engage a project Management consultant for the supervision of his work. He will be designated by the term PMC and work as Employer's agent at the site.

✕✕✕🏠 Contractor: The term contractor shall mean \_\_\_\_\_ and his/their heirs, legal representatives, assigns and successors.

✕❖🏠 Site: The site shall mean the site where the works are to be executed as shown within boundary in red border on the site plan including any building and erections thereon allotted by the Employer for the Contractor's use.

❖🏠 Site Engineer: The Site Engineer shall be appointed by the company. The company may also determine the number of Site Engineers and the supporting staff at site office to assist them and also whether the Site Engineer is shall be temporary or permanent. Where more than one Site Engineer is appointed, one of them shall be designed as Senior Site Engineer by the Premises Department and the other Site Engineer shall be reporting to the Senior Site Engineer. Wherever PMC is engaged, Site Engineer, if any, will work in close co-ordination with PMC

❖✕🏠 Drawings: The work is to be carried out in accordance with drawings, specifications the schedule of quantities and any further drawings which may be supplied or any other instruction, which may be given by the Employer during the execution of the work.

All drawings relating to work given to the contractor together with copy of schedule of quantities are to be kept at site and employer! Architects/PMC shall be given access to such drawings or schedule of quantities whenever necessary.

In case any detailed drawings are necessary contractor shall prepares such detailed drawings and or dimensional sketches there for and has it confirmed by the Employer/ Architects/PMC as case may prior to taking up such work.

The contractor shall ask in writing for all clarifications on and address of the contractor and their heirs, legal representatives, assigns and successors.

❖ ❖ ❖ ❖ ❖ “The Works” shall mean the work or work to be executed or done under this contract

❖ ❖ ❖ ❖ ❖ “Act of Insolvency” shall mean any act as such as defined by the presidency Towns Insolvency Act or in Provincial Insolvency Act or any amending statutes.

❖ ❖ ❖ ❖ ❖ “The Schedule of Quantities” shall mean the schedule of quantities as specified and forming part of this contract.

❖ ❖ ❖ ❖ ❖ “Priced Schedule of quantities” shall mean the schedule of quantities duly priced with the accepted quoted rates of the contractor.

## 2. Scope

The work consists of Construction of Employer’s (details of work) in accordance with the “drawings” and “Schedule of Quantities”. Interior, electrical & air-conditioning work at site

Scope of this tender. It includes furnishing all materials, labor, tools and equipment and management necessary for and incidental to the construction and completion of the work. All work, during its progress and upon completion, shall conform to the lines, elevations and grades as shown on the drawings furnished by the Employer / Architects. Should any detail essential for efficient completion of the work be omitted from the drawings and specifications it shall be the responsibility of the contractor to inform the employer’s / Architect’s and to furnish and install such detail with Employer’s / Architect’s concurrence, so that upon completion of the the same will be acceptable and ready for use.

Employer or his agent(PMC) / Architects may in their absolute discretion issue further drawings and or written instruction, details, directions and explanations, which are, hereafter collectively referred to as “The Employer’s / Architect’s instructions” in regard to:

- a) The variation or modification of the design quality or quantity of work or the addition or omission or substitution of any work.
- b) Any discrepancy in the drawings or between the schedule of quantities and/or drawing and / or specifications.
- c) The removal from the site of any defective material brought thereon by the contractor and the substitution of any other material thereof.
- d) The demolition removal and/or re-executed of any work executed by the contractor/s.
- e) the dismissal from the work of any person employed there upon.
- f) The opening up for inspection of any work covered up.
- g) The rectification and making good of any defects under clauses hereinafter mentioned and those arising during the maintenance period (retention period).

The contractor shall forthwith comply with and duly execute any work comprised in interior works Such Employer or his agent/ Architect instruction, provided always that verbal Instructions, directions and explanations given to the contractor’s or his representative Upon the works by the Employer or his agent/ Architects shall, if involving a variation, be confirmed in writing to the contractors within seven days. No work, for which rates are not specifically mentioned in the priced schedule of quantities, shall be taken up without written permission of the Employer or his agent/Architects. Rates of item not mentioned in the

priced schedule of quantities shall be fixed by the Employer in consultation with the Architects as provided in clause “variation”.

Regarding all factory made products for which ISI marked products are available, only products bearing ISI marking shall be used in the work.

### **3. Tenderer shall Visit the Site**

Intending tenderer shall visit the site and make him thoroughly acquainted with the local site condition, nature and requirements of the works, facilities of transport conditions, effective labor and materials, access and storage for materials and removal of rubbish. The tenderer shall provided in their tender for cost of carriage, 1 freight and other charges as also for any special difficulties and “including police restriction for transport etc.,for proper execution of work as indicated in the drawings. The successful tenderer will not be entitled to any claim of compensation for difficulties faced or losses incurred on account of any site conditions which existed before the commencement of the work or which in the opinion of the Employer or his agent/Architects might be deemed to have reasonably been inferred to be so existing before commencement of work.

### **4. Tenders**

The entire set of tender paper issued to the tenderer should be submitted fully priced and also signed on the every page. Signature will indicate the acceptance of the tender papers by the tenderer. The schedule of quantities shall be filled in as follows.

- a) The “Rate” column to be legibly filled in ink in/both English figures and English word
- b) Amount column to be filled in for each item and the amount for each sub head as detailed in the “Schedule of Quantities”.
- c) All corrections are to be initialed.
- d) The “Rate Column “for alternative items shall be filled up.
- e) The “Amount” column for alternative items of which the quantities are not mentioned shall not be filled up.
- f) In case of any errors/omissions in the quoted rates, the rates given in the tender marked “original” shall be taken as correct rates.

No modifications, writings or corrections can be made in the tender papers by the tenderer, but may at his option offer his comments or modifications in a separate sheet of paper attached to the original tender papers.

The Employer reserve the right to reject the lowest or any tender and also to discharge any or all of the tenders for each section or to split up and distribute any item of work to any specialist firm or firms, without assigning any reason.

The tenderers should note that the tender is strictly on the item rate basis and their attention is drawn to the fact that the rates for each and every item should be correct, workable and self supporting. If called upon by the Employer/Architects detailed analysis of any or all the rates shall be submitted. The Employer/Architects shall not be bound to recognize the contractor’s analysis.

The work will be paid for as “measured work” on the basis of actual work done and not as “lump sum” contract, unless otherwise specified.

All item of work described in the schedule of Quantities are to be deemed and paid as complete works in all respects and details including preparatory and finishing works involved, directly, related to and reasonably detectable from the drawings, specifications and schedule of quantities and no further extra charges will be allowed in this connection. In the case of lump sum charges in the tender in respect of any item of work, the payment of such item of work will be made for the actual work done on the basis of lump sum charges as will be assessed to be payable by the Employer/Architects.

The Employer has power to add to, omit from any work as shown in drawings or described in specifications or included in schedule of quantities and intimate the same/in writing but no addition, omission or variation shall be made by the contractor without authorization from the Employer. No variation shall vitiate the contract. Please also refer to para 9 herein after.

#### **5. Agreement**

The successful contractor may be required to sign agreement as may be drawn up to suit local conditions and shall pay for all stamps and legal expenses, incidental thereto.

#### **6. Permits and Licenses**

Permits and licenses for release of materials which are under government control will be arranged by the contractor. The Employer will render necessary assistance, sign any forms and applications that may be necessary.

The Employer/Architect/PMC shall be indemnified against all government or legal actions for theft or misuse of cement M.S. rods and any controlled materials in the custody of the contractor.

#### **7. Government and Local Rules**

The contractor shall conform to the provisions of all local Bye-laws and acts relating to the work and to the Regulations etc., of the government and local authorities and of any company with whose system the structure is proposed to be connected. The contractor shall give all notices required by said Act, Rules, Regulations and Bye-laws etc., and pay all fees payable to such authority for execution of the work involved. The cost, if any, shall be deemed to have been included in his quoted rates, taking into account all liabilities for licenses, fees for footpath encroachment and restorations etc., and shall indemnify the Employer against such liability and shall defend all actions arising from such claims or liabilities. Every interim/final payments Work Contract Tax shall be deducted and the same shall be issued to commercial tax department with respected ratio of 2% for civil/interior works and 4% for electrical/ac works. Amount shall be issued in the name of "CCTO" for commercial tax of local department

#### **8. Taxes and Duties**

The tenderer must include in their tender prices quoted for all duties royalties, cess and sale tax, Service Tax or any other taxes or local charges if applicable.

No extra claim on this account will in any case be entertained.

#### **9. Quantity of Work to be executed**

The quantities shown in the schedule of quantities are intended to cover the entire new structure indicated in the drawings but the Employer reserves the right to execute only part or the whole or any excess to be more than 25%.

#### **10. Other Persons Engaged by the Employer**

The Employer reserves the right to execute any part of the work included in this contract any work which is not included in this contract by other Agency or persons and contractor shall allow all reasonable facilities and use of his scaffolding for the execution of such work. The main contractor shall extend all co-operations in this regard.

### **11. Earnest Money and Security Deposit**

The tender will have to deposit an amount of **Rs.16,000/-**(Rupees Sixteen Thousand Only) in the form of Bank draft drawn in favor of United India insurance co. ltd at the time of submission of tender as an Earnest Money. The Employer is not liable to pay any interest on the Earnest Money. The Earnest Money on the unsuccessful tenderer will be refunded without any interest soon after the decision to award the work is taken or after the expiry of the validity period of the tender.

### **12. Contractor to provide everything necessary**

The Contractor shall provide everything necessary for the proper execution of the work According to the intent and meaning of the drawings, schedule of quantities and specifications taken together weather the same mayor may not be particularly shown or described therein provided that the same can reasonably be inferred there from and if the contractor finds any discrepancies he shall immediately and in writing, refer the same of the employer/Architects PMC whose decision shall be final and binding.

The Contractor shall provide himself for ground and fresh water for carrying out of works at his own cost. The Employer shall on no account be responsible for the expenses incurred by the contractor for hired ground or fresh water obtained from elsewhere.

The rates quotes against individual items will be inclusive of everything necessary to complete the said items of work within the contemplation of the contract, and beyond the unit price no extra payment will be allowed for incidental or contingent work, labor and/or materials inclusive of all taxes and-duties whatsoever for specific items, if any stipulated in the tender documents.

The contractor shall supply, fix and maintain at his own cost, for the execution of any work all tools, tackles, machineries and equipments and all the necessary centering, scaffolding, staging, planking, timbering , shorting, pumping, fencing, boarding, watching and lighting by night as well as by day required not only for the proper execution and protection of the said work but also foe protection for the public and safety of any adjacent roads, streets, walls, houses, buildings, all other erections, matters and the contractor shall take down any remove any or all such centering, scaffolding, planking, timbering, strutting, shoring etc., as occasion shall be required or when ordered so to do and shall fully reinstate and make good all matters and things disturbed during the execution of the works to the satisfaction of the Employer/Architects.

