

**THE INSTITUTE OF CHARTERED ACCOUNTANTS OF INDIA (ICAI)**

**TENDER**

**FOR**

**SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF  
PASSENGER LIFT**

**FOR**

**ICAI BHAWAN AT JODHPUR**

**PART - I**

**(Technical & Commercial Conditions)**

**Name of Tenderer:** \_\_\_\_\_

**Address:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Date of Submission:** \_\_\_\_\_

# I N D E X

## Part -I

### Technical & Commercial Conditions

Sl. No.	DESCRIPTION	PAGE NOS.
1.	Tender Notice (Press/Website)	3-6
2.	Declaration Letter from Contractor to ICAI	7-8
3.	Section - 1 : Instructions to Bidders	9-12
4.	Section - 2 : Eligibility Criteria	13-23
5.	Section - 3 : General Conditions of Contract (GCC)	24-33
6.	APPENDIX - I : Appendix to General Conditions of Contract	34-35
7.	APPENDIX-II : Bank Guarantee for Performance Security	36-37
8.	Section - 4 : Technical Specifications	38-57
9.	Section - 5 : Schedule of Elevators	58-63

## Part - II

### Financial Bid

Bill of Quantities	
--------------------	--

## **NOTICE INVITING TENDER (PRESS)**

**The Institute of Chartered Accountants of India,  
ICAI Bhawan, I.P Marg, New Delhi – 110002**

**Ref.: ICAI/Tender-Jodhpur/Lift: 2018**

**Dated: 10-11-2018**

ICAI invites sealed tenders in 2- bid system (Techno Commercial and Financial bids in two separate covers) from reputed and well established Lift Manufacturers (OEM) for supply, installation, testing & commissioning of passenger lift for its office building at Jodhpur. The details are available at ICAI website [www.icai.org](http://www.icai.org), [www.circ-icai.org](http://www.circ-icai.org) & [www.icaijodhpur.org](http://www.icaijodhpur.org) Last Date of Bid Submission is **06-12-2018 at 4.00 P.M**

Secretary, ICAI

## **TENDER NOTICE (WEBSITE) - Ref.: ICAI/Tender-Jodhpur/Lift: 2018**

ICAI invites sealed tenders in 2- bid system (Techno Commercial and Financial bids in two separate covers) from reputed and well established Lift Manufacturers (OEM) for supply, installation, testing & commissioning of passenger lift for its office building at Jodhpur.

- 1. Scope of Work** : Supply, installation, testing & commissioning of passenger lift for ICAI office building at Jodhpur.
- 2. Availability of Tender** : At ICAI's Website [www.icai.org](http://www.icai.org),  
[www.circ-icai.org](http://www.circ-icai.org) &  
[www.icaijodhpur.org](http://www.icaijodhpur.org)
- 3. Cost of tender** : INR 1180/- in the form of Demand Draft/Pay Order. The DD/PO should be made in the name of 'Secretary, The Institute of Chartered Accountants of India', payable at New Delhi. (The tender Fee to be submitted along with Bid payable at New Delhi).
- 4. Submission of Tender** : Technical and Financial bids should be kept in separate sealed envelopes super scribing 'Technical bid', 'Financial Bid' and the two bids be placed again in a single envelope super scribing 'Supply, installation, testing & commissioning of passenger lift for ICAI Bhawan at Jodhpur'. The Tender Fee and EMD to be placed separately in main envelope.  
Note: Tender fee and EMD must Not be placed in financial bid or Technical bid envelopes.
- 5. Last date, time and Address for submission of tenders** : **06-12-2018 at 4.00 P.M**  
Addressed to:  
The chairman,  
ICAI Bhawan, Guru Roop Rajat, E-32, Kalpatru Shopping Centre, Jaljog Choraya, Jodhpur, Rajasthan.  
Ph: 0291 2771077
- 6. Date of opening the Technical Bid (Cover-1)** : **06-12-2018** at 5.00 pm Hrs.  
the bids would be opened even if bidders are not present.

- 7. Date of opening of Financial bid (Cover -2):** After evaluating the technical bids on ICAI's Parameters, the Financial bids of successful bidders shall be opened on same or any other date as per discretion of the ICAI as notified/informed even if tenderers are not present. The Date shall be communicated through the website [www.icai.org](http://www.icai.org), [www.circ-icai.org](http://www.circ-icai.org) & [www.icaijodhpur.org](http://www.icaijodhpur.org)
- 8. Validity :** Bid shall be valid for 90 Days for acceptance from the last date of submission of the Bid.
- 9. TDS (Income Tax) :** As Applicable
- 10. GST :** Including
- 11. Mobilization Period :** 15 Days
- 12. Period for Supply, Installation, testing & Commissioning of lift :** **3 months**, this period shall be inclusive of Monsoon, holiday etc.
- 13. Earnest Money Deposit :** Earnest Money Deposit (interest free, refundable) of **Rs. 25000/-** (Rs. Twenty Five Thousand Only) by way of a demand draft drawn in favour of the "Secretary, The Institute of Chartered Accountants of India", payable at New Delhi. Validity of EMD should be 3 months.
- 14. Defect Liability/warranty Period :** Defect Liability/warranty Period shall be **One Year** from the date of satisfactory installation, commission and handing over of Lift by the Contractor.
- 15. Amount in words :** Bidder shall write amount in numbers and in words. In case of any discrepancy amount in word shall be considered as final and binding on bidder.
- 16. Hidden/covered item :** The contractor shall ensure that all hidden/covered items are measured jointly with Consultant before covering the same. Incase the same is not measured

- the contractor shall uncover the same and redo the work of the same quality at his own cost for the measurements.
- 17. Out of pocket** : All out of pocket expenses shall be borne by the Contractor only.
- 18. Insurance** : The contractor shall take Labour and Third Party Insurance for the work prior to commencement of the work.
- 19. Overwriting** : Over writing should be avoided & incase of overwriting the same should be signed by the Contractor at each place.
- 20. Stamp & Sign** : The Contractor should Stamp & sign the tender in places indicated.
- 21. Payment Terms** : The Payment shall be made to the contractor after successful installation and commissioning of lift. No interim/advance payment shall be made. The Contractor shall raise the bill in triplicate and submit it to ICAI along with all supporting documents including user manuals, test certificate, warranty certificate, all deliverables etc. Payment shall be made to the contractor after 30 days from the receipt of the Bill and verification thereof.

**Note:-**

1. The Institute of Chartered Accountants of India (ICAI) reserves all rights at any time to reject any application at any stage and/or time fully or partly for whole process and/or for particular contractor and also reserves all rights at any time to add, alter, modify, change, edit & delete any item and/or condition at any stage and/or time or vary all or any of these terms and conditions or replace fully or partly for whole process and/or for particular contractor or vary all or any of these terms and conditions or replace without assigning any reasons whatsoever. In this regard the decision of the Institute of Chartered Accountants of India shall be final and binding on all the participants.
2. The Institute of Chartered Accountants of India reserves right to reject any or all applications without assigning any reason whatsoever. Also, ICAI does not bind itself to award the Contract to Lowest Bidder.
3. Canvassing in connection with tender is strictly prohibited and the tender submitted by a contractor who resorts to canvassing is liable to be rejected.

4. The Institute of Chartered Accountants of India or its representative shall not entertain any bidder/ tenderer during the period of selection of Contractor is in process.
5. The Institute of Chartered Accountants of India reserves the right to verify the particulars furnished by the applicant independently.

## **DECLARATION LETTER FROM CONTRACTOR TO ICAI**

**The Chairman, Jodhpur Branch of ICAI.**

Guru Roop Rajat, E-32, Kalpatru Shopping Centre,  
Jaljog Choraya,  
Jodhpur, Rajasthan.

Dear Sir,

**SUB:** TENDER FOR SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF PASSENGER LIFT FOR ICAI BHAWAN AT JODHPUR

Having examined the requirements, specifications, conditions and schedule of quantities as mentioned in tender document, and satisfying ourselves as to the location of the site, working conditions and terms and conditions mentioned and enumerated in the tender document, I/We hereby offer to execute the above works at the respective rates which I/We have quoted for the items in the Schedule of Quantities.

I/We enclose herewith the following demand drafts:-

1. Earnest Money of Rs. \_\_\_\_\_/- (Rupees \_\_\_\_\_ only) by Demand Draft Number .....dated.....drawn on..... Bank.....Branch.
  
2. Tender Form cost of Rs. \_\_\_\_\_/- (Rupees \_\_\_\_\_ only) by Demand Draft Number .....dated.....drawn on..... Bank.....Branch.

In the event of this tender being accepted, I/We agree to enter into and execute the necessary contract required by you. I/We do hereby bind myself/ourselves to forfeit the aforesaid Earnest Money deposit of Rs. \_\_\_\_\_ /- (Rupees \_\_\_\_\_ ) in the event of our refusal or delay in signing the Contract Agreement and/ or furnishing the Performance Bank Guarantee within the stipulated period. I/We further agree to complete the work within the stipulated time.

I/We agree to keep our tender open for 90 (Ninety) days from the last date of submission of the Bid.

I/We enclose the completed tender documents duly signed under two separate sealed envelopes and the Earnest Money deposit amounting to Rs.\_\_\_\_\_ /- (Rupees\_\_\_\_\_ ) by Bank Draft No..... dated..... Issued by .....

Further I/We agree upon as below:

- 1] I/We, the undersigned, hereby offer to execute, complete the proposed work at the respective unit rates of items quoted by me/us in the Schedule of Quantities in strict accordance with the specifications,



contract conditions and instructions issued / to be issued by Consultants of ICAI and / or their representatives, from time to time.

- 2] I/We further agree that in case any work or part thereof mentioned in the Schedule of Quantities is deleted, I/We shall not claim any compensation thereof.
- 3] I/We agree that this tender shall remain open for acceptance for 90 days from the last date for submission of the tenders;
- 4] I/We undertake to complete and deliver the whole of the works within the period as specified in the tender document from the date of issue of intimation from ICAI that this tender has been accepted by ICAI.
- 5] I/We further agree that within seven days of issue of intimation of acceptance of my/our tender, I/We shall be bound to execute the contract by signing an agreement in accordance with the draft agreement and furnish Performance Bank Guarantee for an amount specified in the tender document. I/We also agree that our contract shall stand cancelled and also you shall be at liberty to forfeit the Earnest Money Deposit and Performance bank Guarantee in case I/We do not start the work within 15 days of intimation of acceptance of my tender.
- 6] I/We shall not assign the contract nor shall I/We sublet any portion of the contract, except with ICAI written consent.
- 7] I / We accept that you are neither bound to accept the lowest Bid nor bound to assign any reason for rejecting or returning of my / our Bid.

