

Request for Proposal (RFP)
Elevator Supply, Installation & Commissioning for
Asian University for Women (AUW), Arefin Nagar Campus
Summary Sheet

Name of the company	Asian University for Women
Procurement Reference Number	Package/Elevator/25_26
Date of issue of the RFP	29 January 2026
Date and Closing Time for RFP submission	8 March 2026 (12:01 pm) (GMT +6)
Quotation submission mail address	tender153@auw.edu.bd
Address for Communication	Asian University for Women 20/A M. M. Ali Road Chattogram 4000, Bangladesh Tel: +880-31-285-4980 Fax: +880-31-285-4988

Bidders are invited to submit their proposals in accordance with the terms outlined in the enclosed Request for Proposal (RFP).

AUW reserves the right to reject any or all offers without providing any reason.

Confidentiality must be strictly maintained. The information provided here should only be used for its intended purpose and scope. By retaining this RFP, you agree to treat all information as confidential.

All communications regarding this Request for Proposal should be directed to AUW, with copies sent to the email addresses listed in the RFP email.

For any further queries, please contact:

- **Primary Point of Contact for RFP Process and Technical Queries:**

Mohammed Ishrat Bin Mahbub

Director of Supply Chain Management

Email: mohammed.mahbub@auw.edu.bd

Contact Number: +8801926673027; Whatsapp: +8801671470348

Proposals should be submitted only to the following email: tender153@auw.edu.bd

No other AUW email address should be used in the "To," "CC," or "BCC" fields. Any proposal that violates this instruction may be disqualified.

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Proposal Summary

Executive Summary

This Request for Proposal (RFP) seeks qualified and experienced firms to Elevator Supply, Installation & Commissioning for the Asian University for Women (AUW) Main Academic Building. The project aims to ensure the facility is equipped with a comprehensive and compliant fire protection, detection, and alarm system in accordance with national and international fire safety standards.

Project Implementation Schedule

The successful bidder shall complete the works within the stipulated time frame stated in the Letter of Award. The indicative timeline for implementation is as follows:

- Design submission and approval: within 11 working days from award.
- Material delivery and installation: within 120 working days from design approval.
- Testing and commissioning: within 14 working days after installation.
- Total completion period: 145 working days from the date of contract signing.

Proposal Evaluation Methodology

All proposals will be evaluated in accordance with AUW procurement procedures and applicable regulations. Evaluation will be conducted based on the following criteria:

- Technical compliance with specifications (60%)
- Relevant experience and qualifications (20%)
- Financial proposal and competitiveness (20%)

The contract will be awarded to the bidder offering the most advantageous proposal, technically compliant and commercially competitive.

Warranty and Post-Installation Support

The contractor shall provide a minimum one (1) year warranty according to the section 4 ITA 2.7 covering all materials, equipment, and workmanship. During this period, the contractor shall perform preventive and corrective maintenance at no additional cost. The contractor shall also ensure availability of spare parts and service personnel as required.

Training and Handover

Upon completion, the contractor shall conduct a comprehensive training session for AUW's designated staff on system operation, troubleshooting, and maintenance. The contractor shall submit the following documents prior to handover:

- As-built drawings
- Operation and Maintenance (O&M) manuals
- Test reports and commissioning certificates
- Warranty certificates

Confidentiality and Compliance

The contractor shall maintain strict confidentiality of all information and documents provided by AUW. All works shall comply with Bangladesh National Building Code (BNBC), NFPA standards, and local standard regulations, IEC. The contractor shall be responsible for obtaining necessary clearances and ensuring safety during execution.

Scope of Work

The scope of work should be updated to focus on the Elevator Supply, Installation & Commissioning of Academic Building. The Contractor shall be responsible for the complete execution design, supply, installation, testing, commissioning, and handover of the Elevator Works of Academic Building in accordance with international codes and standards. The scope includes, but is not limited to, the following:

1. Site Assessment and Mobilization

- Conduct site visits and assessments as required.
- Mobilize resources and set up utility service connections for the site office (if required).