The contractor shall also provide such temporary road on the site as may be necessary for the proper of the contract and for his own convenience but not otherwise. Upon completion, such roads shall be broken up and leveled where so required by the drawings unless the Employer shall otherwise direct. The contractor shall at all the times give access to workers employed by the employer or any men employed on the building and to provide such parties with proper sufficient and if required, special scaffolding, hoists and ladders and provide such them with water and lighting and leave or make any holes, grooves etc., in any work, where directed by the employer as may required to enable such workmen to lay or fix pipes, electrical wiring, special fittings etc., The quoted rates of the tenderers shall accordingly include all these above mentioned contingent works.

### **13. Time of Completion, Extension / of Time & Progress Chart**

**1. Time of Completion:** The entire work is to be completed in all respects within the stipulated period. Time is the essence of the contract and shall be strictly observed by the contractor he work shall not be considered as complete until the Employer/Architects have certified in writing that this has been completed and the Defects Liability Period shall commence from the date of such certificate.

**2. Extension of Time:** If in the opinion of the Employer/Architects/PMC the works be delayed (a) by reason of any exceptionally inclement weather, or (b) by reason of instruction from the Employer in consequence of proceeding taken or threatened by or disputes, with adjoining or neighboring owners or (c) by the works, or delay, of other contractors or trade men engaged or nominated by the Employer and not referred to in the specification or (d) by reason of authorized extra and additions or (e) by reason of any combination of workmen or strikes or lock-out affecting any of the building trades or (f) from other causes which Employer may consider being beyond the control of the contractor, the Employer at the completion of the time allowed for the contract shall make fair and reasonable extension of time for completion in respect therefor. In the event of the Employer failing to give possession of the site upon the day specified above the time of completion shall be extended suitably.

In case of strikes or lock-outs, as are referred to above, the contractor shall, immediately give the Employer, written notice thereof. Never the less, the contractor shall use his best endeavors all that to prevent delay, and shall to all that may be reasonably required, to the satisfaction of the Employer to proceed with the works and on his doing so that it will be ground of consideration by the Employer for extension of time as above provided. The decision of the Employer as to the period to be allowed for an extension of time for completion here under (which decision shall be final and binding on the contractor) shall be promulgated at the conclusion of search strike or lock-out and the Employer shall then, in the event of on extension being granted, determine and declare the final completion date. The provision in cost 15 with respect to payment of liquidated damages shall, in such case, be read and construed as if the extended date fixed by the Employer were substituted for and the damage shall be deducted accordingly.

**3. progress of work:** During the period of construction the contractor shall maintained proportionate progress on the basis of a programme chart submitted by the contractors immediately before commencement of work and agreed to be the Employer/Architects/Contractor should also include planning for procurement of scarce materials well in advance and reflect the same programme chart so that there is no delay in completion of the project.

#### **14. Liquidated Damages**

Should the work be not completed to the satisfaction of the Employer/Architects within stipulated period, the contractor shall be bound to pay to the Employer a sum calculated as given below by way of liquidated damages and not as penalty during which the work remains uncompleted or unfinished after the completion – date.

- |   |  |
|---|--|
| a) For contractors having<br>Time for completion<br>6 months and less | 1.00% of the estimated amount shown in<br>the tender per week subjected to a ceiling<br>of 10% of the accepted contracted sum. |
| b) For contracts having<br><br>Time for completion                    | 0.50% of the estimated<br><br>amount shown in the exceeding 6 months but   |

Not exceeding 2 (24 Weeks)	tender per week subject years to a ceiling of 7.5% of The accepted contracted Sum but not exceeding the Total S.D. of the contract.
c) For contracts having Time for completion In excess of 2 years	0.25%of the estimated amount shown in the tender per week subject To a ceiling of 5%of, the Accepted contracted sum But not exceeding total S.D. of the contract.

**15. Tools, Storage of material, protective works and site office Requirements**

The contractor shall maintain a site office with site engineer to receive instruction notice or communication etc.

All drawings maintained on the site are to be carefully mounted on board's pf appropriate size and covered with a coat of approved varnish. They are to be protected from ravages of termites, ants, and other insects.

The contractor shall use the toilets identified by the company for use of their workmen and keep the same in a clean and sanitary condition to the satisfaction of the company/ Public Health Authorities and shall cause such latrines and soil to be cleared away whenever necessary and shall make good all the works distributed by these conveniences;

Every precaution shall be taken by the contractor to prevent the breeding of mosquitoes on the works during the construction, and all receptacles; cisterns water tanks etc., used for the storage of water must be suitably protected against breeding of mosquitoes.

The contractor shall indemnify the Employer against any breach of rules in respect of anti- material measures.

The contractor shall not fix or place any placards or advertisement of any description or permit the same to be fixed or placed in or upon any boarding gantry, building structure other than those approved by the Employer.

Protective Measures: The contractor from the time of being placed in possession of the site must make suitable arrangement for watching, lighting, and protecting the work, the site and surrounding property by day, by night, on Sundays and other holidays.

Contractor shall indemnify the Employer against any possible damage to the building, roads, or members of the public in course of execution of the work.

The contractor shall provide necessary temporary enclosures, gates, entrances, etc., for the protection of the work and materials and for altering and adopting the same as may be required and removing on completion of the works and making good all works distributed.

Storage of materials: The contractor shall provide and maintain proper sheds for the proper storage and adequate protection of the materials etc., and other work that may be executed on the site including the tools materials of sub-contractors and remove same on completion. Cement should be stored one feet above the ground level and have pucca raised floor.

Tools: The theologicize levels, prismatic compass, chain, steel and metallic tapes and all other surveying instruments found necessary on the works shall be provided by the contractor for the due performance of this contract as instructed by the site Engineer. All measuring tapes shall be of steel and scaffolding and ladders that may be required for safely taking measurement shall be supplied by the contractor.

The maistries and the supervisors on the works shall carry with them always a one meter or two meter steel tape, a measuring tape of 3 meters, a spirit level, a plumb bob and a square and shall check the work to see that the work is being done according to the drawing and specifications. The site Engineer will use any or all, measuring instruments or tools belonging to the contractors as he chooses for checking the works executed on the contract. The contractor should cover in his rates for making provisions for all reasonable facilities for the use of his scaffolding, tools and plant etc., by sub-contractors for their work.

#### **16. Notice and patents of Appropriate Authority and Owners**

The contractor shall conform to the provisions of any Acts of the Legislature relating to the work, and to the Regulations and Bye-laws of any authorities, and/or any water, lighting and other companies, and/or authorities with whose systems the structure were proposed to have connection and shall before making any variations from the drawings or specification that may be associated to so conform, give the Employer/ Architects written notice specifying the variations proposed to be made and the reason for making them and apply for instruction thereon. The Employer /Architects on receipt of such intimation shall give a decision within a reasonable time.

The contractor shall arrange to give all notices requires for by the said Acts, Regulations or Bye-laws to be given any authority, and to pay to such authority or to any public officer all fees that may be properly chargeable in respect of the work and lodge the receipts with the Employer.

The contractor shall indemnify the Employer against all claims in respects of patent rights, royalties and damages to buildings, roads or members of public in course of execution of work and shall defend all action arising from such claims and shall keep the Employer saved harmless and indemnified in all respects from such actions, costs and expenses.

#### **17. Clearing Site and setting out Works**

The site shown on the plan shall be cleared of all obstructions, loose stone, and materials rubbish of all kinds. All holes or hollows whether originally existing or produced by removal or loose stone or materials shall be carefully filled up with earth well rammed and leveled off as directed at his own cost. The contractor shall set out the works and shall be responsible for the true and perfect setting out of the work and for the correctness of the positions, levels, dimensions and alignment of all parts thereof. If at any time, any error shall appear during the progress of any part of the work, the contractor shall at his own expenses rectify such error, if called upon to the satisfaction of the Employer. The Contractor shall further set out the works to the alternative position at the site until one is finally approved and the rates quoted in his tender should include for this and no extra on this account will be entertained.

#### **18. Datum**

The average ground level will be considered as the crown of the nearest road, which should be taken as "Datum" which is however, subject to final confirmation by the Employer/Architects. All level shown in the drawings are to be strictly adhered to.

### **19. Benches**

The contractor is to construct and maintain proper benches of all the main walls, in order that the lines and levels may be accurately checked at all times.

### **20. Contractor Immediately to Remove All Offensive Matters**

All soil, filth or other matters of any offensive nature taken out of any trench, sewer, drain, cesspool or other place shall not be deposited on the surface but shall be at once carted away by the contractor to place provided by him.

The contractor shall keep the foundations and works free from water and shall provide and maintain at his own expenses electrically or other power driven pumps and other plant to the satisfaction of the Employer for the purpose, until the building is handed over to the Employer. The contractor shall arrange for the disposal of the water so accumulated to the satisfaction of the Employer and local authority and no claims will be entertained afterwards if he does not include in his rates for the purpose.

### **21. Access**

Any authorized representative of the Employer shall at all reasonable times have free access to the works and/or to the, workshops, factory or other places where the materials are laying or from where they are being obtained, and the contractor shall give every facility to the company or their representative necessary for inspection and examination and test of the materials and workmanship. Except the representatives of the Employer no person shall be allowed at any time without the written permission of the Employer.

### **22. Materials, Workmanship, Samples, Testing of Materials**

All the works specified and provided for in the specifications or which may be required to be done in order to perform and complete any part thereof shall be executed in the best and most workmanlike manner with materials of the best and approved quality of the respective kinds in accordance with the particulars contained in and implied by the specifications and as represented by the drawings or according to such other additional particulars, and instructions as may from time to time be given by the Employer / Architects during the execution of the work, and to his entire satisfaction.

If required by the Employer/Architects the contractor shall have to carry out tests on materials and workmanship in approved materials testing laboratories or as prescribed by the Employer/Architects at his own cost to prove that the materials etc. Under test conform to the relevant I.S Standards or as specified in the specifications. The necessary charges for preparation of mould (in case of concrete cube) transporting, testing etc., shall have to be borne by the contractor. No extra payment on this account should in any case be entertained.

All works to be carried out generally as per BIS Specifications.

Branded items, i.e., BIS complaint items specified in the tender shall not be tested separately. However the other items if approved by company are subjected to testing as per tender specifications .All the materials(except where otherwise described)stores and equipment required for the full performance of the work under the contract must be provided through normal channels and must include charges for import duties, sales tax, octroil and other charges and must be the test of their kind available and the contractor must be entirely responsible for the proper and efficient carrying out of the work. The work must be done in the best workmanlike manner. Samples of all other materials to be used must be submitted to the

Employer/Architects when so directed by the Engineer/Architects and written approval from Employer/Architects must be obtained prior to placement of order.