Thanking you,

Yours faithfully,

[To be signed by the Authorized Representative of tenderer who has the Power to do so]

Place:

Witness

Signature:

Date:

Name:

Address:

**SECTION - 1**  
**INSTRUCTIONS TO BIDDERS**

## **INSTRUCTIONS TO BIDDERS**

1. Every page of the TENDER document shall be signed by the bidder or by a person duly authorized by the bidder.
2. Prospective bidders desirous of participating in tender process may submit their written queries (*if any*) to The chairman, ICAI – Jodhpur Branch, at least 2 days prior to the pre-bid meeting through email to [jodhpur@icai.org](mailto:jodhpur@icai.org) only. No query would be entertained on phone/ in person.
3. All the terms and conditions will be those mentioned in the bid document and no change/alterations in the terms and conditions by the Contractor will be acceptable.
4. Upon verification, evaluation / assessment, in case, any information furnished by the bidder is found to be false / incorrect, their bid shall summarily be rejected and no correspondence on the same shall be entertained.
5. No deviation from tender terms and conditions will be accepted. Any violation thereof will lead to the rejection of the bid.
6. Bidder shall submit letter of authorisation, authorising the person signing the TENDER document on behalf of the bidder and the written power of attorney in the name of person who is empowered for making such authorizations.
7. The person signing the TENDER document, with date, shall sign all changes, alterations, corrections in the TENDER document in full. No eraser and/or over writing without authentications is/are permissible.
8. ICAI will not be responsible for any misinterpretation or wrong assumption by the bidder, while responding to the tender.
9. Bidder should consider any corrigendum published on the tender document before submitting the bid.
10. Please go through the tender document and advertisement carefully to understand the documents required to be submitted as part of the bid.
11. The complete Bid document along with the documentary evidence should be numbered and cross-referenced/linked with TENDER Clause Number.
12. The Bidder shall submit its Bid in two (2) parts, namely; Part-I will have Technical Bid and Part-II will have Financial Bid in separate envelopes. Technical Bid and Financial Bid shall be submitted on the Bidder's letter head.

13. Bid submitted shall be in the prescribed formats as given herein and shall also have the relevant documents including documentary evidences.
14. Bidder must submit the original 'Technical' and 'Financial' Bids in separate sealed envelopes and put again in a sealed envelope, super scribed "Bid for Supply, installation, testing & commissioning of passenger lift for ICAI Bhawan at Jodhpur".
15. The Bids complete in all respects as specified in this TENDER shall be sent/submitted by Hand/Post/Courier to: –

The Chairman  
ICAI Bhawan, Jodhpur Branch,  
Guru Roop Rajat, E-32, Kalpatru Shopping Center,  
Jaljog Choraya, Jodhpur,  
Rajasthan.

16. The Bids shall be valid for a period of 90 days from the closing date for submission of the Bid.

Last Date & Time of submission of Bid: **06-12-2018 at 4.00 P.M**

17. The complete bid document should be submitted before due date and time as given at Clause 16 above. Bid received after the stated time and date would not be considered and are liable for rejection.
18. The ICAI reserves the right to select or reject any/all the bid(s) including the lowest bid without assigning any reason and no correspondence in this regard shall be entertained. The ICAI takes no responsibility for delay, loss, or non-receipt of response to this TENDER.
19. The bidder shall carefully examine and understand the specifications/conditions of TENDER and seek written clarifications, if required, to ensure that they have understood all specifications/conditions of TENDER.
20. The bidder should have offices and support staff in India. The Bidder shall authorize a representative for interacting with the ICAI during evaluation of the Bid.
21. The successful Bidder shall be required to enter into an agreement with the ICAI, within seven (7) days of the award of the work or within such extended period, as may be specified by the ICAI in this regard.
22. Submission of illegible documents shall lead to disqualification of the bidder.

Date & Time of opening of Technical Bid and Financial Bid shall be communicated through ICAI website [www.ica.org](http://www.ica.org), [www.circ-ica.org](http://www.circ-ica.org) & [www.icaijodhpur.org](http://www.icaijodhpur.org)

23. The bid must be accompanied with earnest money deposit (*interest free*) for the amount indicated in the Notice Inviting Tender in the form of a Demand Draft drawn on any Nationalized/Scheduled Bank in favour of “*Secretary, The Institute of Chartered Accountants of India*”, payable at Delhi. Tenders not accompanied with EMD shall be summarily rejected.
24. If the bidder, after submission, revokes his/its bid or modifies the terms and conditions thereof during the validity of his/its bid except where the ICAI has given opportunity to do so, the earnest money deposit submitted by Bidder, in such case, shall be forfeited. The Earnest Money Deposit of unsuccessful bidders shall be returned within reasonable time, after award of contract.
25. No enquiry shall be made by the bidder(s) during the course of evaluation of the Bids, till final decision is conveyed to the successful bidder(s). However, ICAI can make any enquiry / seek clarification from the bidder(s), which the bidder must furnish within the stipulated time else bid of such defaulting bidder will be rejected.
26. Prices shall be written in both words and figures. In the event of difference, the price in the words shall be valid and binding.
27. The financial bid shall be evaluated for completeness and accuracy. Arithmetical errors will be rectified on the following basis:
  - If there is discrepancy between unit price and total price that is obtained by multiplying the unit price with the quantity, Unit price shall prevail, and total price shall be corrected. If the bidder does not accept the correction of the errors, its bid will be rejected. If there is any discrepancy between words and figures, the amount in words will prevail.

**SECTION - 2**  
**ELIGIBILITY CRITERIA**

## **ELIGIBILITY CRITERIA**

Reputed firms (1) having 10 years of experience and having satisfactorily executed in time at least six jobs costing total 01 crores in last two years ending 31.03.2018, (2) having Average Annual Financial turnover of at least Rs.50 lakhs during the last 3 years ending 31st March 2018. (3) 24 x 7 local service set –up, (4) should not have incurred any loss during the last two years ending 31st March, 2018 and (5) should have a solvency of Rs.50 lakhs issued by a scheduled Bank. All these shall be submitted along with tender request letter.

### **1.0 Criteria for Eligibility and documents to be submitted along with Volume I (Part I).**

- 1) List of Clients for similar nature of work along with documentary evidences about award / completion of works with value, completion period, type of Buildings, name and address / contact No.
- 2) List of works of similar nature in hand with value, schedule date of completion.
- 3) List of Banker along with address, contact number of Branch.
- 4) Turn over of the company for the last 3 financial years, supported by documents.
- 5) Solvency certificate from the Bank for the prescribed value.
- 6) Organizational chart of the company.
- 7) Organizational chart for the personnel proposed to be deployed at ICAI project (Engineer, Supervisor, skilled & non-skilled workers and administrative staff)
- 8) List of machinery available with the firm & to be deployed on the project.

**2.0 Documents – Among others, the Bidder shall invariably enclose the following documents with the Technical Bid:**

- Copy of TDS Certificate issued by the employer in support of eligibility criteria.
- Form A – Financial Information
- Form B- Details of all works of similar class/ nature completed during the last seven years ending 31.03.2018.
- Form B-1- Additional Information for completed works
- Form C- Project under execution or awarded as on 31.03.2018
- Form –D- Performance report for works referred to in Form B & C
- Form E – Structure and Organization
- Form E-1- Details of Key Technical and Administrative Personnel employed by the firm/company
- Form F - Performa on ISO certification
- Solvency Certificate
- Self-attested copy of GST No. and PAN No.
- Self-Declaration letter of undertaking on letter head stating that bidder had not been blacklisted in last 5 years by Govt./BFSI/PSU Govt. Dept. /Regulator/statutory body.
- Earnest Money Deposit (interest free, refundable) of Rs. \_\_\_\_\_ (Rs. \_\_\_\_\_) by way of a demand draft drawn in favour of the “Secretary, The Institute of Chartered Accountants of India”, payable at New Delhi.
- Cost of Tender Form (non-refundable) of Rs. \_\_\_\_\_ (Rs. \_\_\_\_\_ only) by way of a demand draft drawn in favour of the “Secretary, The Institute of Chartered Accountants of India”, payable at New Delhi.



**FINANCIAL INFORMATION**

I Financial Analysis – Details to be furnished duly supported by figures in Balance Sheet/Profit and Loss Account for the last Three years duly certified by the Chartered Accountant, as submitted by the applicant to the Income-Tax Department (Copies to be attached).

YEARS

	2015-16	2016-17	2017-18
--	---------	---------	---------

- (i) Gross Annual turn-over in Construction Works:
- (ii) Profit/Loss
- (iii) Financial position:
  - (a) Cash
  - (b) Current Assets
  - (c) Current Liabilities
  - (d) Working capital (b-c)
  - (e) Current Ratio:  
Current Assets/Current Liabilities (b/c)
  - (f) Acid Test Ratio:  
Quick Assets/Current Liabilities (a/c)

II. Income Tax clearance Certificate

III. Solvency certificate from Bankers (Schedule Bank) of Applicant.

III. Financial arrangements for carrying out the proposed work

SIGNATURE OF APPLICANT(S)

Signature of Chartered Accountant with seal

**FORM'  
B'**

**DETAILS OF ALL WORKS OF SIMILAR CLASS COMPLETED DURING THE LAST SEVEN YEARS  
ENDING 31<sup>ST</sup> March 2018**

SL	Name of project & location	Owner or sponsoring organization	Agreement No	Scope of work *	Cost of work in Crores	Date of commencement per contract	Stipulated Date of completion	Actual date of completion	Litigation/ Arbitration pending / In progress with details **	Name and address/ Tel No of Officer to whom reference	Remarks
1	2	3	4	5	6	7	8	9	10	11	12

\* indicate Number of Basement and No of storeys in super structure.

\*\* Indicate gross amount claimed and amount awarded by the Arbitrator

Signature of Applicant(s)

**ADDITIONAL INFORMATION FOR COMPLETED WORKS**

1. Name of work
2. Location
3. Client's name and address
4. Consultants name and address.
5. Scope of work (No. of Lifts)
  - a. Number of floors (in Basement)
  - b. Number of floors in Superstructure.
  - c. Height of the building.
6. Specialized equipment deployed for the project.
7. Project Management organization structure.
8. Number of shifts and its duration adopted in execution.
9. Systems adopted for timely completion of the project.