2. Design and Documentation

- Prepare design drawings and obtain approval from relevant authorities.
- Prepare any necessary evacuation plan drawings.
- Develop shop drawings based on the GFC layout and obtain approval from the Client and Consultant before execution.
- Submit an execution schedule that accounts for both imported and local materials.
- Submit material samples (from the approved BOQ brand list) for approval.
- Prepare all required documentation, including as-built drawings, calculations, and handover documents, in compliance with relevant codes.

3. Supply and Installation

- Provision and installation of equipment and accessories as per drawings and specifications.
- Include any necessary electrical, mechanical, civil, or other items not explicitly covered in the supporting BOQ or technical specifications.
- Manage on-site storage of both imported and local materials, with proper records maintained by the storekeeper.
- Execute work strictly in accordance with approved shop drawings.

4. Testing, Commissioning, and Balancing

- Perform testing, commissioning, and balancing of all installed Elevator Works of Academic Building. Ensure quality and compliance with all relevant codes and standards.
- Provide valid calibration certificates for all testing equipment used, attached with the test report.

5. Technical Team Assignment

- Assign a dedicated technical team (Project Manager, Project Engineer, Safety Officer, etc.) to be continuously available throughout execution.

6. Reporting and Progress Monitoring

- Prepare and submit supporting documents, including:
 - Daily field reports

- Monthly progress reports
- Material inspection reports
- Requests for inspection throughout execution

7. Post-Handover Documentation and Training

- Prepare and submit all post-handover documentation for the Elevator Works of Academic Building including:
 - Operation & Maintenance (O&M) Manuals
 - As-built drawings
 - Warranties
 - Commissioning reports and test certificates
 - Training manuals
 - Spare parts lists
- Conduct training for client personnel on all installed systems.

8. General & Additional

- Prepare shop drawings based on the GFC layout, and need to be approved by the client and consultant prior to commencement of execution.
- Submit the actual execution schedule, taking into account both imported and local materials.
- Prepare documentation works including as-built drawings and handover documents, testing, pre-commissioning, post commissioning and all types of calculation in compliance with relevant codes upon completion of execution.
- Submit local material samples based on the brand list for approval by the client's technical team and consultant.
- Manage on-site storage for imported and local materials with proper record by the store keeper.
- Include any necessary items (i.e, electrical, mechanical, civil, ICT etc.) which is not included in the supporting BOQ and technical specifications should be considered in the shop drawings before execution.
- Assign a dedicated technical team/engineers (i.e, Project Manager, Project Engineer, Safety Officer etc.) to be continuously available during execution.
- Ensure the quality of execution meets all compliance and code requirements.
- Prepare and submit all necessary supporting documents such as daily field reports, monthly progress reports, material inspection reports, and requests for inspection throughout the execution period.
- The contractor will perform the temporary generator installation and termination to facilitate the ant testing and commissioning of the overall working scope with their own cost.
- All foreign and local items must undergo factory inspection with necessary test either locally or abroad by the engineers, consultant, and client prior to shipment or delivery.
- All testing equipment's must have a valid calibration certificate.
- The contractor must comply with all EHS (Environment, Health & Safety) policies and standards.

- If any technical personnel are deemed unsuitable by the Client/Consultant, they must be replaced immediately.
- The contractor shall submit an RFI (Request for Information) for drawings/decisions with at least two weeks' lead time for consultant feedback.
- The contractor shall submit a detailed Work Method Statement (WMS).
- The contractor shall provide 2 sets of shop drawings (A1), 2 sets of as-built drawings (A1 and A2), and 2 sets in A3 size. All documents, calculations, operation manuals, maintenance checklists, and color images of approved samples shall be submitted in one A3 set and one A4 set.
- The attic stock should be calculated as 2% of the total quantity of materials installed, to be provided after project handover.
- During the execution phase, the lift vendor shall properly coordinate and communicate with the civil contractor. Any mismatch arising due to miscommunication or lack of coordination with the civil contractor shall be the sole responsibility of the lift vendor, and any required rework shall be carried out at the lift vendor's own cost.
- Prepare post-handover documents for elevator systems include Operation & Maintenance (O&M) Manuals, as-built drawings, warranties, commissioning reports, test certificates, training manuals, and spare parts lists for all installed systems.
- The warranty period for the products and the monthly maintenance after installation and handover shall be carried out and documented in accordance with an approved checklist.