During the inclement weather the contractor shall suspend concreting and plastering for such time as the Employer/Architects may direct and shall protect from injury all work when in course of execution. Any damage (during constructions) to any part of the work for any reasons due to rain, storm, or neglect of contractor shall be rectified. By the contractor in an approved manner at no extra cost.

Should the work be suspended by reason of rain, strike, lock-outs or any other cause, the contractor shall take all precautions necessary for the production of work and at his own expenses shall make good any damage arising from any of these causes.

The contractor shall cover up and protect from damage, from any cause, all new work and supply all temporary doors, production to windows, and any other requisite for the execution of the work whether by himself or special tradesmen or sub-contractor and any damage caused must be made good by the contractor at his own expenses.

### **23. Removal of Improper Work**

The employer shall during the progress of the work have power to order in writing from time to time the removal from the work within such reasonable time or times as may be specified in the order of any materials which in the opinion of the Employer/Architects or not in accordance with specification or instructions, the substitution or proper re-execution of any work executed with materials or workmanship not in accordance with the drawings and specifications or instructions. In case the contractor refuses to comply with the order the Employer shall have the power to employ and pay other agencies to carry out the work and all expenses consequent thereon or incidental thereto as certified by the Employer/Architects shall be borne by the contractor or may be deducted from any money due to or that may become due to the contractor. No certificate which may be given by the Architects shall relieve the contractor from his liability in respect of unsound work or bad materials.

### **24. Site Engineer/Project Management Consultant**

The term "Site engineer/PMC" shall mean the person/agencies appointed and paid by the Employer or superintend the work. The contractor shall afford the Site Engineer/PMC every facility and assistance for examining the works and materials and for checking and measuring work and materials. The site Engineer/PMC shall have no power to revoke, alter, enlarge or relax any requirements of the contractor or to sanction any day work, additions, alterations, deviations or omission or any extra work whatever, except in so far as such authority may be specially conferred by a written order of the Employer.

The Site Engineer/PMC shall have power to give notice to the contractor or to his foreman, of non-approval of any work or materials and such work shall be suspended or the use of such materials shall be discontinued until the decision of the Employer is obtained. The work will from

Time to time be examine by the Architects, Engineer from the premises Department of the Employer and the Site Engineer if any, But such examine shall not in any way exonerate the contractor from the obligation to remedy any defects which may be found to exist at any stage of the work or after the same is completed. Subject to the limitations of this clause the contractor shall take instructions only from the Architects/Employers or his representative.

### **25. Contractor's Employees**

The contractor shall employ technically qualified and competent supervisors for the work who shall be available (by turn) throughout the working hours to receive and comply with instructions of the Employer /Architects. The contractor shall engage at least one experienced Engineer as site-in-charge for execution of the work. The contractor shall employ in connection with the work persons having the appropriate skills or ability to perform their job efficiently. The contractor shall employ local labourers on the work as far as possible.

No laborer below the age of sixteen years and who is not an Indian National shall be employed on the work.

Any laborer supplied by the contractor to be engaged on the work on day-work basis either wholly or partly under the direct order or control of the Employer or his representative shall be deemed is a person employed by the contractor.

The contractor shall comply with the provisions of all labor legislation including the requirements of

- α) The Payment of Wages Act
- β) Employer's Liability Act
- χ) Workmen's Compensation Act Contract Labor (Regulation & Abolition) Act, 1970 and Central Rules 1971
  - e) Apprentices Act 1961
  - f) Minimum Wages Act
  - g) Any other Act or enactment relating thereto and rules framed there Under from time to time

The contractor shall keep the Employer saved harmless and indemnified against claims if any of the workmen and all costs and expenses as may be incurred by the Employer in connection with any claim that may be made by any workmen.

The contractor shall comply at his own cost with the order of requirement of any Health Officer of the State or any local authority or of the Employer regarding the maintenance of proper environmental of the area where the contractor's laborers are housed or accommodated, for the prevention of small pox, cholera, plague, typhoid, malaria and other contagious diseases. The contractor shall provide, maintain and keep in good sanitary condition adequate sanitary accommodation and provide facilities for pure drinking water at all times for the use of men engaged on the works and shall remove and clear away the same on completion of the works. Adequate precautions shall be taken by the contractor to prevent nuisance of any kind on the works or the lands adjoining the same

The contractor shall arrange to provide first-aid treatment to the laborers engaged on the works. He shall within 24 hours of the occurrence of the any accident at or about the site or in connection.

With execution of the works, report such accident to the Employer and also to the Competent Authority where such report is required by law.

## **26. Dismissal of workmen**

The contractor shall request of the Employer immediately dismiss from works any person employed thereon by him, who may in the opinion of the Employer be unsuitable or incompetent or who

may misconduct himself. Such discharges shall not be the basis of any claim for compensation or damages against the Employer or any of their officer or employee.

## **27. Assignment**

The whole of the works included in the contract shall be executed by the contractor and the contractor shall not directly or indirectly transfer, assign or underlet the contract or may part share or interest therein nor, shall take a new partner, without written consent of the Employer and no subletting shall relieve the contractor from the full and entire responsibility of the contract or from active superintendence of the work during their progress.

## **28. Damage to person and property Insurance Etc.,**

The contractor shall be responsible for all injury to the work or workmen to persons, animals or things and for all damages to the structural and/or decorative part of property which may arise from the operations or neglect of himself or of any sub-contractor or of any of his or a sub-contractor's employees, whether such injury or damage arise from carelessness, accident or any other cause whatsoever in any way connected with the carrying out of this contract. The clause shall be held to include inter-alia, any damage to buildings whether immediately adjacent or otherwise, and any damage to roads, streets, foot paths or ways as well as damages caused to the buildings and the works forming the subject of this contract by rain, wind or other inclemency of the weather.

The contractor shall indemnify the Employer and hold harmless in respect of all any expenses arising from any such injury or damages to persons or property as aforesaid and also in respect of Any claim made in respect of injury or damage under any acts of compensations or damage consequent upon such claim.

The contractor shall reinstate all damages of every sort mentioned in this clause, so as to deliver the whole of the contract works complete and perfect in every respect and so as to make good or otherwise satisfy all claim for damages to the property or third parties-

The contractor shall affect the insurance necessary and indemnify the Employer entirely from all responsibility in this respect. The insurance must be placed with a company approved by the Employer and must be effect jointly in the name of the contractor and the Employer and the policy lodged with the latter. The scope of insurance is to include damage or loss to the contract itself till this is made over in a complete state. Insurance is compulsory and must be affected from the very initial stage. The contractor shall also be responsible for anything which may be executed from damage to any property arising out of incidents, negligence or defective carrying out of this contract.

The Employer shall be at liberty and is hereby empowered to deduct the amount of any damages, compensations, costs, charges and expenses arising or accruing from or in respect of any such claim for damages from any sums due or to become due to the contractor.

## **29. Insurance**

The contractor shall arrange to take "Contractors all risk insurance policy including third party liability," covering the entire period of contract (including extended period if any) for the entire scope of works for a risk cover not less than the contract value.

Unless otherwise instructed the contractor shall insure the works and keep them insured until the virtual completion of the contract against loss or damage by fire and / or earthquake, flood. The insurance must

be placed with a company approved by the Employer, in the joint name of the Employer and the contractor for such amount and for any further sum if called to do so by the Employer, the premium of such further sum being allowed to the contractor as an authorized extra.

The contractor shall as soon as the claim under the policy is settled or the work reinstated by the Insurance company should they elect to do so, proceed with due diligence with the completion of the work in the same manner as though the fire has not occurred and in all respect under the conditions of the contract. The contractor in case of rebinding or reinstatement after fire shall be entitled to extension of time for completion as the Employer may deem fit.

### **30. Accounts, Receipts & Vouchers**

The contractor shall, upon the request of the Employer furnish them, with all the invoices, accounts, receipts and other vouchers that they may require in connection with the works under this contractor. If the contractor shall use materials less than what he is required under the contract, the value of the difference in the quantity of the materials he was required to use and that he actually used shall be deducted from his dues. The decision of the Employer shall be final and binding on the contractor as to the amount of materials the contractor is required to use for any work under this contract.

**31.** Before taking any measurement of any work the site Engineer or a subordinate deputed by him shall give reasonable notice to the contractor. If the contractor fails to attend at the measurements after such notice or fails to countersign or to record the difference within a week from the date of measurement in the manner required by the site Engineer then any such event the measurements taken by the site Engineer or by the subordinate deputed by him as the case may be is final and binding on the contractor and the contractor shall have no right to dispute the same.

### **32. Payments**

All bills shall be prepared by the contractor in the form prescribed by the Employer/Architects. Normally one interim bill shall be prepared each month subject to minimum value for interim certificate as stated in these documents. The bills in proper forms must be duly accompanied by detailed measurements in support of the quantities of work done and must show deductions for all previous payments, retention money etc.

The Employer/Architect shall issue a certificate after due scrutiny of the contractor's bill stating the amount due to the contractor from the Employer and the contractor shall be entitled to the payment thereof, within the period of honoring certificate named in these documents. In case of delay due to some reason in the processing of such bills for payment, an advance of 75% of the billed amount may be paid on the request of the contractor for the smooth progress of the work. The amount stated in an interim certificate shall be the total value of work properly executed and 75% of invoiced value of material brought to site for permanent incorporation into the work up to the date of the bill less the amount to be retained by the Employer as retention money vide clause 11 of the general conditions of contract, less TDS, less works contract tax of 2% of cost of civil works and 4% of cost of electrical works and less installments previously paid under these

Conditions, provided that such certificate shall only include the value of said material and goods as and from such time as they are reasonably, properly and not prematurely brought to or placed adjacent to the work and then only if adequately protected against weather or other casualties.

The Employer will deduct retention money as per tender conditions. The refund of retention money will be made as specified in the said clause.

If the Employer has supplied any materials or goods to the contractor, the cost of any such materials or goods will be, progressively deducted from the amount due to the contractor in accordance with the quantities in the work.

All the interim payments shall be regarded as payments by way of advance against the final payment only and not as payments for work actually, done and completed, and shall not preclude the Requiring of bad, unsound, and-imperfect or unskilled work to be; remove and taken away and reconstructed, or re-erected or be considered as an admission of the due performance of the contract, or any part thereof in any respect or the accruing of any claim, nor shall, it conclude, determine or affect in anyway the power of the Employer under these conditions or any of them as to the final settlement and adjustment of the accounts or otherwise or in any other way vary or affect the contract. The final bill shall be submitted by the contractor within one month of the date fixed for completion of the work or of the date of certificate of completion furnished by the Site Engineer and payment shall be made within three months. Payments will be made 75% against Supply of materials & 25% against erection and commissioning.