SIGNATURE OF APPLICANT(S)

**FORM C**

**PROJECTS UNDER EXECUTION OR AWARDED**

	Name of Owner or project & location	Agree ment No	Cost of work	Date of commencement as per contract	Stipulated Date of completion	Upto date progress percentage of work	Slow progress and reasons thereof	address/ Tel No of Officer to whom reference may be	whether any show cause notice issued or Arbitration initiated during the	
1	2	3	4	5	6	7	8	9	10	11

Signature of Applicant(s)

**FORM 'D'**

**PERFORMANCE REPORT FOR WORKS REFERRED TO IN FORM 'B' & 'C'**

1. Name of the work/  
Project & Location.
2. Scope of work.
  - a. Number of floors in Basement.
  - b. Number of floors in Superstructure.
3. Agreement No.
4. Estimated Cost
5. Tendered Cost
6. Value of work done
7. Date of Start
8. Date of completion
  - a. Stipulated date of completion.
  - b. Actual date of completion.
9. Amount of compensation levied for delayed  
Completion, if any.
10. Performance report based on  
Quality of Work, Time Management,  
and Resourcefulness : Very Good / Good / Fair

DATE

SUPERINTENDINGENGINEER/  
CHIEF PROJECT MANAGER  
OR EQUIVALENT.

**STRUCTURE AND ORGANISATION**

1. Name and address of the applicant
2. Telephone No./Fax No/E-Mail address.
3. Legal Status (attach copies of original document defining the legal status)
  - (a) An Individual
  - (b) A proprietary Firm
  - (c) A Firm in partnership
  - (d) A Limited Company or Corporation.
4. Particulars of registration with various Government bodies (Attach attested photo-copy)
  - a) Registration Number.
  - b) Organization / Place of registration
5. Names and Titles of Directors and officers with designation to be concerned with this work with Designation of individuals authorized to act for the organization.
6. Was the applicant ever required to suspend work for a period of more than six months continuously after you commenced the construction? If so, give the name of the project and give reasons thereof.
7. Has the applicant or any constituent partner in case of partnership firm/company, ever abandoned the awarded work before its completion? If so, give the name of the project and give reasons thereof.
8. Has the applicant or any constituent partner in case of partnership firm/Company, ever been debarred/black listed for tendering in any organization at any time? If so, give details:
9. Has the applicant or any constituent partner in case of partnership firm, or any directors in case of a Company ever been convicted by a court of law? Or any criminal proceedings presently pending? If so, give details.
10. Any other information considered necessary but not included above.

SIGNATURE OF APPLICANT(S)

**FORM E-1**

**DETAILS OF KEY TECHNICAL AND ADMINISTRATIVE PERSONNEL EMPLOYED BY THE FIRM / COMPANY**

SL. NO	Designation	Total Number	Names	Qualification	Professional Experience	Length of continuous service with employer
1	2	3	4	5	6	7

**Note : additional information about Technical personnel , if any , may be submitted on separate sheet**

Signature of Applicant(s)

## FORM F

### PROFORMA ON ISO CERTIFICATION

1. Year of Certification
  
2. Name and Address of Certifying Agency
  
3. Name of Management Representative
  
4. Validity of Certificate

**Note :** Attested copy of certificate (attested by Government Officer or Notary Public) to be enclosed.

SIGNATURE OF APPLICANT(S)



**SECTION - 3**

**GENERAL CONDITIONS OF CONTRACT**

## **GENERAL CONDITIONS OF CONTRACT**

### **1. APPLICATION**

These general conditions shall apply to the extent that provisions in other parts of this document do not supersede them. For interpretation of any clause in the RFP or the Agreement arising thereunder, the interpretation /clarification of the ICAI shall be final and binding on the Bidder.

### **2. CLARIFICATIONS**

During technical evaluation of the bids, ICAI may, at its sole discretion, ask Bidders for clarifications on their bids. Any word used in singular shall have the connotation of plural as well.

### **11. AMENDMENTS**

At any time prior to deadline for submission of bid, ICAI may for any reason, modify the Tender conditions. The Bidders shall be notified of the amendments by posting the same at ICAI's Website [www.icaai.org](http://www.icaai.org) and such amendments shall be binding on them and if the amendments are notified after submission the Bids, the bidders shall follow the instructions as may be issued by ICAI

### **4. PARTNERSHIP /COMPANY**

If the Bidder is a Partnership Firm/Company/LLP, the full details of the composition of the organization in detail should be submitted along with copy of the Articles of Association /MOA/Partnership Deed/Power of Attorney/any other relevant document as the Case may be

### **5. DISQUALIFICATIONS**

The ICAI may, at its sole discretion and at any time during the evaluation of Bid, disqualify any bidder, if the bidder has; Submitted the Bid documents after the response deadline; Made misleading or false representations in the forms, statements and attachments submitted in proof of the eligibility requirements; Exhibited a record of poor performance such as abandoning works, not properly completing the contractual obligations etc. in any project in the preceding three years; submitted bid that is not accompanied by required documentation or is non-responsive; Failed to provide clarifications related thereto, when sought; Submitted more than one Bid; Declared ineligible by the Government of India or any other body for corrupt and fraudulent practices or blacklisted; or modified the terms and conditions of RFP.

### **6. PREPARATION OF BID**

The Bidder shall comply with the related information during preparation of the Bid. The Bid and all associated correspondence shall be written in English and shall conform to prescribed formats. Any interlineations, erasures or over writings shall be valid only if they are initialed by the authorized person signing the Bid. The Bid shall be typed or written in indelible ink and shall be signed

by the Bidder or duly authorized person(s) to bind the Bidder to the contract. The letter of authorization shall be supported by written power of attorney and shall accompany the Bid.

Bidders are not permitted to modify, substitute, or withdraw bids after its submission.

## **7. SUBMISSION, RECEIPTS AND OPENING OF BIDS**

Technical and financial bids must be submitted in sealed envelopes. The bids shall be opened on the specified date & time at the designated venue.

## **8. DEADLINE FOR SUBMISSION OF BIDS**

Bids from Bidders, complete in all respects must be received by the ICAI at the address and by the date specified herein.

## **9. EARNEST MONEY AND PERFORMANCE SECURITY AMOUNT**

9.1 A sum of **Rs. 25000/- (Rupees Twenty Five Thousand only)** as earnest money deposit (EMD) in the form of the demand draft drawn on any Nationalized/Scheduled Bank drawn in favour of '*The Secretary, the Institute of Chartered Accountants of India*', payable at New Delhi shall be furnished by the Bidder along with the Bid.

9.2 The successful Bidder shall furnish to ICAI performance guarantee for an amount equivalent to 10% of the contract value, in the form of bank guarantee issued by a scheduled Bank in favour of '*Secretary, The Institute of Chartered Accountants of India, New Delhi*' within Seven (7) days of the receipt of the Letter of Intent. On the receipt of Performance Bank Guarantee, EMD will be refunded/returned to the successful Bidder.

9.3 EMD/Security Deposit/Performance Security is liable to be forfeited in case:

- a) The successful bidder withdraws its/his offer during the period of tender validity (*The offer shall be valid for a minimum period of 90 days from the last date of submission of Bid*).
- b) The successful bidder refuses/fails to execute the Agreement or furnish the Performance Guarantee.
- c) The successful bidder fails to honour the contract or refuses to comply with any or all terms and conditions of the tender.

9.4 The EMD of unsuccessful bidder shall be returned only after finalization of the tender process. No interest shall be paid on the amount of Earnest Money and Performance Guarantee Deposit.

12. Acceptance of Bid shall be intimated to the successful tenderer through a Letter of intent (LOI) duly signed by the authorized signatory of the ICAI. The successful tenderer is required to execute the agreement on a non-judicial stamp paper within the time specified in the LOI.

### **13. Delivery and Commissioning of Lift**

The supply, installation, testing and commissioning of the lift shall be completed within a period of **3 Months** from the date of issue of letter of intent.

### **14. Guarantees / Liabilities**

The Lift including its all components and accessories shall be guaranteed for a period of 1 year from the date of commissioning of the same against faulty design, defective material, shortfall in performance and faulty workmanship. The contractor shall immediately make free replacement of any of the parts or components that might go out of order within this period and the decision of ICAI or its Consultant in this regard will be final and binding on the contractor. Free maintenance shall be provided during the Defects liability period.

### **13. TERM / PERIOD OF CONTRACT**

The maintenance contract will be initially for a period of three (3) years to be effective from the expiry of defect liability period of one (1) year. On the expiry of maintenance contract of 3 years,, ICAI may extend it further on mutually agreed terms and conditions.

### **14. PAYMENT TERMS**

The Payment shall be made to the contractor after successful installation and commissioning of lift. No interim/advance payment shall be made. The Contractor shall raise the bill in triplicate and submit it to ICAI along with all supporting documents including user manuals, test certificate, warranty certificate, all deliverables etc.

ICAI will remit payment to the Contractor within thirty (30) days from the date of receipt of invoice subject to submitting all requisite documents along with invoice and verification thereof. The above will be subject to TDS as applicable under the Income Tax Act, 1961.

### **15. DELIVERABLES**

1. Completed form of Tender(s).
2. Fully Completed Pricing Schedule and Activity Schedule (no Grouped or bracketed Items).
3. Confirmation that any tender amendments have been incorporated.
4. Insurances.

5. A detailed method statement on how the work shall be managed and what measures are available to mitigate any delays.
6. An outline assessment of the risks associated with the project, how these will be mitigated and associated costs include within the tendered sum.
7. A demonstration of sufficient competence and resource to fulfill the Health and safety requirements.
8. The job work of Supply, installation, commissioning & testing of lift is to be completed based on given BOQ & Technical Specifications.
9. After completion of the work, the firm will have to submit stability test report including electrical test reports of the installation done.
10. The firm has to provide license from PWD/Authority Concerned for the lift. The firms Bid/Offer should mention it clearly.
11. Provide list and details of all subcontractors and the work for which they will be responsible. The contractor will be expected to engage with the same subcontractors listed post contract.
12. The firm on which the job is awarded shall remove the existing features, if required & necessitated, if any, in consultation with the Architect/Engineer-in-charge. The firm may quote accordingly.
13. The firm has to give unconditional free service at least for One year.
14. The firm will have to take all the safety precautions while carrying out the works regarding the safety and security of all the personals and Building/property.
15. The firm will have to comply with all the fire and other safety norms while executing the work.
16. The firm will have to carry out the work, from 8.00 am to 6.00 pm including/excluding lunch hours, as the case may be on all working days except Sundays and holidays without hampering the sectional routine works. However, ICAI will have the discretion to permit work during lunch hour or holidays.
17. An organ gram setting out the team structure and identifying site based and non-item based personnel. A statement on how the project shall be managed at senior management level should also be provided.
18. A draft site waste Management Plan.