Summary of Qualification of Tenderers

The Applicant must meet the following qualification criteria:

1. A minimum of Ten (10) years of experience in Elevator Supply, installations, commissioning and operations.
2. Specific experience as a Prime Contractor in Elevator Supply, installations, commissioning and operations, with at least one (01) contract of similar nature, complexity, and construction methods/technology successfully completed within the last five (05) years, having a minimum value of Tk. 2 (Two) crore.
3. Experience in completing Elevator Supply, installations, commissioning and operations installations and operations for a building with a total built-up area of at least 9,000 square meters.
4. The average annual turnover shall be greater than Tk. 5 (Five) crore, calculated over the best three (3) years within the last five (5) years.
5. The minimum amount of liquid assets, i.e., working capital or credit line(s), of the Tenderer shall be Tk. 3.50 (Three Point Five Zero) crore.
6. Proven reputation as a constructor in both the public and private sectors, supported by a detailed company profile, client list, and work accomplishment certificates.
7. The applicant must not have any record of contract non-performance in the **last 5 years** from the RFP publication date.
8. All pending litigation must not exceed **15% of the applicant's net worth**.
9. At least **1 contract** of similar nature and complexity in Elevator Supply, installations, commissioning and operations, completed within the last **3 years**.
10. Applicants must demonstrate: Relevant **professional and technical qualifications, Managerial capability, A reliable reputation** for contract performance, Adequate and **skilled personnel**
11. The successful Applicant, who later becomes the Tenderer, is required to perform the works and services as described in the subsequent Tender.
12. Applicants must have access to the **necessary equipment and physical facilities** to perform the work, either by: **Owning** the equipment; having **proven access** through a **contractual arrangement** (e.g., lease or hire); or having **assured access** to such equipment for the required duration. All required equipment must be in **full working condition**.



ASIAN UNIVERSITY
FOR WOMEN

Section 1. Instructions to Applicants

1. Interpretation 1.1 Throughout this qualification Document:

- (a) the term **“in writing”** means communication written by hand or machine duly signed and includes properly authenticated messages by facsimile or electronic mail;
- (b) if the context so requires, **singular** means plural and vice versa;
- (c) **“day”** means calendar days unless otherwise specified as working days;
- (d) **“Qualification Document”** means the Document provided by the Employer to an Applicant as a basis for preparation of the Application; and
- (e) **“Application”** depending on the context, means an application submitted by an Applicant for Qualification to participate in the subsequent Tenders and to perform the Contract, in response to an Invitation for Qualification.

2. Corrupt, Fraudulent, Collusive or Coercive Practices

2.1 It is the Employer’s policy to require that Employer’s staff, as well as Applicants/Tenderers, suppliers, and contractors and their subcontractors observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Authority-

- (a) defines, for the purposes of this provision, the terms set forth below as follows:
 - (i) **“corrupt practice”** is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
 - (ii) **“fraudulent practice”** is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
 - (iii) **“collusive practice”** is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
 - (iv) **“coercive practice”** is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
 - (v) **“obstructive practice”** is (aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or (bb) acts intended to materially impede the exercise of the Authority’s inspection and audit rights provided.
- (b) will reject a proposal for award if it determines that the Tenderer recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for the contract in question;
- (c) will sanction a firm or individual, including declaring ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the firm has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for, or in executing, a contract.

3. Source of Funds

The Employer will arrange fund towards the cost of the project named in the ADS. The Employer intends to apply a portion of that funds to eligible payments under the contract(s) resulting from the Tendering for which this prequalification is conducted.