### **Final Payment**

The final bill shall be accompanied by a certificate of completion from the Consultants & Architects. Payment of final bill shall be made after deduction of Retention Money, works contract tax at 2% for civil/interior works and 4% for electrical/ac works, Work Contract Tax shall be issued in the name of "CCTO" for commercial tax of local department. 50% of the total security deposit (retention amount + Initial security Deposit) will be refunded to the Contractor on the completion subject to the following:

Contractor's removal of his equipment, labor force, temporary sheds/stores etc. From the site. (Excepting for a small presence required if any for the Defect Liability period and approved by the company)

Balance 50% of the amount shall be refunded after the completion of the Defects Liability Period after receiving the Employer's /Architects' certificate that the contractor has rectified all defects to the satisfaction of the Employer /Architects. The acceptance of payment of the final bill by the contractor would indicate that he will have no further claim in respects of the work executed.

### **33. Variation/ Deviation**

The price of all such additional items/non-tendered items will be worked out on the basis of rates quoted for similar items in the contract wherever existing or on engineering rate analysis based on prevalent fair price of labor, material and other components as required. The tender rates shall hold good for any increased or decreased in the tendered quantities up to variation of 25%. For variation beyond 25%, the rate for the respective item may be reviewed on mutually agreed terms.

### **38. Concealed Work**

The contractor shall give due notice to the Employer/Architects whenever any work is to be buried in floor / earth, concrete, ceiling or in the bodies of walls or otherwise becoming inaccessible later on, in order that the work may be inspected and correct dimensions taken before such burial, in default whereof the same shall, at the opinion of the Employer/Architects be either opened up for measurement at the contractor's expense or no payment may be made for such materials. Should any dispute or differences arise after the execution of any work as to measurements etc. or other matters which cannot be conveniently tested or checked, the notes of the Employer/Architects shall be accepted as correct and binding on the contractor.

### **39. Escalation**

The rate quoted shall be firm throughout the tenure of the contract (including extension of time, if any, granted) and will not be subjected to any fluctuation due to increase in cost of materials, labor, sales tax, octroi, etc. unless specifically provided in these documents.

Further in case of variation in the wages of labour due to statutory enactments like the revision of the Minimum Wages Act by more than 10%, the increase in actual labour cost due to the implementation of the statutory provisions based on the number and category of labour actually borne on the Muster during the period under consideration may be also considered, if provided in the tender.

#### **40. Idle Labour**

Whatever the reasons may be no claim for idle labour, additional establishment cost of hire and labour charges of tools and plants would be entertained under any circumstance.

#### **41. Suspension**

If the contractor except on account of any legal restraint upon the Employer preventing the continuance of the work or in the opinion of the Employer shall neglect or fail to proceed with due diligence in the performance of his part of the contract or if he shall more than once make default, the Employer shall have the power to give notice in writing to the contractor requiring the work to be proceeded within a reasonable manner and with reasonable dispatch, such notice purport to be a notice under this clause.

After such notice shall have been given the contractor shall not be at liberty to remove from the site of the works or from any ground contiguous thereto any plant or materials to subject from the date of such notice being given until the notice shall have been complied with. If the contractor fails to start the work within seven days after such notice has been given to proceed with the works as therein prescribed, the Employer may proceed as provided in clause 42 ( Termination of contract by Employer)

#### **42. Termination of Contract by Employer**

If the contractor being a company go into liquidation whether voluntary or compulsory or being a firm shall be dissolved or being an individual shall be adjudicated insolvent or shall make an assignment or a composition for the benefit of the greater Part, in number amount of his creditors or shall enter into a Deed or arrangement with his creditors, or if the Official Assignees in insolvency, or the Receiver of the contractor in insolvency, Shall repudiate the contract, or if a Receiver of the contractor's firm appointed by the court shall be unable, within fourteen days after notice to him requiring him to do so, to show to the reasonable satisfaction of the employer that he is able to carry out and fulfill the contract, and if so required by employer to give reasonable security therefore. or if the contractor shall suffer execution to be issued, or shall suffer any payment under this contract to be attached by or on behalf of and the creditors of the contractor, or shall assign, charge or encumber this contract or any payments due or which may become due to the contractor, there under, or shall neglect or fail to observe and perform all or any of the acts matters of things by this contract, to be observed and performed by the contractor within three clear days after the notice shall have been given to the contractor in manner hereinafter mentioned requiring the contractor to observe or perform the same or shall use improper materials or workmanship in carrying on the works, or shall in the opinion of the employer not exercise such due diligence and make such due progress as would enable the work to be completed within due time agreed upon, and shall fail to proceed to the satisfaction of the employer after three clear days notice requiring the contractor so to do shall have been given to the contractor as hereinafter mentioned, or shall abandon the contract, then and in any of the said cases, the company may notwithstanding previous waiver determine the contractor by a notice in writing to the effect as hereinafter mentioned, but without thereby effecting the powers of the employer of

the obligations and liabilities of the contractor the whole on which shall continue in force as fully if the Contract, had not been so determined and as if the works subsequently executed had been executed by or on behalf of the contractor ( without thereby creating any trust in favor of the contractor) further the employer or his agent, or servants, may enter upon and take possession of the work and all plants, tools, scaffolding, sheds, machinery, steam and other power, utensils and materials lying upon premises or the adjoining lands or roads and sell the same as his own property or may employ the same by means of his own servants and workmen in carrying on and completing the works or by employing any other contractors or other persons or person to complete the works, and the contractor shall not in any way interrupt or do any act, matter of thing to prevent or hinder such other contractors or other persons or person employed from completing and finishing or using the materials and plants for the works when the works shall be completed, or as soon thereafter as conveniently may be, the employer shall give notice in writing to the contractor to remove his surplus materials and plants and should the contractor fail.

To do so within a period of 14 days after receipt by him the employer may sell the same by public Auction and shall give credit to the contractor for the amount so realized. Any expenses or losses incurred by the employer in get the works carried out by other contractors shall be adjusted against the amount payable to the contractor by way of selling his tools and plants or due on account of work carried out by the contractor prior to engaging other contractors or against the Security Deposit.

### **43. Arbitration**

All disputes or difference of kind whatsoever which shall at any time arise between the parties hereto touching or concerning the works or the execution or maintenance thereof of this contract or the rights touching or concerning the works or the execution of maintenance thereof this contract or the construction remaining operation or effect thereof or to the rights or liabilities of the parties or arising out of or in relation thereof whether during or after determination foreclosure or branch of the contract (other than those in respect of which the decision of any person is by the contract expressed to be final and binding) shall after written notice by either party to the contract to the other of them and to the employer herein after mentioned be referred for adjudication to a sole Arbitrator to be appointed as herein after provided.

If the Arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever another Sole Arbitrator shall be appointed as aforesaid.

The work under the contract shall, however, continue during the, arbitration proceedings and no payment due or payable to the contractor shall be with held on account of such proceeding.

The Arbitrator shall be deemed to have entered on the reference on the date he issued notice to both the parties fixing the date of the first hearing.

The Arbitrator may from time to time, with the consent of the parties, enlarge the time for making and publishing the award.

The Arbitrator shall give a separate award in respect of each disputes or difference referred to him. The Arbitrator shall decide each dispute, in accordance with the terms of the contract and give a reasoned award. The venue of arbitration shall be such place as may be fixed by the Arbitrator in his sole discretion.

The fees, if any, of the Arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The cost of the reference and of the award including the fees , if any , of the Arbitrator who may direct to and by whom and in what manner such cost or any part thereof

shall be paid and may fix or settle and amount of cost to be so paid. The award of the Arbitrator shall be final and binding on both the parties.

Subjected to aforesaid the provisions of the Arbitration Act 1992 or any statutory modification or reenactment thereof and the rules made there under, and for the time being in force, shall apply to the arbitration proceeding under this clause.

The Employer and the contractor hereby also agree that arbitration under clause shall apply to the arbitration proceeding under this clause.

The Employer and the contractor hereby also agree that arbitration under clause shall be a condition precedent to any right to action under the contract with regard to the matters hereby expressly agreed to be so referred to arbitration.

<b>SAFETY CODE AND MODEL RULES FOR PROTECTION OF HEALTH AND SANITARY ARRANGEMENTS FOR WORKERS</b>
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**Safety Measures:** Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites of work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. Personal Safety Equipments.

All necessary personal safety equipment as considered adequate by the Engineer should be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use, and the contractor should take adequate steps to ensure proper use of equipment by those concerned.

- a) Workers employed on mixing asphalt materials, cement and lime mortars shall be provided with protective footwear and protective goggles.
- b) Those engaged in white washing and mixing or stacking of cement bags or any material that is injurious to the eyes shall be provided with protective goggles.
- c) Those engaged in welding works shall be provided with welder's protective eyesight lids.
- d) The contractor shall not employ men below the age of 18 years and women on the work of painting with products containing lead or any toxic material in any form. Wherever men above the age of 18 are employed on the work of following precautions should be taken:
  1. No paint containing lead or lead products shall be used except in the form of pastier or ready-made paint. Paints like vinyl and epoxies having toxic fumes should be applied after following all precautions laid down by manufacturers.
  - ii. Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint dry rubbed and scrapped.
  - iii. Overalls shall be supplied by the contractor to the workers and adequate facilities shall be provided to enable the working painters to wash during the cessation of work.
  - iv. When the work is done near any public place where there is risk of drowning all necessary equipments should be provided and kept ready for use and all necessary steps take for prompt rescue of any person in danger and adequate provision should be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.

### **First Aid**

At every work place, there shall be maintained in readily accessible place first aid appliance including an adequate supply of sterilized dressings and sterilized cotton wool. The appliance shall be kept in good order and in large work place, they shall be kept in good order and in large work place, they shall be placed under the charge of a responsible person who shall be readily available during working hours.

### **Drinking Water**

a) In every work place, there shall be provided and maintained at suitable places easily accessible to labour sufficient supply of cold water fit for drinking. Where drinking water is obtained from and intermittent public water supply, each work place shall be provided with storage where such drinking water shall be stored.

## GENERAL SPECIFICATIONS

### **To be read in unison with particular specifications and bill of quantities**

These specifications are for work to be done, item to be supplied and materials to be used in the works as shown and defined on the drawings and described herein, to the satisfaction of the Employer/Architect.