19. The firm will have to provide training to ICAI personnel regarding operation and maintenance of the passenger lift.
20. The firm will have to provide the training documents, electrical diagram, mechanical/hydraulic diagram, and necessary catalogue / user manuals regarding the Lift.

The Tenderer shall provide additional cost information if required by the Employer including breakdowns of cost headings to show how costs of individual items have been calculated. Such information is to be provided free of charge within 5 working days of the Employer's request.

Tenderers may supply any additional information they consider necessary to supplement their tender submission.

## **16. INDEMNITY**

- a) The Contractor shall keep ICAI indemnified against all actions, suits and proceedings and any costs, charges, expenses, loss or damage incurred, suffered, caused to/sustained by ICAI by reason of infringement of intellectual property rights of third party or any default or breach or lapse or negligence or non-observance of any rules, regulations, laws, byelaws etc. or non-performance or any non-payment by/on behalf of Contractor.
- b) The Contractor shall, at its own expense, defend, indemnify, and hold ICAI harmless for damages, liabilities, claims, losses, costs, demands, suits, actions, and reasonable expenses (*including but not limited to reasonable attorneys' fees and settlement costs*) (collectively, "Damages") arising out of or related to any third party suits or claims brought against ICAI (i) arising out of or related to the Contractor's violation of any applicable laws, gross negligence, or willful misconduct, or (ii) arising out of or related to any physical damage to property, or personal injury or death, caused by Contractor or any of its Affiliates, officers, directors, and employees.
- c) If any action in any court of law is brought by a third party against ICAI or any of its representatives /officers for the failure or neglect on the part of Contractor to perform any acts, matter, covenants or things under the Contract, or for any damage or injury caused by the alleged omission or negligence on the part of Contractor, its agents/representatives or employees, Contractor shall in all such cases be responsible and indemnify and keep ICAI and/ or its representative/officers harmless from all losses, damages, expenses or decrees arising out of such action.

**17. LIQUIDATED DAMAGES**

If the CONTRACTOR fails to complete the works by the due date or within extended time, the Contractor shall be liable to pay Liquidated Damages to the ICAI at the rate of 0.5 % of the contract value for every week of delay subject to a maximum of 10% of the contract value. In addition to Liquidated Damages, in case the delay is beyond 3 months, it shall render the Performance Guarantee to be forfeited and the Contract will come to end and the ICAI shall be at liberty to withdraw the work and get it executed from any other agency at Contractor’s risk and cost and the site shall be vacated by Contractor immediately.

**18. COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT**

The Vendor shall quote the charges for comprehensive AMC (including spares) for the equipments offered. The scope of the service contract shall include minimum 4 servicing at quarterly intervals and ANY NUMBER of breakdown calls per year. The rates for AMC shall be valid for a period of 3 years after expiry of defects-liability period, and the amount towards annual service contract shall be paid on half yearly basis after rendering satisfactory service. The defects will have to be rectified within the rectification time after complaint is lodged. During the Annual Maintenance Contract (AMC), if the contractor fails to maintain guaranteed uptime 95% on quarterly basis then ICAI will impose Liquidated Damages as per the table below.

Sr. No.	Defect	Rectification time	Penalty (per day)
1	Defects resulting in failure of Lift	8 hours	Rs.1000/-
2	Any other minor defect	72 hours	Rs. 500/-

The service contract shall be renewed for additional period of **at least 12 years after the initial contract period valid till the end of 4 years (one year defect liability period and 3 years initial contract period)**. While renewing the contract, the new contract amount will be arrived at based on following formula.

$$AC = AP \left\{ 15 + 60 \times \left( \frac{EPIC}{EPIP} \right) + 25 \times \left( \frac{CPIC}{CPIP} \right) \times \frac{1}{100} \right\}$$

Where

AC = The contract amount for the current year.

AP = The contract amount for the previous year.

EPIC = Wholesale price Index For Electrical Products 6 months prior to the commencement date of contract for the current year for Mumbai as per Bulletin of Reserve Bank of India.

EPIP = Wholesale price index for electrical products 6 months prior to the commencement date of contract for the previous year for Mumbai as per Bulletin of Reserve Bank of India.

Consumer price index for industrial worker (All India Average) 6  
CPIC = months prior to the commencement date of contract for the current  
year for Mumbai as per Bulletin of Reserve Bank of India.

Consumer price index for industrial workers (All India Average) 6  
CPIP = months prior to the commencement date of contract for the previous  
year for Mumbai as per Bulletin of Reserve Bank of India.

## **19. TERMINATION**

The ICAI may, by giving 30 days advance written notice to the Contractor terminate the contract for the following defaults on the part of the Contractor:

- For default to perform obligations under the Contract or if the quality is not as per the specifications/satisfaction of the ICAI or in the event of non-adherence to time schedule by the Contractor.
- becomes incapable of or unable to perform the Contract; dissolution of Contractor or commencement of liquidation or winding up proceedings or appointment of a Receiver or insolvency of the Contractor;
- Contractor assigns or sub-lets the work under the contract without the prior written permission from the ICAI
- Contractor violates any of the terms and conditions of the contract

However, the termination notice may be revoked provided the Contractor rectifies the default within notice period to the satisfaction of the ICAI. No consequential damages shall be payable to the Contractor in the event of such termination.

## **20. CONSEQUENCES OF TERMINATION**

Upon Termination of the Contract, the work undertaken by the Contractor shall become the property of the ICAI and all its rights shall vest in the ICAI.

## **21. RESOLUTION OF DISPUTES**

In case any dispute arises between the parties in relation to any of the terms and conditions of Tender Document or meaning or interpretation thereof or the contract arising thereunder, in the first instance, the parties shall try to resolve the dispute amicably, failing which the dispute shall be referred to the sole arbitrator to be appointed mutually by the parties. The Arbitration and Conciliation Act, 1996 and any statutory modification or re-enactment thereof, shall apply to these arbitration proceedings. Arbitration proceedings shall be held at Delhi and the language of the arbitration proceeding and that of all documents and communications between the parties shall be in English. The decision of the arbitrator shall be final and binding upon both the parties. All arbitral awards shall be in writing and shall state the reasons therefor. The expenses of the arbitration as determined by the arbitrator shall be shared equally by the parties.



## **22. Jurisdiction**

Subject to the arbitration clause herein contained, all disputes between the parties pertaining to this contract shall be subject to the jurisdiction of the competent Courts at Delhi only.

## **23. Confidentiality**

- a) Confidential Information means any information or data, in any form or storage medium whatsoever, of any nature in relation to ICAI that may be provided by ICAI to the Contractor on confidential basis in terms of the Contract.
- b) The Contractor shall, at all times, during the continuance of the Contract or otherwise (i) keep all Confidential Information confidential and accordingly shall not disclose any such Confidential Information to any third party under any circumstances; (ii) not use or cause the use of any Confidential Information for any purpose whatsoever other than that contemplated under this Contract; (iii) take all care to ensure that all persons including the officials as well as employee(s) of the Contractor who handle the Confidential Information keep(s) the same confidential and not use the same except for the purposes for which it is meant for.
- c) The obligations of the Contractor under this clause shall survive the termination of the contract.

## **24. Standards of Performance**

The selected Bidder/Contractor shall perform and carry out their obligations under the Contract with due diligence and efficiently. The Contractor shall always act in respect of any matter relating to this contract as faithful advisor to the ICAI. The Contractor shall always support and safeguard the legitimate interests of the ICAI in any dealings with the third party. The Contractor shall conform to the standards laid down in RFP in totality.

## **25. Taxes and Duties**

The Bidder(s) shall fully familiarize themselves about the applicable taxes such as GST etc., on amount payable by ICAI under the contract. The Bidder shall pay such tax, duties, fees and other impositions (wherever applicable) levied under the applicable law.

## **26. Relationship**

Nothing contained in this RFP Document or Agreement arising thereunder shall be construed as constituting a partnership, joint venture, or agency between ICAI and the Contractor. The same is specific and limited to the covenants as herein contained.

The Contractor understands that there shall be no Employee and Employer or Master and Servant relationship between the personnel deputed by the Contractor for carrying out the work and ICAI. The Contractor shall be solely responsible for all the claims of its personnel and shall ensure that its personnel do not make any claims whatsoever against ICAI. ICAI shall have no liability in this regard. In any event, the ICAI shall owe no responsibility or liability of any kind arising out of or incidental to the performance of any work(s) as herein contained by the Contractor's personnel or otherwise, at the site or outside the site, including any liability due to any accident or injury or death caused to or suffered by any such personnel or any other health or medical liability or compensation, all of which shall be the sole responsibility of the Contractor.

It shall be the duty of the Contractor to communicate in unequivocal terms the provisions of this clause to its personnel.

## **27. ASSIGNMENT**

The Contractor shall not assign the work to any other Agency/individual, in whole or in part, to perform its obligation under the Contract, without the ICAI's prior written consent.

## **28. INSURANCE**

Contractor shall obtain and maintain any and all necessary insurance cover for the entire work that may be required under any law or regulations applicable.

## **29. CERTIFICATE OF VIRTUAL COMPLETION OF WORKS**

The Contractor shall report in writing to the ICAI/its Consultant as and when the works are completed in all respects. The ICAI shall after the verification of the works and in consultation with Consultant issue to the Contractor a certificate to be called "Virtual Completion Certificate". The Defects Liability period shall commence only from the date of issue of such certificate.

**APPENDIX TO THE FORM OF TENDER**

<b>Sl No.</b>	<b>Clause No.</b>	<b>Brief Description of Clause</b>
1.	Name of Work	Supply, Installation, Testing and Commissioning of <b>Passenger Lift One Number</b> at Office Building of Institute of Chartered Accountants of India (ICAI) at Jodhpur
2.	Cost of Tender Document	<b>Rs 1180/-</b> in the form of DD/ Pay Order in favor of Secretary, The Institute of Chartered Accountants of India, payable at New Delhi
3.	Earnest Money Deposit	In the form of DD/ Pay Order for an Amount of <b>Rs. 25000/-</b> in favor of Secretary, The Institute of Chartered Accountants of India, payable at New Delhi
4.	Validity of the BID	90 days
5.	Commencement of work	Within 15 days from the date of Letter of Intent/ Work Order or handing over of site, whichever is later.
6.	Time of Completion inclusive of holidays & rainy period.	<b>Three Months</b>
7.	Signing of Contract Agreement	Within 7 days of issue of Letter of Intent/ Work Order
8.	Performance Security Deposit	10 % of the contract amount (to be submitted before signing agreement) in the form of Bank Guarantee in favour of Secretary, ICAI, payable at New Delhi. The validity of which will be up to Defect Liability Period plus 90 Days.
9.	Release of Performance Security	Full performance security (10%) shall be refunded after completion of Defect Liability Period.
10.	Insurance	➤ Contractor shall obtain and maintain any and all necessary insurance cover for the entire work that may be required under any law or regulations applicable.