4. Eligible Applicants

- 4.1 This Invitation for Qualification is open to all potential Applicants from all countries, except Israel. An Applicant will be eligible if it is a citizen, or is constituted, registered and operates in conformity with the provisions of the laws of that country.
- 4.2 Applicants may be a physical or juridical individual or body of individuals, or company, association or any combination of them in the form of a Joint Venture, Consortium or Association (JVCA) invited to take part in public procurement or seeking to be so invited or submitting an Applicant in response to an Invitation for Qualification.
- 4.3 Applicants shall have the legal capacity to enter into the Contract under the Applicable Law.
- 4.4 Applicants and all parties constituting the Applicant shall not have a Conflict of Interest. Applicants in its own name or its other names or also in the case of its Persons in different names shall not be under a declaration of ineligibility for corrupt, fraudulent, collusive or coercive practices.
- 4.5 Applicants with a poor performance, consistent history of litigation or arbitration awards against it shall not be eligible for Qualification.
- 4.6 Applicants shall not be insolvent, be in receivership, be bankrupt, be in the process of bankruptcy, be not temporarily barred from undertaking business and it shall not be the subject of legal proceedings for any of the foregoing.
- 4.7 Applicants shall have fulfilled its obligations to pay taxes and social security contributions under the provisions of laws and regulations of the country of its origin.
- 4.8 Applicants shall provide such evidence of their continued eligibility satisfactory to the Employer, as the Employer will reasonably request.
- 4.9 Applicants' requirements for eligibility will extend, as applicable, to each JV partner and Specialist Subcontractor proposed by the Applicant.

5. Eligible Materials, Equipment and Associated Services

4.1 All materials, equipment and associated services to be supplied under the Contract are from eligible sources, unless their origin is from Israel.

4.2 For the purposes of this Clause, “**origin**” means the place where the Materials and Equipment’s are mined, grown, cultivated, produced or manufactured or processed, or through manufacturing, processing, or assembly, another commercially recognized new product results that differs substantially in its basic characteristics from its components or the place from which the associated services are supplied.

6. Site Visit

- 6.1 Applicants are advised to visit and examine the Site of Works and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the Application, submission of subsequent Tender and entering into a contract.
- 6.2 Applicants and any of its personnel or agents will be granted permission by the Employer to enter into its premises and lands for the purpose of such visit, but only upon the express condition that the Applicant, its personnel, and agents will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.
- 5.3 The costs of visiting the Site shall be at the Applicants’ own expense.

7 Qualification: General

Qualification Document

6.1 The Sections comprising the Qualification Document are listed below, and should be read in conjunction with any Addendum issued under ITA Clause 11.

- Section 1 Instructions to Applicants (ITA)
- Section 2 Application Data Sheet (ADS)
- Section 3 Application Forms
- Section 4 Scope of Works

6.2 Applicants are expected to examine all instructions, forms, terms, and specifications in the Qualification Document as well as in Addendum to Qualification, if any.

8 Clarification of Qualification Document

- 7.1 Applicants requiring any clarification of the qualifications Document shall contact the Employer in writing at the Employer’s address indicated in the RFP before **two-third** of the time allowed for preparation and submission of Application elapses.
- 7.2 Non-performance of a contract shall not occur within the last years, prior to the deadline for Application submission based on all information on fully settled disputes or litigation.

9 Litigation History

- For the purpose, a fully settled dispute or litigation is one that has been resolved in accordance with the Dispute Resolution Mechanism under the respective contract and where all appeal instances have been exhausted.
- For a Joint Venture under ITA Sub Clause 18.1, the precise minimum requirements of Leading Partner and other partners shall be as specified in the ADS.