#### **1. General:**

- i. The workmanship is to be the best possible and of a high standard. The contractor shall take all steps immediately to make up deficiency if any noticed by the Employer / Architect. Use must be made of special tradesman in all aspects of the work and allowance must be made in the rates for the same.
- ii. The materials to be provided by the contractor shall be in accordance with the samples already got approved from the Employer / Architect by the contractor and in conformity with specification and approved list of manufactures and brand. The contractor shall produce all, invoices, vouchers or receipts for any materials if called upon to do so by the Employer/ Architect.
- iii. Samples of materials are to be submitted to the Employer / Architects for their approval before the contractor orders or deliver the materials to the site. Samples together with their packing are to be provided free of charge by the contractor and should any materials be rejected they will be removed from the site at the contractors expenses. All samples will be retained by the Employer / Architects for comparison with materials which will be delivered at site. Also the contractor will be required to submit specimen finishes of colors, fabrics, etc., for the approval of the Employer / Architects before proceeding with the works.
- iv. The contractor shall be responsible for providing and maintaining temporary coverage required for the protection of finished work. He is also to clean out all wood shavings, cuts ends and other waste from all parts of the works before covering or in fillings is constructed.
- v. The contractor shall maintain uniform quality and consistency in workmanship throughout the execution of the work.

#### **2. Joinery in wood work**

- i. The contact surface between internal frame and skinning shall be glued with approved adhesive in addition to fixing with necessary screws etc.
- ii. After preparing proper surface of skinning by sand papering etc., the laminates or veneers shall be fixed on it with the help of approved adhesive.
- iii. Framework for full height partition shall be rigidly fixed to the floor, walls and ceiling soffit. The partition height shall be measured up to bottom of false ceiling and framing members/ply going above shall not be measured.
- iv. Any portion that are warped or found with other defects are to be replaced. The whole of the work is to be framed and finished in a workman - like manner in accordance with the detailed drawings and the direction of PM / Architect and whenever required, fitted with all necessary metal ties, straps, screws, adhesive, etc., joinery work generally to be finished with fine sand / glass paper.

- v. All joints shall be standard mortise and tendon, dowel, or cross halved screws, nails, etc., will be of standard iron or wire. Tendons should fit the mortise exactly.
- vi. Nailed or glued butt joints will not be permitted.
- viii. Wherever screw heads are on finished surface those will be sunk and the hole plugged with a wood plug of the same wood and grain to match the color.

### **3. Timber**

- i. All the wood be used shall be properly seasoned, of natural growth and shall be free from worm holes, loose or dead knots or other defects, sawn square and shall not suffer warping splitting or other defects. White cedar, Malaysian sale both of 1<sup>st</sup> quality.
- ii. All internal frameworks shall be treated with approved wood preservative and with fire retardant treatment paint. Wood shall be treated for resistance to pests.
- iii. All wood brought to the site be clean it shall not have any preservative or other coating / covering.
- iv. All rejected, decayed, bad quality wood shall be immediately removed from site.
- v. All the dimensions mentioned for T.W members are finished sizes.
- vi. All exposed T.W to receive polish and should be of 1<sup>st</sup> Quality Indian T.W

### **4. Plywood**

- i. Marine plywood shall generally conform to IS 71 0-1980, bonded with phenol formaldehyde, B.W.P / BWR grade.
- ii. Commercial plywood shall generally conform to IS: 303 bonded with Phenol formaldehyde, MR grade.

### **5. Hardware and Metals**

- i. All the screws / bolts with nuts to be used shall have oxidized finish (unless required otherwise of approved shape, size and quality).
- ii. Fittings shall be only SS, or Brass and suitable for heavy duty unless specified otherwise.
- iii. Samples of all hardware are required to be got approved in advance.
- iv. The agency should cover-up and protects the brass surface against oxidation by suitable material veneer as necessary and subsequently cleans it away at the same time of handing over.
- v. All hardware shall be fitted with good workmanship without the surrounding edges being damaged.

### **6. Laminate**

- i. All laminate shall be 1 mm thick of approved make or as directed.
- ii. The contractor shall get the sample showing the surface texture pattern and color approved, by Employer / Architect.

## **7. Fabrication in metal**

All brazing and welds are to be executed in a clean and smooth manner, rubbed down and finished in flat and tidiest way, particularly where exposed.

## **8. Glass**

- i. All glass to be approved manufacture, complying with I.S 3548 - 1960, or as per approved quality and sample, to be of the qualities specified and free from bubbles, air holes, waviness and other defects.
- ii. In cutting glass, proper allowance shall be made for expansion
- iii. Glass for mirror shall be silvering quality (S.Q) Conforming to I.S 3458 - 1958 or as approved sample and quality.
- iv. On completion, all glass surfaces shall be cleaned inside and out, all cracked, scratched glass/mirror shall be replaced.

## **9. Paint and Polishes**

- i. All material required for the works shall be specified and approved manufacture, delivered to the site in the manufacturers containers with the seals, etc., unbroken and after use empty containers shall be stored till finally cleared by the employers.
- ii. All iron or steel/ metal surfaces shall be thoroughly scrapped and rubbed down with the brushes and shall be entirely free from rust, mill scale, etc., before applying the primary coat.
- iii. Metallic polish finishes shall be properly finished, without any flow marks, spots, roughness etc.
- iv. Painting work shall be of high standard, without any brush marks on the finished surfaces and no spots on adjacent furniture, glass, etc.

## **FLOOR TILES**

Plain cement tiles, chequered tiles, mosaic tiles, terrazzo tiles shall conform to IS: 1237. For neutral shade tiles grey cement shall be used. Tiles shall be compacted by mechanical vibration and hydraulically pressed. It shall be of choice shade and shall have desired pattern of chip distribution. The sizes of chips and proportion of chips to cement in Terrazzo or mosaic floor shall be as specified in IS: 1237. The size and thickness of tiles shall be as approved by the Architect / company.

## **GLAZED TILES**

White or colored glazed tiles shall comply with IS: 777. It shall be from an approved manufacturer and shall be flat and true to shape. They shall be free from cracks, crazing, spots, chipped edges and corners. The glazing and color shall be of uniform shade and unless otherwise specified the tile shall be min mm thick.

## **PAINTS**

Lime for lime wash, dry distemper, oil bound distemper, cement, primer, oil paint, enamel paint, flat oil paint, plastic emulsion paint, anti-corrosive primer, red lead, water proof cement paint shall be from an approved manufacturer and shall confirm to the latest Indian Standards for various paints,

Ready mixed paints as received from the manufacturer without any admixture shall be used, except for addition of thinner, if recommended by the manufacturer.

## **PANELLED SHUTTERS**

Panel shall be of pattern and size as shown on the drawings or as directed by the Employer / Architects. Panels shall be in one piece wherever possible. Panels shall be frames into grooves made in styles and rails to the full depth of groove and faces shall be closely fitted to sides of grooves.

## **FLUSH DOORS**

All flush doors shall be solid core unless otherwise specified. It shall conform to the relevant specifications of I.S 2202 and shall be obtained from approved manufacturers. The finished thickness of the shutter shall be as mentioned in the item. Face veneers shall be of the pattern and color approved by the Employer / Architects and an approved sample shall be deposited with the Employer / Architects for reference.

The solid core shall be of wood laminate prepared from battens of well seasoned and treated good quality wood having straight grains. The battens shall be of uniform size of about 2.5 cm width. These shall be properly glued and machine pressed together with the grains of each piece reversed from that of adjoining one. The longitudinal joints of the battens shall be staggered and no piece shall be less than 50 cm in length. Alternatively, the core shall be of solid teak particle board. Edges of the core shall be lipped with first class teakwood patterns of 4 cm. (1 1/2")  
Min depth, glued and machine pressed along the core.

## **PAINTING OIL / ENAMEL / PLASTIC EMULSION ETC**

Ready mixed oil paint, plastic emulsion paint, ready mixed synthetic enamel paint, Aluminum paint, etc., shall be brought in original containers and in sealed tins. If for any reason thinner is necessary the brand and quantity of thinner recommended by the manufacturer or as instructed by the Employer / Architects shall be used.

The surface shall be prepared as specified above and cost of approved primer shall be applied. After 24 hours, drying approved of specified quality paint shall be applied evenly and smoothly. If required filler putty coating may be given to give smooth finish. Each coat shall be allowed to dry out thoroughly and then lightly rubber down with sand paper and cleaned of dust before, the next coat is applied. Number of coats shall be as specified in the item and if however, the finish of the surface is not uniform additional coats as required shall be applied to get good and uniform finish at no extra cost. After completion no hair marks from the brush or clogging of paint puddles in the corners of panel angles of moldings shall be left on the work. The glass pans floor etc. shall be cleaned of stains.

When the final coat is applied, if directed, the surface shall be rolled with a roller or if directed it shall be stippled with stippling brush.

## **MELAMINE FINISHES**

### Glossy

Apcolite Natural wood finish clear glossy is a premium quality melamine's coating specially formulated as a protective and decorative finishing clear coating for wood. The finish shall be smooth & glossy.

Sand the surface along the grains with Emery Paper No>180 or with a suitable grade sand paper. Brush the surface free of loose dust. Fill the wood using Acolyte Wood Filler. Remove excess filler immediately after applications. Allow 2-3 hours of drying before sanding with Emery Paper No 240 or 280. If desired, apply Apcolite Wood Stains by ragging after filling step of mix it in Apcolite Natural Wood Finish up to 20% by volume and apply by spraying after Sealer Coat. In application by ragging

allow a drying time of 5-10 minutes in between coats and 30-60 minutes before over coating with finish coats. Apply a coat of Apcolite Natural Wood Finish Clear Sealer. After overnight drying smooth sand with Emery Paper No.320 and wipe the surface free of loose dust. Apply Apcolite Natural Wood Finish Clear Glossy as follows. Ensure that the surface to be coated is free from loose matter. Apcolite Natural Wood Finish Clear Glossy is a two component system consisting of base and hardener. These should be mixed in the recommended ratio. The two components should be mixed in a glass, plastic or enameled container. Allow the mixture to stand for 30 minutes and then apply by brushing or spraying using the recommended thinner for consistency adjustment. The mixture of base and hardener should be used within 8 hours. To enhance gloss and decorative value Apcolite Natural Wood Finish Clear Glossy can be buffed using suitable buffing mops but only after 48 hours of application.

### Matt

Apcolite Natural Wood Finish Clear mat is a premium quality melamine is coating specially formulated as a protective and decorative finishing clear coating for wood. Finish shall be smooth & matt.

Send the surface along the grains with Emery Paper No.180 or with a suitable grade sand paper. Brush the surface free of loose dust. Fill the wood using Apcolite Wood Filler. Remove excess filler immediately after applications. Allow 2.3 hours of drying, before sanding with Emery Paper No. 240 or 280. If desired, apply Apcolite Wood Stains by ranging after filling step or mix it in Apcolite Natural Wood Finish up to 20# by volume and apply by spraying after Sealer Coat. In application by ragging allow a drying time of 5 - 10 minutes in between coats and 30-60 minutes before over coating with finish coats. Apply a coat of Apcolite Natural Wood.