11.	Final Bill	<p>The Payment shall be made to the contractor after successful installation and commissioning of lift. No interim/advance payment shall be made. The Contractor shall raise the bill in triplicate and submit it to ICAI along with all supporting documents including user manuals, test certificate, warranty certificate, all deliverables etc.</p> <p>ICAI will remit payment to the Contractor within thirty (30) days from the date of receipt of invoice subject to submitting all requisite documents along with invoice and verification thereof. The above will be subject to TDS as applicable under the Income Tax Act, 1961.</p>
12.	Taxes and Duties	GST including
13.	Freight, Insurance, Packing, Forwarding, Loading & Unloading	To be included in the bid price.
14.	Escalation	No Escalation shall be payable during the contract period, whatsoever may be the reason.
15.	Electricity & Water	Electricity, drinking water and water for construction to be arranged by CONTRACTOR at his own cost.
16.	Period of Defect Liability Period	12 (twelve) Months from date of issue of completion certificate by ICAI/Architect/PMC.
17.	Liquidation Damages	0.5 % of Contract Value per week of delay, subject to a maximum of 10 % of Contract Value.

(Signature of the Authorized person)

Designation: .....

Date: .....

Name of the firm: .....

(Official Seal) .....

Address: .....

**BANK GUARANTEE FOR PERFORMANCE SECURITY**  
**[Clause 9.2 of the GCC]**

To  
 The Secretary  
 Institute of Chartered Accountants of India  
 Indraprastha Marg

Bank Guarantee No.....

**New Delhi – 110 002**

In consideration of the Institute of Chartered Accountants of India, a statutory body established under the Chartered Accountants Act, 1949, having its Head Office at 'ICAI Bhawan' Indraprastha Marg, New Delhi – 110 002 (hereinafter referred to as "ICAI") having agreed, under the terms and conditions of clause \_\_\_\_\_ of General Conditions of Contract (GCC) of Tender Ref. \_\_\_\_\_ dated ....., and Agreement dated \_\_\_\_\_ made between M/s \_\_\_\_\_, a \_\_\_\_\_ having its registered office at \_\_\_\_\_ (hereinafter referred to as "the Contractor") and the ICAI in connection with the supply, Installation, Testing and Commissioning of Passenger Lift at ICAI Building at \_\_\_\_\_, to accept irrevocable Bank Guarantee for Rs. \_\_\_\_\_/- (Rupees \_\_\_\_\_ only) from a Nationalized Bank as Security Deposit to be furnished by the Contractor for due performance of the terms and conditions contained in the said Tender and Agreement, we .....bank and having head office at ..... (Hereinafter referred to as "the Bank") on the request of the contractor do hereby covenant and agree with the ICAI as follows:-

1. We, the Bank do hereby guarantee and undertake to pay the ICAI, on demand without proof and condition any or all monies payable by the contractor to the extent of Rs \_\_\_\_\_/- (Rupees \_\_\_\_\_ only) at any time upto..... (Date) without demur, reservations, contest, recourse or protest and or without any reference to the contractor, in case the contractor fails to perform the said agreement as aforesaid. Any such demand made by the ICAI on the Bank shall be conclusive and binding notwithstanding any difference or dispute between the ICAI and the contractor pending before any Court, Tribunal, Arbitrator or any other authority
2. Notwithstanding anything contained herein, ICAI's decision in regard to the effect whether the contractor has made any such default and amount to which the ICAI is entitled on account of such default will be conclusive, final and binding on us and we undertake not to question ICAI's decision and not ask to establish ICAI's claim under this guarantee and we shall pay the demanded amount without any objection.
3. We undertake to pay to the ICAI any money so demanded notwithstanding any dispute or disputes raised by the Contractor in such or any proceeding pending before any court or Tribunal relating thereto and our liability under this present being absolute and unequivocal. The payment so made

by us under this guarantee shall be a valid discharge of our liability for payment thereunder.

4. The Bank also agrees that the ICAI at its option shall be entitled to enforce this guarantee against the Bank as principal debtor without proceeding against the contractor and notwithstanding any security or other guarantee that ICAI may have in relation to contractor's liabilities.
5. We further agree that the ICAI shall have full liberty without our consent and without affecting in any manner our obligations herein under to vary any of the terms and condition of the said Agreement or to extend time of performance by the said contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the ICAI against the said Contractor and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor or for any forbearance, or any indulgence of the said Contractor or by any other act or matter or thing whatsoever which under the law relating to sureties would, but for these provisions have effect of so relieving us.
6. The guarantee shall not be discharged due to the change in the constitution of the Bank or the Contractor.
7. We the Bank lastly undertake not to revoke this guarantee during its currency except with the previous consent of the ICAI in writing unless discharged by the ICAI.
8. This guarantee shall hold and remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the ICAI under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged. Unless a demand or claim under this guarantee is made on us in writing on or before ..... we shall be discharged from all liability under this guarantee thereafter.

Date the .....day of .....201\_

For and on behalf of the Bank

.....  
Signature

.....  
Date

.....  
Name

.....  
Designation

**SECTION - 4**

**TECHNICAL SPECIFICATIONS**

## **TECHNICAL SPECIFICATIONS**

### **1. SCOPE OF WORK**

These specifications cover the details of Electrical Elevator equipment to be supplied, inspection as may be necessary before dispatch, delivery at site, installation, testing, commissioning and handing over and the defects liability for a period of 1 year after completion of all works.

These specifications shall be read in conjunction with the General Conditions of Contract (GCC) with all correction slips as well as schedules and drawings. In the event of any discrepancy between these specifications and inter-connected contract documents, the stringent of the two shall be followed.

Lift Requirements :            No. of Passengers: – 12

Lift Shaft Size :- 1850 mm Width X 1820 mm Depth,  
Floors :- Basement, Ground floor, First floor  
In Future:- Second Floor, Third Floor & Terrace

Available headroom in lift corridor at more than 4600 mm Level

### **2. GENERAL**

The equipment and installation covered by these specifications and drawings shall conform to codes of practice in force and highest standards of workmanship and materials. This work shall be done in accordance with the provisions of the Lifts Act, and subsequent amendments, as also any state or local Act in force and latest Indian Standard 14665.

The Electrical wiring shall strictly comply with IS:732 and the entire installation shall be in accordance with the Indian Electricity Act 2003 and Indian Electricity Rules 1956 as amended to-date.

The Contractor shall follow all statutory requirements as well as best trade practices in the manufacture and installation of elevators. The Contractor shall arrange to obtain the statutory approval of the Inspectorate of Lifts as may be required before commencement of the erection and for commissioning of the Elevators and handover for operation after satisfactory tests.

### **3. DRAWINGS**

Before commencing work, the Contractor shall prepare and submit all drawings necessary to show the general arrangement and details of elevator installation. These drawings must be approved by the Engineer-In-Charge and by Statutory Authorities before installation and shall become part of the contract.



The Contractor shall, within 3 weeks of receipt of a Letter of award of contract, submit 3 copies of all working drawings showing hoist way and machine room layouts clearly indicating and specifying all connected structural, electrical and architectural works including imposed structural static / dynamic loads and electrical ratings. Within 15 days of receipt of letter of award of contract, the Contractor shall obtain from the Engineer-In-Charge all the information he needs to prepare his drawings and shall have any interaction with the Engineer-In-Charge to finalize all parameters and data for design. The Contractor will be held responsible for any discrepancies, errors and omissions in the drawings or particulars submitted by him even if these have been approved by the Engineer-In-Charge. On approval of these drawings by the Engineer-In-Charge / Employer (within 4 weeks of submission of full documentation), the Contractor shall submit five copies of approved working drawings incorporating corrections / comments, if any made by the Engineer-In-Charge, and shall immediately commence work.

On completion of work, the contractor shall supply four sets of CD's and four copies of the detailed wiring diagram, as-built drawings and equipment maintenance manuals. Further, a copy of such detailed diagram and a set of instructions for evacuation of passengers, in case of breakdown of the elevator, shall be framed and installed in the respective machine room by the Contractor.

The Contractor shall carry out all the work strictly in accordance with drawings, details and instructions of the Engineer-in-Charge.

4. Works to be arranged by MAIN CONTRACTOR/OTHERS  
The following items shall be provided by the Main Contractor (Civil Work) under instructions of the Engineer-in-Charge / Consultants to suit the requirements of the Elevator Contractor.
  - I. Hoist ways, machine rooms and pits of specified dimensions (within normal building tolerances).
  - II. Floor, wall and ceiling finishes in hoist ways, pits and machine rooms; including painting (except painting of equipment and materials supplied by Elevator Contractor) and waterproofing, as well as doors and windows in machine room.
  - III. Cables from main L.T. Panel Board to Main Switches of required rating for 3-phase and single phase supply in Machine Rooms / agreed place, including necessary earthing. Supplier's scope shall start from outgoing terminals of power supply.
  - IV. Free 3-phase power supply for group testing and commissioning of elevators after erection is completed.

- V. Temporary power supply connection(s) at mutually agreed location(s). Costs including energy charges till completion of erection shall be reimbursed by the Elevator Contractor to the Main Contractor.
  - VI. Lighting installation within machine rooms, hoist ways and pits as required by the Elevator Contractor including 1-phase main switch at machine room.
  - VII. Ventilation of machine rooms, if provided.
  - VIII. Hoisting beams and hooks as specified by the Elevator Contractor.
  - IX. Trap doors, floor gratings, steps / ladders, and openings in machine rooms, as specified by the Elevator Contractor.
  - X. Installing and dismantling scaffolding for pre-installation civil works. Scaffolding for lift erection work shall, however, be provided by the Elevator Contractor.
  - XI. Provision of suitable space, as available, for storage. However, it is lift contractor's sole responsibility to ensure safety of his material.
5. **LIFTS CONTRACTOR'S RESPONSIBILITIES:** Ancillary Works
- I. All cabling and wiring from 3 - phase main switch and single phase switch in machine room to Contractor's equipment.
  - II. All machine bases, pedestals, and structural steel supports and brackets for the installation, to suit the sizes of the hoist-ways. Steel required for insert plates/ISMB/Beams for support of equipments in machine room/ MRL and grouting/installing on foundation/slab/ wall.
  - III. Sill tracks including sill supports, if required.
  - IV. Lift-pit ladders, Screen guards, fascia plates and other protection for installation.
  - V. All chasing and cutting of pockets/holes and making good. (All cutting and chasing shall be as approved by Engineer-in-Charge).
  - VI. Ensuring safety against accidents including barricading all openings and caution signs. All statutory rules and regulations shall be observed.
  - VII. Scaffolding for installation and allowing electrical contractor to use the scaffolding for electrical lighting work in the lift-shaft.
  - VIII. All other items necessary for satisfactory execution and completion of works, whether specified or not.
  - IX. Any additional work to satisfy the inspection authority for obtaining approval.