10 Joint Venture, Consortium or Association (JVCA)

- 10.1 Applicants may participate in the qualification process and subsequent procurement proceedings by forming a Joint Venture, Consortium or Associations (JVCA) or alternately with the intent to enter into such an agreement supported by a Letter of Intent.
- 10.2 The JV agreement, indicating at least the parts of the Works to be executed by the respective partners, shall be legally entered into case-by-case in the Applicant's Leading Partner's country of origin, as specified in the ADS, duly signed by all legally authorized representatives of the Persons who are parties to such agreement.
- 10.3 Applicants, as an alternate to ITA Sub Clause 9.2, may intend to enter into a JV agreement case-by-case in the form of a Letter of Intent along with the proposed agreement, indicating at least the parts of the Works to be executed by the respective partners, duly signed by all partners of the intended JV and authenticated by an authority of the Applicant's Leading Partner's country of origin, as stated in the ADS, with the declaration that the partners will execute the Joint Venture agreement in the event the Applicant, in the first place pre-qualified and then successful in the subsequent Tender.
- 10.4 Applicants shall submit the Letter of Intent and the proposed JV agreement along with the Application.
- 10.5 For a Joint Venture under ITA Sub Clause 9.1, the precise minimum qualification requirements of Leading Partner and other partners shall be as specified in the ADS.
- 10.6 In cases where a JV partner's, personnel capacity, equipment capacity and financial capacity individually fulfils the precise minimum qualifying requirement of that particular component as specified, capacities of such partner(s) in the JV will be combined together for summation to determine the total precise minimum qualifying requirements criterion of that JV as stated under ITA Sub Clause 9.5.
- 10.7 Each partner of the JV shall be jointly and severally liable for the execution of the Contract, all liabilities and ethical and legal obligations in accordance with the Contract terms.
- 10.8 The JV shall nominate a Representative (partner-in-charge) who shall have the authority to conduct all business for and on behalf of any and all the partners of the JV during the tendering process and, in the event the JV is awarded the Contract, during contract execution including the receipt of payments for and on behalf of the JV.
- 10.9 The composition or the constitution of a JV once formed shall not be allowed to be altered prior to signing of the Contract.
- 10.10 Alteration of partners to the composition or constitution at a date later than the signing of the Contract during execution shall be allowed by the Employer only when any of such partners is found to be incompetent or has serious difficulties which may impact the overall implementation of the proposed Works, where the incoming partner shall require to have qualifications higher than that of the outgoing partner.

10.11 Each partner of the JV shall complete the JV Partner Information (Form F3) for submission with the Application.

11 Contents of Application

11.1 The Application prepared by the Applicants shall comprise the following:

- 11.1.1 Application Submission Letter (Form F-1);
- 11.1.2 Applicant Information (Form F-2);
- 11.1.3 documents demonstrating that they are enrolled in the relevant professional or trade organizations registered in their country of origin;
- 11.1.4 written confirmation authorizing the signatory of the Application to commit the Applicant;
- 11.1.5 documents confirming the legal capacity stating that there are no existing orders of any judicial court that prevents either the Applicant or employees of that Applicant subsequently entering into or signing a Contract with the Employer;
- 11.1.6 documents confirming that the Applicant is not insolvent, in receivership, bankrupt or in the process of bankruptcy, temporarily barred from undertaking business and shall not be the subject of legal proceedings for any of the foregoing;
- 11.1.7 documents confirming that all claims, arbitration or other litigation cases have been satisfactorily resolved, and if not, they shall have no serious negative impact on the financial capacity of the Applicant;
- 11.1.8 documents confirming that the Applicant has fulfilled its obligations to pay taxes and social security contributions under the provisions of laws and regulations of its country of origin as a proof of fulfilment of taxation obligations;
- 11.1.9 documents establishing the Applicant's eligibility to perform the contract;
- 11.1.10 documents establishing the origin of all Materials, Equipment and services to be supplied under the Contract, as stated under ITA Clause 26;
- 11.1.11 documents establishing the minimum qualifications of the Applicant required to be met for due performance of the Works and physical services under the contract;
- 11.1.12 any other document as specified in the ADS.