Finish Clear Sealer. After overnight drying smooth sand with Emery Paper No.320 and wipe the surface free of loose dust. Apply Apcolite Natural Wood Finish Clear Glossy as follows. Ensure that the surface to be coated is free from loose matter. Apcolite Natural Wood Finish Clear Glossy is a two component system consisting of base and hardener. These should be mixed in the recommended ratio. The two components should be mixed in a glass, plastic or enameled container. Allow the mixture to stand for 30 minutes and then apply by brushing or spraying using the recommended thinner for consistency adjustment. The mixture of base and hardener should be used within 8 hours.

**POLISHING AND VARNISHING** French Polishing: French spirit polish shall be an approved make conforming to IS 348. If it has to be prepared on site, the polish shall be made by dissolving 0.7 kg of est. shellac in 4.5 liters of ethylated spirit without heating. To obtain required shade, pigment may be added and mixed.

Surface shall be cleaned. All unevenness shall be rubbed down smooth with sand paper and well dusted. Knots if visible shall be converted with a preparation of red lead and blue. Resinous or loose knots and gaps filled with seasoned timber pieces made level with rest of the surface. Holes and indentations on surface shall be filled with putty made of whiting and linseed oil. Surface shall be given a coat of filler made of 2.25 kg of whiting in 1.5 liter of ethylated spirit. When it dries surface shall again be rubbed down perfectly smooth with sand paper and wiped clean. Piece of clean fine cotton cloth and cotton wool made into shape of pad shall be used to apply polish .The pad shall be moistened with polish and rubbed hard on the surface applying the polish sparingly but uniformly and completely over the entire surface. It shall be covered with a fresh piece of clean fine cotton cloth, slightly damped with ethylated spirit and rubbed lightly and quickly with a circular motion, till the finished surface attains uniform texture and high gloss.

**Wax Polishing:** Wax polish shall either be prepared on site or obtained ready made from market. Polish made on the site shall be prepared from a mixture of pure bees wax, linseed oil, turpentine oil and varnish

in the ration of 2:1½: 1½ by weight. The bees wax and the boiled linseed oil shall be heated over a slow fire when the wax is completely dissolved the mixture shall be cooled till it is just warm, and turpentine oil and varnish added to it in the required proportions and the entire mixture is well stirred.

Surface shall be prepared as described under French Spirit Polish except that the final rubbing shall be done with sand paper which has been slightly moisture with linseed oil.

Mixture of polish shall be applied evenly with a clean cloth pad in such a way that no blank patches are left and rubbed continuously for half an hour. When the surface is quite dry a second coat shall be applied in the same manner and rubbed continuously for half an hour or until the surface is dry. Final coat shall then be applied sand rubber for 2 hours or more if necessary, until the surface has assumed a uniform Gloss and is quite dry showing no sign of stickiness when touched. Gloss of the polish depends on the among of rubbing, therefore rubbing must be continuous and with unirlm pressure and frequent change in direction.

**VARNISHING:**

Surface shall be prepared as described above. After preparation of surface, two coats of clean boiled linseed oil shall be applied at sufficient interval of time. After the linseed oil has dried two coats of varnish obtained from approved manufacturer shall be applied at sufficient interval of time. If the surface fails to produce the required gloss an additional coat shall be applied without any extra cost.

**NOTE:**

All timber for joinery or wrought form work shall be of best Indian Teak wood unless otherwise specified and or specified quality, carefully selected free from sap and subject to inspection and approved before delivery. All teak wood to be used in this work shall be seasoned in an approved manner.

The joiners work shall be framed and put together immediately after signing the contract, but not to be wedged up until required for fixing. The approval of the Employer/Architects shall be obtained before any primer coat is applied.

The whole of joinery to be finished to the dimensions and sizes indicated in the drawings are subject to tolerance to 1.50 mm of each planned face, but no allowance shall be given to flush doors, shutters, ply and other manufactured board etc.

All block boards etc. shall correspond to respective I.S. specification. Flush doors shall correspond to relevant IS Specification. Samples of all block board, plywood, flush doors, etc. shall be got approved by the Employer/Architects before placing order. All such items shall be of standard manufacture of reputed quality. Unless otherwise specified all flush shutters shall be teak veneered on both sides. All flush shutters shall be of solid core and shall be provided with teak wood external lipping.

Rate quoted shall include for all framing, usual waster and cuttings and not extra rates or claims will be entertained on this account.

The contractors shall be responsible to deliver all items at site of work. The Contractor will submit a program of work in such a way that requirements for each floor commencing from ground floor is complete before the requirement of the next floor and arrange to have them field in position as the General Builders work progresses.

Timber in contact with masonry or concrete shall be treated with so lignum paint or any approved anti-termite treatment before fixing.

The Contractor will be making necessary holes in concrete and masonry for fixing in position and grouting. The Contractor will be responsible for the proper fixing of partitions true to plumb and alignment until completion and grouting pockets with cement concrete and make good affected portions without claim to any extra.

All doors partitions etc shall be finished in the manner specified in the drawing. Specifications and schedules, wherever painting and polishing are specified, although three coats finishes specified are to be included in the rates quoted, the Contractor shall be required to carry out additional costs are considered necessary in the opinion of the Employer/Architects. If directed, putty shall be applied over the entire surface to ensure smooth and neat finish at no extra cost.

The iron mongery fittings shall be of heavy type cast brass oxidized and of approved manufacture. Samples of all iron mongery items shall be got approved by the Employer/Architects prior to procurement.

## **ELECTRICAL WORK**

The entire installation work shall be carried out in accordance with approved drawings and in gernal conformity with the requirements of the Indian Electricity Act, 1910 .the Indian Electricity Rules 1956, the relevant I.S.Codes of practice, as amended to date, wherever applicable and the regulations of the local licensing bodies/CEA etc and where such installations are subject to inspection and approval of Fire Insurance and Explosives Authorities the Installation shall be planned and executed also conforming to their regulations/rules.

1.1. In case of difference between:

The specifications here in and the IEE Rules/Regulations of the local licensing authority/CEA or/and of the Fire Insurance/Explosives Authorities, the later shall prevail.

### **Drawings and Schedules:**

The tender papers include only the general site plan the main and sub main circuit diagram to the rising main and the distribution board in the various floors of the buildings and the layouts of the various points therein. These show the general scheme of things. Should the tendered feel that design, the specifications or the drawing/layouts require modifications either due to manufacturing practice or special requirements under regulations/rules or for other substantial reasons therefore, with complete information to enable the Employer to properly appreciate the modified proposal. The tenderer shall quote for the tender proposal but state separately the rates/sums necessary for such modification, as alternatives

The precise positions of all points, controls, switch boxes, main and distribution board, tap off points etc., shall be subject to approval by the Architects. Wherever required, the contractor shall prepare whatever detailed drawing are necessary, complying with the requirements under para -1, General above, for proper execution of the work and under the approval of the Architects shall submit them to the Electrical Inspectorate or other appropriate State Authority along with necessary forms and papers and obtain the approval. Fees or charges for such purpose shall initially paid, on behalf of the Employer, to the appropriate authority, by the contractor, the payments so made being reimbursed by the Employer to the contractor in due course on production of necessary proof of payment supervision.

From the contractor's side shall be carried out by person/persons holding certificates of competency of appropriate class issued by the respective State Government bodies authorized to issue such certificate under statutory rules and regulations in force. The names of such supervision personnel shall be approved by the architects.

### **Service Connection:**

It is the responsibility of contractor to obtain the necessary service connection from the local electric supply undertaking or system the necessary fees or charges begin paid by the Employer.

### **Testing and Commissioning:**

On completion of the work and / or at the appropriate stages of the work as necessary the contractor shall arrange for all the necessary tests for safety, resistance, continuity etc, of the installation/equipment/Plant, ect. In Provided that the work shall not be deemed to be complete and the installation will not be taken over if the test results are not within satisfactory limits. In

case the results are unsatisfactory the contractor is required to carry out all necessary rectifications/modifications at his own cost to bring the installation/plant/equipment to the level of acceptability within a period of 4 (four) weeks from the date of test and the defects liability period of 12 months will stand extended by the period of delay in such rectification/modification, modification, that is in excess of the said period of 4 weeks.

On completion of work four prints each of the completion drawings(wiring diagrams and electrical layouts) incorporating all the modifications, carried out from time to time shall be submitted by the contractor to the employer through the Architects, indicating there in the position of all points board, mains, sub mains, circuits, etc. Properly number, the point bearing the same numbers as the circuit to which they belong. The contractor shall also where necessary furnish 4 sets of complete date of the equipment / plant installed, manufacturer maintenance and operating instruction and the relevant literature to enable proper operation and maintenance to be carried out after he hands over the work / installation.

### **Workmanship**

First class workmanship and neat appearance are essential requisites for compliance with these specifications.

### **Materials and Makes**

All materials, equipment, fittings, fixtures, appliances, accessories, etc., to be used in the installation shall conform to the relevant Indian Standard Specifications and for such items as are not covered by I.S.S. the British Standards shall become applicable. They must be of the best quality obtainable in the makes/manufacture specified below, samples being approved by the Architects.

Contractor to quote for the brand of item mentioned in the first choice of materials. For usage of any alternative brand, company's prior approval is a must.

### Note:-

The tenderer will specify the makes (one in each category) of goods, accessories, fittings, etc., which he proposes to use, in column 4 of the "list of approved makes of electrical goods and statement of makes proposed to be used by Tendered etc. "Attached to the Form of

Tender. If he specifies more than one make in any category, the Architects shall be entitled to assume that the

Best of the different makes so specified will be used by the contractor on the works or other equivalent make/maker as the Architects shall decide upon.

The word Equivalent used in these papers means “make of Equivalent Chipping, Chasing, Holing, Conduct work:

The contractor shall be deemed to have inspected the General Builders work (and of others) in progress (or if it has been finished, the building) prior to submission by him of his tender and his rates shall be deemed to include the following:

In the case of all RCC work (slabs, columns etc) wherein conduits are required to be buried the contractor or his representative/supervisor shall be continuously watching the work so that before concrete is laid in, he may lay and fix the conduits securely in place to proper alignment and in proper position, ensuring that during the process of laying of the concrete the conduits laid remain rigidly in their proper positions.

Note:

Where conduits have already been laid in RCC work the contractor shall utilize the same, and be paid for wiring allowing rebate/recovery as specified in the bills of quantities. In the event the conduits laid by other agency are not clear for drawing wires, this should immediately be brought to the notice of the Architects / Employer.

All chipping, chasing, holding to be done in walls/floors and the like (whether bare or plastered or finished or not) shall be done neatly and the surfaces made good (or restored) by the contractor at his cost, after the conduits or other accessories are buried and fixed in place, without any delay begin caused to the General Builder work or work of other contractors on the job the walls, floors, etc., So made good are to match with the adjoining / contiguous wall/floor surfaces. All such work shall be done neatly and efficiently in the best workman like manner.