- X. Any minor chipping work required for adjustment of Guide rails/carriage etc.
- XI. Sealing of all holes made in RCC walls during the course of installation.
- XII. Commissioning spares.
- XIII. Price of commissioning spares (Itemized with Quantity) shall be included in elevator supply rate.
- XIV. Obtaining approval and license of Elevator Inspector before commissioning of elevator.
- XV. Three Phase (Normal) and Single Phase (Emergency) Supply shall be made available in lift machine room / as agreed by Employer. Suitable ELCB / MCB shall be made available in lift machine room by Employer. Supplier's scope of work shall start from outgoing terminal of this ELCB / MCB.
- XVI. Arrangement of receiving and storing the material till the handing over of elevator to Employer. Employer shall be responsible for safety of elevator and its accessories only after approval of elevator by lift-inspector and handing over to Employer after checking of complete satisfactory operation as per specification.
- XVII. All the material shall be offered for inspection in factory and shall be dispatched to site only after receipt of Release order from Employer.
- XVIII. Each and every material, including cables, required for satisfactory erection and operation of elevator shall be included in the scope of supply and work.

6. **SOUND REDUCTION**

The Contractor shall provide necessary sound reduction materials, such as rubber pads of suitable density to effectively isolate the machine from the machine beams and/or flooring/ walls.

Noise level inside cars and in the machine room shall be maintained at minimum levels and in any case not more than specified under PERFORMANCE PARAMETERS.

7. **TRACTION MACHINE**

The machine shall be worm-gear traction type with motor, electro-mechanical type of brake and driving sheave mounted in proper alignment on a single heavy cast-iron base or steel bedplate.

The worm shaft shall be fitted with roller bearings to take end thrust. The sheave shaft shall also be fitted with roller bearings to ensure proper alignment. All shafts shall be provided with well-designed keys.

Rotating parts shall be statically and dynamically balanced.

The drive sheave shall be designed with machined V-grooves to ensure adequate traction with minimum wear on rope. All sheaves including deflector sheaves, where used, shall conform to I. S. 14665 (Part 4 section 3)

Adequate and dust – proof lubrication shall be provided for all bearings and worm-gears.

The brake shall be suitably curved and provided with fire-proof friction lining. The operation of brake shall be smooth, gradual and with minimum noise. The brake shall be designed to be of adequate size and strength to stop and hold the car at rest with rated load. The brake shall be capable of operation automatically by various safety devices, current failure and by the normal stopping of the car. The brake shall be released electrically. It shall also be possible to release the brake manually so as to move the lift car in short stops. Suitable Brake release tools (total 4 Nos.) shall be supplied and stored in the machine rooms/ agreed place.

For manual operation of elevators, up and down direction of the movement of the car shall be clearly marked on the motor or traction machine. A warning plate in bold signal red colour “to switch off the mains supply before releasing the brake and operating the wheel “shall be prominently displayed.

8. **HOIST MOTOR**

The motor shall be suitable for 415 Volts  $\pm 10\%$ , 50 Hz.  $\pm 6\%$ , 3 Phase A.C. Supply. The motor must be designed for arduous elevator duty, rapid reversals and constantly repeated starts and stops as defined in the relevant codes of practice. All windings must be heavily insulated, adequately impregnated for tropical climate and mechanically strengthened and must be specifically designed to have a high starting torque and low starting current characteristics within the limits acceptable to electricity supply co. requirements and I.E. Rules. The motor shall be designed in such a way as to withstand occasional overloading above its rated capacity and shall have overload protection of relay and protection against phase failure as well as phase reversal. The motor shall have good speed regulation under different conditions of load and shall be designed to give a noiseless and vibration-free operation. Insulation shall be class F. Motor shall be TEFC type and with IP 55 protection with minimum 120 starts per hour. HP of the motor of each lift should be specified.

9. **MOTOR CONTROL AND DRIVE**

The lift motor shall be controlled by a variable voltage variable frequency (A.C.V.F.) micro-processor control system which shall control and monitor every aspect of elevator operation at all stages of the car motion cycle on real time basis.

The A.C.V.F. drive system shall control A.C. voltage and frequency concurrently with the hoist motor to regulate the elevator's actual performance to match closely the ideal speed pattern, obtain maximum efficiency of operation and provide a very smooth ride.

Frequency shall range between zero and rated value.

The Controller shall be provided with a self-diagnostic programme to keep downtime to a minimum possible.

The controller shall intelligently adjust door times in response to car calls, hall calls and "Door Open" button operation.

An Inspector's changeover test switch and set of test buttons shall be provided in the controller. Operation of the Inspector's changeover switch shall make both the car and landing buttons inoperative and permit the elevator to be operated in either direction from the controller for test purposes by pressing corresponding test buttons in the controller. Controller should have Integrated Field Test Mechanism. It shall not, however, interfere with the emergency stop switches inside the car or on the top of the car.

#### 10. **GUIDES AND FASTENINGS**

- I. Guide-rails for car and counterweight shall consist of machined mild steel tee sections, erected plumb, and securely fastened to the Elevator well framing by heavy steel brackets, suitably spaced, to limit deflection of guide-rails to 3 mm under normal working conditions.
- II. The guide-rails shall be of suitable section with ends forming matched joint and shall be connected with steel fish plates.
- III. Guide-rails shall cover the full height of the hoist way and pit.
- IV. Guides shall be designed to withstand the action of safety gear when stopping a counter weight or fully loaded car.
- V. The max. deviation from true plumb and alignment of guide rails shall be 2 mm.
- VI. All support framing shall be rigid and shall be designed to restrict displacement of the point of support of brackets to 3 mm under normal working conditions.
- VII. The whole guide-rail installation, including expansion joints, shall be designed for a smooth ride.
- VIII. The guide-rails shall be protected during storage and installation with a rust-inhibiting coating which shall be cleaned off on completion of installation.

- IX. Guide-shoes shall be adjustable type and mounted so as to provide continuous contact with guide rails under all conditions.

Guide shoes shall be provided at top and bottom of each side of car and counterweight and shall be designed for quiet operation.

Additional guide shoes shall be provided on each side of buffer frame in case of oil-buffers.

## **6. SAFETY**

In addition to other specifications, the Elevator shall be provided with safety devices as follows:-

- I. Against overload.
- II. Safety gear on car so that in the event of rope breaking or loosening, the car will be brought to rest immediately by means of grips on the guides.

The over-speeding car shall be automatically brought to a gradual stop on guide-rails and power supply to the hoist motor shall be switched off.

- III. Over-speed centrifugal governor operating the safety gear in case of over-speeding of car in the down direction.
- IV. Car gate lock in the event of car gate being opened, when passengers are in the car, the elevator will be brought to rest.
- V. Over-travel limit switches at top and bottom limits of travel to disconnect the power supply and apply brakes to stop the car within a defined safe distance in case of over-travel in either direction
- VI. Ultimate terminal switches to stop the car automatically within top and bottom clearances independently of normal over-travel limit switches but with buffers operative.
- VII. Protective guards to counterweights in pit, rope sheaves and wherever required.
- VIII. Toe guard apron to the car platform.

## **7. CAR**

- a. Cabin Size – as per make

The internal clear dimensions of the cabin shall be as per those specified in IS 14665-Part I. The car shall be so mounted on the frame that vibration and noise transmitted to the passengers inside is minimized.

b. Frame and Safety Device

The car frame shall consist of mild steel channel top and bottom securely riveted or bolted and substantially reinforced and braced so as to relieve the car enclosure of all strains when the safety device comes into action due to over speed or when the capacity loaded car is run on the buffer springs at normal speed.

The safety device mounted on the bottom members of the frame operated by a centrifugal speed governor shall be arranged to bring the car to a gradual stop on the guide-rails in the event of excessive descending speed; and provision shall be made to shut off the power supply to the motor.

c. Buffers

Spring buffers (2 Nos.) or as recommended by supplier shall be furnished and installed in the pit under the car and counterweight. These buffers shall be mounted on RCC Pedestals in the pit. The car buffer spring must be of correct design to sustain the car with capacity load without damage, should the car terminal limits become inoperative. The car buffers must be located symmetrically with reference to centre of car.

The Contractor may alternatively offer oil type buffers. The plunger shall be mild steel, designed for a very high factor of safety and accurately machined. A toughened rubber bumper shall be fitted to the plunger top to cushion the impact of steel buffer plates attached under the car and the counterweight. An oil gauge shall be provided to check the oil level.

d. Counterweight

The Elevator shall be suitably counter-balanced for smooth and economical operation. Cast iron weights shall be contained in a structural steel frame properly guided with suitable guide shoes (4 Nos).

Substantial expanded metal counter-weight screen guard shall be furnished and installed, as required by Lift Inspector.

e. Hoisting and Governor Ropes

Bright steel wire ropes with fiber cores suitable for elevator duty shall be used for hoisting ropes.

Not less than 3 independent suspension ropes shall be provided and designed to share load equally by means of adjustable shackle rods with equalizer springs at each end of hoisting ropes.

Each rope shall have adequate section to provide a minimum factor of safety of 4 based on the max. force on the rope.

Governor ropes shall be similar to hoisting ropes. Their ends shall be securely attached to the car and to the safety gear. The governor ropes shall be tensioned by a weight loaded device in the pit.

The contractor shall submit the technical details and source of supply of ropes to the Engineer-in-Charge as well as a certificate of performance of ropes from an approved test laboratory or Authority.