## SCOPE OF ELECTRICAL CONTRACTOR'S WORK

01. Providing electrical installation work at Central Office
02. Supply, erection, testing and commissioning of wall mounting MCB type lighting distribution board.
03. Supply, erection, testing and commissioning of wall mounting MCB type power distribution board.
04. Supplying & laying of 1.1 KV power cables.
05. Providing necessary end termination for the above cables.
06. Supply and laying of 660 volts grade control armored copper cables
07. Providing necessary end terminations for the above cables.
08. Supply & erection of necessary lighting fittings, ceiling fans and exhaust fans
09. Supply and providing lighting distribution system inclusive of inverter emergency lighting wirings.
10. Supply and providing power distribution system
11. Supply and fixing of power sockets
12. Supply and fixing of lighting sockets
13. Supply and providing necessary earthing system
14. Supply and fixing of necessary industrial sockets.
15. Minor civil works and supply & providing of necessary additional items in the existing system.
16. Pre-commissioning test, including testing of electrical wirings.
17. Co-ordination and liaisoning with TNEB Authorities in regularizing the connected load, if required.
18. Testing of all the system along with client after energisation
19. Handing over the installation
20. All the existing building wiring, fans, lights, sockets, etc to be removed.

**ARTICLES OF AGREEMENT**

THIS AGREEMENT made at \_\_\_\_\_

\_\_\_\_\_ of day \_\_\_\_\_ 2015 BETWEEN M/s. UNITED INDIA INSURANCE COMPANY LTD, CHENNAI. A2 body corporate, constituted under the provisions of Banking Companies (Acquisition & Transfer of Undertaking) Act, 1970 having it's The Regional manager no.134, Greams road Chennai – 600 006 and M/\_\_\_\_\_

WHEREAS the employer is desirous of INTERIOR, ELECTRICAL & AIR-CONDITIONING WORKS IN TRAINING CENTRE AT REGIONAL OFFICE, UNITED INDIA INSURANCE COMPANY LTD, CHENNAI. Caused Drawing and specifications describing the work to be done by M/s FOARCONS Architects (herein after referred to as the Consulting Architects) for a value of \_\_\_\_\_.

Tendered Value	
Earnest Money	
Security Deposit	

WHEREAS the said Drawings and the specifications and the priced Schedule of Quantities have been signed by or on behalf of the parties hereto and

WHEREAS the Contractor has agreed to execute upon and subject to the conditions, set forth herein (hereinafter referred to as “the conditions”) the work shown upon “the said Drawings” and described in “the said Specification” and “the said Priced Schedule of Quantities” at the representative rates mentioned in the priced Schedule of Quantities.

NOW IT IS HEREBY AGREED AS FOLLOWS:

 In consideration of the payment to be made to the Contractor as hereinafter he shall upon and subject to said conditions, execute and complete the works shown upon said drawings and such further detailed drawings as may be furnished to him by the said consulting architects and described in the said specification and the said priced Schedule of Quantities.

 The Employer shall pay the contractor such sums as shall become payable hereunder at the times can in the manner specified in the said conditions.

 The term “Consulting Architects” in the conditions shall mean the said M/s Foarcons Architect or in the event of their death or ceasing to be the Consulting Architects for that purpose of this contract, such other person as shall be nominated for that purpose by the Employer, not being a person to whom the Contractor shall object for reasons considered to be in sufficient by the Employer. Provided always that no persons subsequently appointed to be consulting Architects under this contract shall be entitled to disre-

and or over-rule any decision or approval or direction or expressed in writing by the consulting Architects for the time being.

 The plan, agreement and documents above mentioned shall form the basis of this contract and the decision of the said Consulting Engineers/Architects for the time being as mentioned in the Conditions of contract in reference to all matter of dispute as to the materials, workmanship or account and so as to the intended interpretation of the clauses of the Agreement of any other document attached hereto shall be final and binding on both parties and may be made a Rule of Court.

 The said contract comprises the works above mentioned and all subsidiary works connected therewith within the same site as may be ordered to be done from time to time by the said employer through the consulting Architects or other the Consulting Architects for the time being, even though such works may not be shown on the drawings or described in the said specifications or the Priced Schedule of quantities.

 The Employer reserves to himself the right of altering the drawings and nature of the work and of adding to or omitting any items of work or of having portions of the same carried out without prejudice to this contract.

 The said conditions shall be read and construed as forming part of this Agreement, and the parties hereto will respectively, abide by and submit themselves to the conditions and stipulations and perform the agreement on their parts respectively in such conditions contained.

 Further, letter exchange between the Employer and the Contractor after the receipt of this contract as listed, shall form an integral part of this contract.

 The several parts of this contract form have been read to us and fully understood by us.  
As witness our hands this \_\_\_\_\_ 2015

Signed by the Said

Employer

\_\_\_\_\_

In the presence of

Contractor

\_\_\_\_\_

Signed by the said

\_\_\_\_\_

In the presence of

\_\_\_\_\_

<b>MODE OF MEASUREMENTS</b>
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**INTERIOR WORKS**

1. **Partitions:** The partition height shall be measured up to bottom of false ceiling and framing members/ ply going above shall not be measured.
2. **Blinds:** actual done to be measured in square feet.
3. **False ceiling:** false ceiling work, the measurement shall be for the actual area covered. No deductions for the cutouts, of light fittings, speakers, column up to 5.00 sq.ft / 0.50 Sqm.
4. **Cornice:** actual done to be measured in running length
5. **Doors:** Clear area over one face inclusive of frame shall be measured. Holdfasts and portions embedded in masonry of flooring shall not be measured.
6. **Wall & column paneling:** The area of cladding shall be measured in square meter, or square feet. The gross area gladded will be measured. No deductions will be made for gaps up to one centimeter between the panels.
7. **Painting wall & window & grills:** actual done at site to measure in square feet in one times only for no of coats

**ELECTRICAL WORKS**

1. **Power cable:** Starting No & end No to be visible for measuring the length.
2. **Points:** to be arrived from measurement chart.
3. **6sqmm/ 10sqmm:** to be measured from Panel board/UPS/to DB.
4. **4sqmm:** to be measured by no of A/C socket
5. **Wiring/ 2.5sqmm:** to be measured by no of circuit/ computer socket, and row power sockets.
6. **Copper wire for earthing:** to be measured from UPS to earthing.
7. **10sqmm copper wire:** to be measured from UPS to earthing
8. **Telephone wiring:** to be measured by no of telephone socket to ebapx.
9. **Inverter wiring:** to be measured by no of circuit to DB
10. **Data cable:** to be measured by no of data points provided at site to hub.
11. **Quantity nos:** to be calculated by break up chart prepared by the contractor.

## GENERAL SCOPE OF WORK

Sets of Working Drawing shall be submitted on award of Contract within seven days for the proposed systems.

### **Guarantee and warranty**

Guarantee and Warranty for the supplies with respect to design, quality of materials used, Workmanship and performance shall be covered for a period of 12 months from the date of handing over of the commissioned systems.

The Bidder shall also submit a bar Chart one for the supply of materials and the other for the execution of the work within seven days of the award of contract.

The Bidder shall use the best engineering practice in the execution of this project and any such provisions to be made shall be brought to the notice of the Clients well in advance of the work being executed.

## LIST OF APPROVED MAKE OF MATERIALS FOR INTERIOR WORKS

UNLESS OTHERWISE SPECIFIED IN THE BOQ. THE APPROVED BRANDS FOR VARIOUS MATERIALS SHALL BE AS FOLLOWS:

1	BWR grade Plywood	Archid ply / Green ply / Century Ply
2	Lamination	Sunmica of 1mm Thick.
3	Aluminum Frames	Jindal
4	Hardware (Screws, nails, Stays Etc)	Earl Bihari / Efficient Gadgets / Imex
5	Mortise & multipurpose lock	Godrej / Ebco
6	Hinges & Drawer slides	Ebco
7	Handles	Godrej / Ebco
8	Door Closers	Dorma
9	Floor Springs	Dorma
10	Adhesive	Fevicol SH
11	Paints	
	a) Synthetic Enamel Paint	Asian/ Berger/ Nerolac
	b) Melamine	Asian/ Berger/ Nerolac
12	Vertical Blinds	Alta Vista
13	Gypsum Board Ceiling	Gyproc Stain-Gobain With Sections
14	Grid Ceiling	Gyproc Stain-Gobain Mineral Fiber Ceilings Of Celotex Pin' With Narrow Reveal Edge Corner Bevel 14mm Grid (Bolt Slot)
15	Flush Doors	Century ply-sainik / Green ply

## LIST OF APPROVED MAKE OF MATERIALS FOR ELECTRICAL WORKS

UNLESS OTHERWISE SPECIFIED IN THE BOQ. THE APPROVED BRANDS FOR VARIOUS MATERIALS SHALL BE AS FOLLOWS:

1	Indication Lamps	L&T
2	Lt/Ht UG Cables	Polycab
3	MCBs/MCCBs/DBs	Legrand
4	Metalclad Plug & Socket	Legrand
5	Data & Telephone Sockets	Anchor Roma
6	PVC Copper Wires	Anchor FRLS wire
7	PVC Conduit	Avon plast
8	Switches & Sockets	Anchor Roma
9	Automatic Phase shifter	Swift
10	LED green square fitting(2'0"x2'0")	Philips- RC140B LED29S-6500 PSE WH Philips -green LED BBS170 1XDLED-5000 PSU
11	LED for down light	WH
12	Tube light Fittings & Lamps	Philips
13	Wall Mounted/Ceiling Fans	Crompton Greaves
14	Data cables /Telephone Cables	D-Link
15	Speaker/Ampilifer/Mic	Ahuja
16	Speaker Wire	Polycab
17	DVD Player	Philips

### NOTES:

- Latest MCB, DB, MCCB all are in same brand with manufactures date.
- Advance/final bills are in same format of bill of quantities with measurements sheet.
- Single line format bills for advance/ final payment shell be not be acceptable.
- Any changes in the drawing or required for the site with conformation of architect / bank engineer.
- If additional works required apart from the tender. Those items to be prepared with rate analyses