Compensation for travel shall be provided for all elevators having a travel of more than 30m.

f. Enclosure

The car enclosure shall be S.S. finished. The cabin floor, roof and walls shall be free of distortion and undue deflection as per IS 14665 – Part 4, Section 3.

g. Brakes

D.C. brakes will be spring-applied and electrically released. They shall be designed to provide smooth stops under variable loads.

h. Doors

Provision shall be made for vertical and horizontal fine adjustment of fire rated glass door

i. Door Operators

The door operators shall be ACVF inverter controlled heavy duty A. C. motor, allowing variable opening and closing speeds and full synchronization of car and landing doors.

j. Travelling Cables

The travelling cables shall be multi-core with high conductivity stranded conductors specifically designed for elevator duty. The cables shall be provided with retaining straps and individual cable clamps.

k. Emergency Lighting

A self-contained, non-maintained emergency light with a trickle-boost charger shall be provided.

l. Emergency Exit and Evacuation (Not Applicable)

An emergency exit shall be provided on car roof. A safety switch shall be provided to prevent the car travelling when the emergency exit is open.

An emergency key shall be provided on each landing to unlock the doors for evacuation and maintenance.



The doors shall be capable of being opened manually during power failure from inside the car when the car is within a landing zone.

m. Intercom

An Intercom system shall be provided between the car, main landing, machine room and Fire Console room linked to EPABX of Office Bldg.

n. Manual Cranking Facility

Manual cranking facility shall be provided in the machine room/agreed place to facilitate evacuation of passengers in case of power failure. The manual mode shall be in addition to automatic car failure operation, specified elsewhere.

o. Emergency Stop Switch

A stop switch in the machine room / top of car shall be provided for use by maintenance crew to cancel all car and landing calls for a particular elevator.

p. Maintenance Switch

On operation of the maintenance switch (located on top of the car) by the maintenance crew, the car shall travel at slow speed not exceeding 0.85 m / sec by continuous operation of a button.

q. Landing Door Interlocks

Electrical interlocks shall be provided to ensure that the car does not operate unless all doors are closed and unless the car reaches a landing zone.

r. Overload Indicator

An overload indicator with buzzer shall be provided in the cabin to indicate to the passengers that the car will not start as it is overloaded.

s. Other Features

All features specified in the Schedule shall be provided.

(i) Full length handrails shall be provided on the rear-wall panels.

(ii) The door closing time shall be set for min. 5 seconds and the door closing speed shall not exceed 0.25 m/sec.

t. **OPERATING PANELS, BUTTONS AND SWITCHES**

Main and secondary car operating panels, buttons and switches shall be located on the two front wall panels next to the car door and as specified in the Schedule of Elevators.

All buttons and switches shall be clearly legible with fade-proof text and figures, and shall be easily accessible,

u. **ELECTRIC WIRING**

Necessary insulated wiring to connect all parts of the equipment shall be furnished and installed. Insulated wiring shall be flame -retardant and moisture- resistant and shall be run in M.S. conduits. All cables shall be flame – retardant with copper conductors.

Trailing cables shall be PVC sheathed copper conductor multi-core ribbon type designed for elevator service. They shall be flexible and shall be suitably suspended to relieve strains on individual conductors. All copper conductors shall be of appropriate gauge copper to avoid excessive voltage drop. All wires, cables, conduits, metal boxes, fittings and earthing shall comply with statutory requirements and IS specifications. The body of non-current carrying metal parts like enclosures of motor, controller etc. shall be suitably earthed as per IS specifications.

The controller unit comprising of the main circuit breaker, adjustable overload and phase reversal and phase failure protection, all the circuit elements, transformer, rectifier for D.C. control supply, inverter power pack, terminal blocks etc. shall be enclosed in an insect vermin- proof, sheet- steel floor or wall- mounted cabinet with hinged doors at front or at both front and rear. Proper warning boards and danger plates shall be provided on both sides of the controller casing. Sheet steel used for controller cabinet shall not be less than 18 gauge and shall be properly braced, where necessary. Suitable gland- plate shall be provided for cable entry. The battery for the charger unit shall be suitably placed in the machine room/agreed place.

All sheet steel work shall be surface- treated and painted with two coats of synthetic enamel paint of suitable shade, both inside and outside, over two coats of zinc primer.

**8. PAINTING**

All exposed metal work furnished in these specifications, except as otherwise specified, shall be given one shop coat of anti-corrosive primer after approved surface treatment of metal surfaces and two coats of approved enamel paint of approved shade. Minimum DFT specified shall be met for each coat of paint. Painting shall be guaranteed to last for the guarantee period specified. All recommendations of the Paint Manufacturer shall be strictly complied with.

## **9. WORKS TESTS**

The following tests shall be carried out at Works. The Engineer-in-Charge shall be given notice of the time and procedure of the tests before they are carried out, and shall be given facilities for observing the tests at Works. Contractor may specify the tests he will be able to show in the factory.

- a. High voltage works tests of equipment, which is not already tested in accordance with appropriate IS codes.
- b. Buffer test.

## **10. TESTS ON COMPLETION**

The following tests shall be carried out to the satisfaction of the Engineer-In-Charge.

- I. Insulation resistance and earth test for all electrical apparatus.
- II. Continuous operation of the elevator under full load conditions and simulated starts and stops (150 nos. per hour each) for one hour at the end of which time the service temperature of the motor and the operating coils shall be tested. This shall be as per I.S. specification.
- III. The car shall be loaded until the weight on the rope is twice the combined weight of the car and the specified load. The load must be carried on for about 30 minutes, without any sign of weakness, temporary set or permanent elongation of the suspension rope strands.
- IV. The following items shall be tested :
  - a. Levelling accuracy at each landing in conditions of fully loaded and empty car.
  - b. No load current and voltage readings both on 'Up' and 'Down' Circuits.
  - c. Full load current and voltage readings both on 'Up' and 'Down' Circuits.
  - d. One and quarter load current and voltage readings both on 'Up' and 'Down' Circuits.
  - e. Stalling current and voltage and time taken to operate overload.
  - f. Overload protection.
  - g. Gate sequence relays, if provided and installed.
  - h. Car and landing door interlocks.
  - i. Collective control and priority sequences, if installed.

- j. Safety gear mechanism for car and counterweight with fully loaded car and also with only 68 kg load.
- k. Speeds on Up and Down travel with full load, half load and empty car.
- l. Door contacts.
- m. Final terminal stopping device.
- n. Normal terminal stopping device.
- o. Car and counterweight buffers with contract load and contract speed.
- p. Operation of controllers.
- q. Manual operation of elevator at mid-way travel.
- r. Emergency operation.
- s. Phase failure and Phase reversal test.
- t. Any other test necessary.
- u. Inspection test plan (as given below).

	Tests	Reference Documents	Sample size	Scope of Inspection		
				Employer/ Contractor	Consultant/ Remark	Third Party
A	Type Tests					
	For Control Panel					
i	Temperature rise test	IS13947,IEC 60947		W	R	
ii	Dielectric Properties	-do-		W	R	
iii	Short Circuit withstand capacity	-do-		W	R	
iv	Verification of IP protection	-do-		W	R	
	For Motor					

i	Type Test Certificate	IS 8789		W	R	
B	Routine Tests					
	For Control Panel					
i	Routine Test Certificates	As per relevant IEC	100%	W	R	
	For Motor					
i	Routine Test Certificates	As per relevant IEC	100%	W	R	
C	Site Tests					
i	Insulation resistance test and HV test	ISI4665	100%	W	R	
ii	Operation and Interlock sequence test on control circuit	- do -	100%	W	R	
iii	Earthing continuity tests	- do -	100%	W	R	
iv	Test to determine that the motor, brake, control equipment and door locking devices and limit switches function correctly.	- do -	100%	W	R	
v	Brake to be tested to check whether it can sustain a car at rest with 125% of rated load.	- do -	100%	W	R	
vi	Test to determine that the car raises and lowers at rated speed.	- do -	100%	W	R	
vii	To test whether the lift car achieves the rated speed.	- do -	100%	W	R	
viii	To test whether the safety gear stops the	- do -	100%	W	R	

	lift car with rated load (Over speed test)					
	Note:					
	1) W = Witness, R = Review.					

v. Tests on completion shall also be performed to the satisfaction of Inspector of Lifts.

**11. STATUTORY APPROVALS**

All statutory approvals from commencement to commissioning of elevators including license for operation of the lifts shall be obtained by the Contractor from the Inspector of Lifts and other Authorities. However, the Employer will provide all necessary assistance for providing documents, drawings and certificates pertaining to other contractors, if required.

The Employer shall reimburse necessary statutory fees in connection with the approval of installation of elevators.

**12. FEATURES REQUIRED FOR ACVF ELEVATORS**

a. Group / Independent / Attendant Operation

It shall be possible to group specified cars in a group with dynamic disposition of cars as required by the traffic pattern. A smart car dispatching system with ring communication shall be provided for optimum passenger comfort and elevator performance under all traffic conditions. Any defective car shall be automatically eliminated from the group.

Each car shall be provided with a key switch for independent operation housed in a service cabinet. In this mode, the elevator shall respond only to car calls. Hall calls will not be registered.

It should be possible for an attendant to operate any car. Group indicator panels shall be provided in the Main Lobby at Ground Floor and in the machine room to indicate the working of all the lifts in the group (Not applicable).

b. Fireman’s Switch

A fireman’s toggle switch shall be provided in a break glass for the specified elevator at ground floor to enable firemen to bring the elevator non-stop to ground floor from any location and to cancel all calls until the car is operated on attendant control. The Fireman’s switch shall bring other two lifts also to ground floor and will remain there with doors open.

c. Emergency Power Operation

In case of power failure, Automatic Rescue Devices shall bring the elevator safely to the nearest landing and open the doors till power supply is restored and then permit operation of one or more Elevators on emergency power. Standby genset power shall also be supplied to car lights, fan, alarm and intercom (The generator set will be installed by the Employer).

In addition to the standby genset power, a trickling battery shall be provided to supply power to emergency light fixtures, alarm and intercom.

d. Profile Generator

A profile generator or similar device shall be provided to use the car at an optimum speed level and to improve levelling accuracy.

e. Data Storage and Retrieval

Data from daily operations shall be stored in the control system and shall be retrievable.

Data shall include all particulars of calls, mode of operation, door open/close, acceleration / deceleration, stops, status etc. The contractor shall specify in his offer the full capability of his system in this regard.

It should be possible from such retrieved data to prepare an up-dated traffic analysis at any time.

f. Predictive Car Selection

Once a hall call is registered, a dynamic car algorithm shall transfer the call to an optimally selected car to provide the maximum traffic efficiency.

g. Anti - Nuisance

If number of calls registered is in excess of corresponding car load, all car calls shall be cancelled.

h. Car call cancelling

Pressing a button twice shall cancel a car call.

i. Home Landing Facility

A car shall return to a pre-determined landing after the last call is answered.

j. Fire Alarm Home Landing (Through BMS)

The contractor shall provide only potential free contacts and communication ports for fire alarm home landing through BMS.

k. Load Non stop

When the car load exceeds a predetermined limit, the elevator shall not respond to hall calls.

l. Parking shut - off

When the parking switch is turned on, the car shall proceed to a predetermined parking floor answering calls on the way. Lights and fans shall then be automatically turned off and a " PARK " sign shall be displayed.

m. Separate door times

When a car responds only to hall calls or only to car calls, the door shall open for a shorter time than when responding to both car and hall calls.

n. Door Safety

Multi-beam infrared / ultrasonic electronics curtains shall be provided to scan the doorway and reverse the door closing in case of any obstruction.

o. Door Failure Operation

When an obstruction prevents a door from opening, the controller shall attempt its removal by repeated opening and closing, failing which the car shall travel to the next floor.

p. Double Door Operation

If both up and down calls are registered at a hall which is the last registering hall in the direction of the car, the elevator shall travel to that hall and open / close the doors. After this, the car shall reverse its travel and shall open / close the doors again unless no car calls are registered at that floor.

q. Nudging Door Operation

When the doors remain open for more than a predetermined period, a buzzer shall sound and the door shall close automatically.. The door sensing device shall be rendered inoperative but the Door Open button and the safety shoe shall remain operative

r. Self - Diagnostic Facility

The Controller shall perform self - diagnostic tests and report the health of the system.



The system shall take care of minor faults like door operation and motor overheating.

A universal service tool shall be provided in each machine room to assist technicians in quick pin-pointing of mal-function.

s. Car Failure Operation

In case of car mal-function, the system shall make a self - diagnostic check and then allow the car to travel to the nearest floor at slow speed, if safe.

t. Selective floor Service

Programming for selective floors services shall be software driven.

u. Manual Cranking and Slow speed Travel

A manual cranking facility shall be provided.

Slow speed operation shall be possible from machine room and car top.

v. Auto Fan Off

In case no calls are registered for a pre-set time, the cabin fan shall be automatically switched off.

w. Automatic Rescue Device

In case of mains power failure and elevator control system failure, the elevator's own rechargeable and maintenance free battery power shall move the car to the nearest floor and the door shall open automatically for automatic rescue of passengers. A battery run-down indicator shall be provided.

### **13. CONNECTIVITY TO BUILDING MANAGEMENT SERVICES**

The Contractor shall provide potential-free connectivity and communication ports for all elevators to Building Management System.

#### **14. PERFORMANCE PARAMETERS**

The following parameters shall be achieved in the installation:

* Levelling Accuracy	± 3 mm for 1.5 m/s speed ± 4 mm for 1.0 m/s speed
* Jerk level	0.9 – 1.5 m/s <sup>3</sup>
* Noise level in car	58 dB
* Noise level at 1 M in machine room	60 dB
* Acceleration rate	0.6 – 1.0 m/s <sup>2</sup> (adjustable)
* Max. Car vibration	20 mg.

#### **15. SUBMITTALS WITH TENDERS**

The following items are also required to be submitted in duplicate along with the tender.

- I. Catalogues with offered items highlighted, motor HP etc.
- II. List of imported components
- III. Compliance Statement for guaranteed performance parameters given in Specification 20.0 above and “Schedule of Elevators” below.

#### **16. MAINTENANCE DURING DEFECTS LIABILITY PERIOD**

Comprehensive maintenance during Defects Liability Period inclusive of periodic servicing, prompt attention to Employer’s complaint, prompt rectification of all malfunctions and equipment failures, replacement of defective equipment / parts, replacement of light fittings, lubrication including lubricants, maintaining correct alignment and levelling of cars and ensuring smooth running, starts and stops etc. all complete to Employer’s satisfaction shall be done.

**Signature, Stamp and Name of Contractor**

**SECTION - 5**

**SCHEDULE OF ELEVATOR**

**OFFICE BUILDING OF THE INSTITUTE OF CHARTERED ACCOUNTANTS  
OF INDIA AT JODHPUR**

**PASSENGER LIFT – One Number**

**SCHEDULE OF ELEVATOR**

<b>Sl. No</b>	<b>Description</b>	<b>Lift</b>		
1	Group Control	Simplex full collective control w / wo attendant		
2	Type	Passenger		
3	No. of Passengers	12 Nos.		
4	Speed in Meters /sec.	1.00		
5	Floors served :			
	Basement	Yes	Yes	
	Ground Floor	Yes	Yes	
	First Floor	Yes	Yes	
	Upper Floors	In Future		
	No. of Stops (Landings in Main Lobby)	3	3	
6	Total Travel (Approx.)	10.5 m		
7	Hoist way width		1850 mm	1820 mm
8	Machine Room (All Contractors to confirm its adequacy)	MRL		
9	Traction Machine (In Machine Room)	The traction equipment shall be rated for passengers or for nearest higher standard capacity manufactured by the manufacturer		
10	Clear Pit depth available	1500 mm		
11	Clear Overhead (All Contractors to confirm its adequacy)	4600 mm		

12	Control System	ACVF		
13	<b>Description</b>	<b>Lift</b>		
14	ACVF Features	As per Clause 18.0 – Specification		
15	Power for Machine	415 Volts ± 10% AC 3 Phase, 50Hz ± 6%		
16	Auxiliary Power (inclg. Power for car lights /fans & for control system.	230 Volts ± 10%, 50Hz ± 6%		
17	CAR :	As per Make		
18	Floor	18mm thick granite slab in approved patterns and shade (Provision for additional dead weight on this account may be kept) so as to obtain the contract load		
19	Side / Rear panels	SS 304 panels Leather Finish Additional SS 304 handrail on 2 sides. And Full Height Mirror on Rear Car Panel		
A	False Ceiling	Deco Ceiling Finish in SS Mirror 304 with approved concealed LED lighting as per design to be approved by Consultant/Employer		
B	Car Ceiling	Deco Ceiling Finish in SS Mirror 304 with approved concealed LED lighting as per design to be approved by Consultant/Employer		
C	Car doors	Fire rated glass 2100(ht) mm and width 800 mm automatic power-operated centre-opening; stainless steel Leather HL304. Multi-beam infra-red electronic door detector & as per statutory requirements with Gap filling Sheet.		

D	Lighting and Ventilation	LED lamps to give about 200 lux lighting level Battery – operated emergency light with trickle-boost charging; Two blower fans with suitable ceiling grilles/ Side throw etc. all as per approved design
E	Main Car operating panel ( one for car door side)	Aesthetically designed stainless steel SS304 hairline finished face-plate with ring LED illuminated micro-switch/touch-sensitive digital floor call buttons, floor position indicator, digital clock; capacity indicator; door open, door close, emergency stop, and battery-operated emergency light and alarm buttons; audio-visual overload alarm, intercom system hooked on to the machine room / emergency control console and speakerphone. Built-in service cabinet with fan switch, attendant / automatic mode (key operated), attendant switch, non-stop travel button, and group / independent switch. Built-in ventilation slits.

<b>Sl No.</b>	<b>Description</b>	<b>Lift</b>
F	Auto voice announcement for floor Nos.	Yes
G	Intercom connected to lobby, machine room and fire console room	Yes
H	Attendant/automatic selector switch	Yes
I	Independent operation key switch (with attendant selector-switch)	Yes
J	Non-stop travel button (with attendant selector-switch)	Yes
K	Call cut-out key switch (with attendant selector-switch)	Yes
L	Automatic fan switch-off at preset time	Yes
M	Public address system for channel music and announcements	Yes
N	Car Capacity Indicator	Yes
O	Automatic Rescue Device	Yes
P	Visual indicator for fire and emergency operations	Yes

<b>Sl No.</b>	<b>Description</b>	<b>Lift 1</b>
Q	Additional facilities for disabled persons	Yes. (As per statutory requirement)
R	Cabin sill	Aluminium Extrusion
20	Landing sills	Aluminium Extrusion
21	Hall Button Panel	Hairline finished SS304 stainless steel face-plate with micro-switch / touch-sensitive luminous buttons 2 Nos. (UP and DOWN) on each floor landing but 1 No. (UP) on basement landing for lift. (DOWN) on 1 <sup>st</sup> floor landing. (Tenderer to indicate their choices along with technical bid.)
22	Hall lantern and chime	Hairline finished SS304 stainless steel face-plate with illuminated up and down arrows and arrival chime for each elevator landing. (Tenderer to indicate their choices along with technical bid.)
23	Hall position indicator panels on all upper floors	Hairline finished SS 304 stainless steel face plate with digital floor Nos. for each elevator landing. (Tenderer to indicate their choices along with technical bid.)
24	Next Car Up and Next Car Down indicators	On all Upper floors ('UP' only for basement floor for lift. (Tenderer to indicate their choices along with technical bid.)
25	Overload non-start	Yes
26	Lift car full to capacity	No stopping on landing calls

**Signature, Name & Stamp of Contractor**



**INSTITUTE OF CHARTERED ACCOUNTANTS OF INDIA**

**ICAI BHAWAN AT JODHPUR**

**TENDER**

**FOR**

**SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF PASSENGER LIFT**

**PART - II (FINANCIAL BID)**

**Name of Tenderer:** \_\_\_\_\_

**Address :** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Date of Submission:** \_\_\_\_\_

**SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF PASSENGER LIFT  
ICAI BHAWAN AT Jodhpur**

**BILL OF QUANTITIES\_ FOR PASSENGER LIFTS – 1 Nos.**

S.N	Description	Qty.	Cost inclg. Packing & forwarding, GST, Octroi, Freight & any other taxes	Erection & Commissioning Charges inclg. GST	Grand Total in INR
1	Supply, Installation, Testing & Commissioning of __ passenger, 1.5 m/s lift as per technical specifications & schedule of details of lifts inclusive of all taxes, duties, levies as applicable including men material, tools, tackles supporting steel structure as required for its complete successful commissioning and obtaining necessary approvals license from statutory Authorities.	1			
2	Rate per ton of steel items not covered above (along with their list)	RO			
	<b>TOTAL</b>				
(Rupees _____ )					
3	Comprehensive Annual Maintenance Contract Charges (after D.L.P ) valid for 3 Years : after the specified Defects Liability Period				

**Signature, Name & Stamp of Contractor**