<b>BILL OF QUANTITY FOR INTERIOR, ELECTRICAL &amp; AC WORKS IN TRAINING CENTRE AT REGIONAL OFFICE, UNITED INDIA INSURANCE COMPANY LTD CHENNAI.</b>			
<b>S. N</b>	<b>DESCRIPTIONS</b>	<b>QTY</b>	<b>UNIT</b>
<b>INTERIOR WORKS</b>			
1	<b>Wall Paneling</b> - using aluminum heavy section (2mm thickness) of 1"x2" frame work over the wall covered with 6mm thick BWR Plywood finished with 1mm thick laminate of approved shade and colour. With provision for electrical switches, sockets, ac stabilizers, ac drain pipe line and etc.	350	SFT
2	<b>Full height partition</b> with aluminum heavy section (2mm thickness) of 1"x2" frame work covered with 6mm BWR plywood finished with 1mm thick laminate of approved colours, skirting also finished with 1mm thick laminate of approved colours on both sides. Rate to include providing cutouts and provisions to run electrical conduits, switches etc.	470	SFT
3	<b>Foldable Doors</b> (size of doors - 6'0"wide with 2 foldes x7'0" height x 2nos + 3'0"x7'0"x1no) - supplying and fixing flush doors finished with 1mm thick laminate finish of approved pattern. Door shutter can be fixed to the teak wooden frame size of 5"x2.5" finished with duco polish to match laminate colour. Cost include necessary hardwires like door closer, hinges, foldable hinges, heavy tower bolts, handle and locks.	131	SFT
4	<b>False ceiling -1- Gypboard finish</b> Supplying and Erecting gypboard false ceiling at different heights with framework of G.I. Section (of medium thickness) of spacing 4'0"x2'0" above witch 12mm gypboard shall be fixed. Rate shall include cut-outs for lights. The ceiling shall be putty finished and sanded to form clean and homogeneous surface. Rate to include painting two coats of acrylic emulsion of approved colour after necessary preparation, primer etc. Cost includes removal of existing false ceiling and cart away the debris from site. Cost include provision for video projector.	740	SFT
5	<b>False ceiling -2</b> Providing and fixing Saint gobain tile grid ceiling of GYPROC SAINT-GOBAIN Mineral fiber ceilings of 'CELOTEX PIN' with narrow Reveal edge corner bevel 14mm grid (bolt slot white & black) in aluminum powder coated sections supported from ceiling (4'0"x2'0"grid for support rods) with GI framework of every 2'0"x2'0" grid junction, proper leveling and finished of the joints & top surface as per manufactures specifications. All edges shell be perfectly straight. G.I angle shall be embedded within, at the edge and the surface finished flush with surrounding surfaces complete as directed.	1260	SFT
6	Providing and fixing of POP Cornice of approved design	250	RFT
7	Supply and fixing of white board made with 19mm BWR plywood frame work finished with white glassy laminate covered with teak wood beading and duco polish. Size of board 12'0"x4'0"	48	SFT
8	<b>Vertical blinds</b> for window dressing Providing and fixing vertical blinds of 100mm thick of approved shade and pattern. The rate shall include necessary scotch gird treatment on both sides. The overlapping should be uniform and adequate. Necessary operative arrangements, frames to be provided. The work to be completed as per specification. 'Alta vista' blinds make	220	SFT
9	Plastic paint of inner wall with putty – providing & applying plastic paint of Asian / Nerolac make 2coats of paint with surface preparation, 1coat of primer and putty complete. Unit – sft.	1000	SFT
<b>INTERIOR WORKS TOTAL</b>			

**BILL OF QUANTITY FOR INTERIOR, ELECTRICAL & AC WORKS IN TRAINING CENTRE AT REGIONAL OFFICE, UNITED INDIA INSURANCE COMPANY LTD CHENNAI.**

S. N	DESCRIPTIONS	QTY	UNIT
<b>SUPPLY OF TABLES WORKS</b>			
1	<b>Conference table</b> (2'0" wide, 10'0"x2nos + 4'0" x1no- 24'0" length as per drawing ) to be made with 19mm thick BWR plywood frame work 3"box in 8nos of supports and 25mm thick BWR plywood table top with footrest. All exposed surfaces, Table top, front apron, and skirting to be finished with 1mm thick laminate of approved shade and colour, internal surfaces finished with 0.8mm thick laminate of approved colour. Table edges finished with steam beach wood beading with duco polish to match the laminate colour. Front side top edge finished with half round steam beech wood beading with duco polish to match laminate colour. Necessary hardware such as screws and wire manager are approved make.	24	RFT
2	<b>Raised platform</b> ( size of 18'0"x8'0"x1'0"height) to be made with 25mm thick BWR plywood frame work, top 25mm thick BWR plywood finished with 6mm vinyl floor approved make and colour. All verticals to be finished with 1mm laminate of approved colour.	244	SFT
3	<b>Foldable</b> dining table size of 5'0"x1'6" to be made with 25mm thick BWR plywood top finished with 1mm thick approved colour laminate, bottom finished with enamel paint of approved colour and necessary coats of paint, edge fixed with steam beech wood beading finished with duco polish to match laminate colour. Table to be fixed with wall in necessary folding accessories.	3	NOS
4	<b>DINING TABLE</b> of size 3'0" dia circular table top to be made with 19mm thick BWR plywood finished with 1mm laminate edge finished by 3"ht x 1.5"thick curved shape steam beech wood and duco polish to match laminate colour. Vertical supports with 19mm thick BWR plywood 3"thick box type frame work 4nos finished with 1mm laminate.	3	NOS
5	<b>Writing tables (2'6" wide, 6'0" length)</b> to be made with 19mm BWR ply wood frame work with footrest. table top, sides skirting are finished with combination of 1mm thick laminate of approved shade, internal surfaces finished with enamel paint of approved colour. Table edges finished with steam beech wood beading with duco polish to match laminate colour. Necessary hardware are approved make.	3	NOS
6	<b>Writing tables (2'6" wide, 5'0" length)</b> to be made with 19mm BWR ply wood frame work with footrest. Table top, sides skirting are finished with combination of 1mm thick laminate of approved shade, internal surfaces finished with enamel paint of approved colour. Table edges finished with steam beech wood beading with duco polish to match laminate colour. necessary hardware are approved make.	2	NOS
7	Podiyum made with BWR plywood frame work finished with 1mm laminate of approved colour provision for mic arrangements	1	SET
<b>SUPPLY OF TABLES WORKS TOTAL</b>			

<b>BILL OF QUANTITY FOR INTERIOR, ELECTRICAL &amp; AC WORKS IN TRAINING CENTRE AT REGIONAL OFFICE, UNITED INDIA INSURANCE COMPANY LTD CHENNAI.</b>			
<b>S. N</b>	<b>DESCRIPTIONS</b>	<b>QTY</b>	<b>UNIT</b>
<b>ELECTRICAL WORKS</b>			
1	Supplying and Erection of 4W TPN MCCB Vertical type DB with 100 A 4P MCCB, 16 KA with 2nos 40 A TPN MCB's, 3nos 25 A SP MCB's, and 3nos 32 A SP MCB's with suitable steel enclosure with fixing accessories. For power DB (Acs) (Make of MCBs-LEGRAND)	1	SET
2	Wiring to light points using with 3 runs of 1.5 sqmm PVC insulated multistraud copper conductor wire with suitable PVC conduit pipe with fixing accessories. (Make wires - ANCHOR FRLS wiring, ANCHOR ROMA SWICTHES) a) One light Controlled by One Switch	45	PTS.
	b) 6A Switch box Sockets in the switch board itself	6	PTS.
	c) fan points with regulator	2	PTS.
3	Supplying and Laying of 2 runs of 2.5 sqmm PVC insulated multistraud copper conductor wire with 1 run 1.5 sqmm copper wire as earth wire with suitable PVC conduit pipe with necessary fixing accessories for 15amps sockets/circuit mains. (Make wires - ANCHOR FRLS wiring)	300	RM
4	Supplying and Laying of 2 runs of 4 sqmm PVC insulated multistraud copper conductor wire with 1 run 2.5 sqmm copper wire as earth wire with suitable conduit pipe with necessary fixing accessories etc. AC wiring (Make wires - ANCHOR FRLS wiring)	300	RM
5	Supply and laying of 16 sq.mm, 4 core armad aluminum cable. With end terminations (Make -POLYCAB)	60	RM
6	Supply and fixing of 40/32/20A 3 pin metal clad plug and socket with 1 no 40/32/20ASp MCB with with suitable powder coated sheet steel enclosure with fixing accessories etc (make LEGRAND)	10	NOS.
7	Supplying and Erection of 5A 3 pin switched socket with suitable surface mounted box (make ANCHOR ROMA)	25	NOS
8	<b>Supplying and fixing LED green square 2'0"x2'0"</b> light fixture with necessary fixing accessories. The size of the fixture as per the manufacturers standards. Unit – nos. Fittings make & model to be approved by company engineer/architect. (PHILIPS make of RC140B LED29S-6500 PSE WH)	26	NOS.
9	<b>Supplying and fixing LED for down light</b> with fixing accessories. Unit – nos. Fittings make & model to be approved by company engineer/architect. (PHILIPS make of green LED BBS170 1XDLED-5000 PSU WH)	19	NOS.
10	Providing 48" ceiling fan of approved make with electronic regulator. Fan make & model to be approved by company engineer/architect.	2	NOS.
11	Providing wall mounted fans of approved make with electronic regulator & 5A 3 pin switched socket. Fan make & model to be approved by company engineer/architect.	22	NOS.

<b>BILL OF QUANTITY FOR INTERIOR, ELECTRICAL &amp; AC WORKS IN TRAINING CENTRE AT REGIONAL OFFICE, UNITED INDIA INSURANCE COMPANY LTD CHENNAI.</b>			
<b>S. N</b>	<b>DESCRIPTIONS</b>	<b>QTY</b>	<b>UNIT</b>
<b>MUSIC SYSTEM</b>			
1	Supplying and Laying of twin twisted copper wiring with suitable conduit pipe with necessary fixing accessories etc. amplifier to speakers (Make wires - POLYCAB wiring)	300	Mtrs
2	Supplying and fixing 30 watts speakers in required places. (Make - AHUJA)	8	NOS
3	Supplying and installation of 300W amplifier. (make AHUJA amplifier)	1	SET
4	Supplying and installation of mic with frequency of 50-15000Hz, sensitive - 2.5mv/pa, impendence-600ohms (make of AHUJA - AUD-98XLR)	1	SET
<b>ELECTRICAL WORKS TOTAL</b>			
<b>AIR CONDITIONING WORKS</b>			
1	P&F air-conditioners split type including piping, installation. Rate shall be inclusive of Sales-tax, octroi and all other taxes. High wall split Air conditioners with cordless remote of <b>Carrier novello plus make 3star rated</b> make; Copper and drain pipe of required length of up to 4mts. The basic rate of A/C with all components to be quoted. Unit – rate per unit. Rate include out unit wall bracket.		
	a) for <b>1.5 ton unit(carrier novello plus make 3star rated)</b> with 4 KVA ( <b>Everest</b> make) Stabilizer	10	NOS
2	Extra copper piping over than 5mts with necessary covering. if required as per site condition	30	Rmt
3	Drain out pipe to be provided from indoor ac units to outdoor drainage with 12mm pvc pipe to be concealed in partition/wall/flooring with necessary joints. if required as per site condition	60	Rmt
<b>AIR CONDITIONING WORKS TOTAL</b>			