11.2 In addition to the requirements stated under ITA Sub Clause 9.1, Applications submitted by a JV or proposing a Specialized Subcontractor shall include:

- 11.2.1 Joint Venture Agreement legally entered into in the Applicant's Leading Partner's country of origin, by all partners, as stated under ITA Sub Clause 18.2;

Or,

- 11.2.2 Letter of Intent along with the proposed agreement duly signed by all partners of the intended JV and authenticated by an authority of the Applicant's Leading Partner's country of origin with the declaration that it will execute the Joint Venture Agreement in the event the Applicant and the Tenderer is successful in the subsequent Tender, as stated under ITA Sub Clause 18.3;

- 11.2.3 the JV Partner Information (**Form F-3**), as stated under ITA Sub Clause 18.11;
- 11.2.4 the Specialist Subcontractor Information (**Form F-4**), as stated under ITA Sub Clause 19.6.

12 Documents Establishing the Applicant's Qualification

12.1 Applicants shall complete and submit the Applicant Information (**Form F-2**) and shall include documentary evidence, as applicable to satisfy the following:

- 12.1.1 details on the financial standing of the Tenderer, such as profit and loss statements and corresponding auditor's report establishing the liabilities and assets;
- 12.1.2 details of general experience in Fire management works on case-by-case procurement proceedings performed for each of the last years along with the sums, dates and recipients;
- 12.1.3 details of specific experience in construction works of similar nature and size on case-by-case procurement proceedings performed for each of the last years along with the sums, dates and recipients;
- 12.1.4 details of average annual turnover for a period;
- 12.1.5 details of existing commitments and works to assess the minimum Tender Capacity;
- 12.1.6 details of adequacy of working capital for the subsequent Tender i.e., access to line(s) of credit and availability of other financial resources;
- 12.1.7 details of numbers of technical and administrative personnel along with their qualification and experience proposed for the subsequent Tender;
- 12.1.8 details of Applicant's technical facilities, available major construction equipment's, measures for ensuring quality such as, ISO certification and design, research and development facilities proposed to carry out the Contract;
- 12.1.9 details of Procuring Entities who may be contacted, if necessary, by the Employer; and authority to seek references from the Applicant's bankers or any other sources.

12.2 Applicants, if applying as an existing or intended JV, shall submit documentary evidence to establish its qualifications as stated under ITT and, in particular, it shall submit an affidavit nominating one of the JV partners as the REPRESENTATIVE (partner-in-charge) who shall have the authority to conduct all business for and on behalf of any and all the partners of the JV during the tendering process and, in the event the JV is awarded the Contract, during contract execution including the receipt of payments for and on behalf of the JV.

13 Bank Guarantees

13.1 Performance Bank Guarantee Clause

- 13.1.1 The successful bidder, upon receiving the Notification of Award (NoA), shall furnish an unconditional and irrevocable **Performance Bank Guarantee** in favor of *Asian University for Women (AUW)*.

- 13.1.2 The amount of the Performance Bank Guarantee shall be **ten percent (10%) of the total Contract Price**, issued from any scheduled bank operating in Bangladesh and acceptable to AUW.
- 13.1.3 The Performance Bank Guarantee shall remain **valid until twenty-eight (28) days after the completion of the Defects Liability Period** or final acceptance of the works, whichever is later.
- 13.1.4 Failure to submit the Performance Bank Guarantee within the stipulated time may result in the cancellation of the award and forfeiture of any right to the contract.
- 13.1.5 The Performance Bank Guarantee shall be returned to the Contractor upon satisfactory completion of all contractual obligations and submission of all completion documents as per AUW's satisfaction.
- 13.1.6 AUW reserves the right to **invoke the Performance Bank Guarantee**, in whole or in part, in the event of the Contractor's default, non-performance, or breach of any contractual terms.

13.2 Advance Payment Bank Guarantee (if applicable)

- 13.2.1 If the Employer provides any **advance payment** to the Contractor, the Contractor shall furnish an **unconditional and irrevocable bank guarantee** for the full amount of the advance, valid until the advance is fully recovered.
- 13.2.2 The Employer may encash the bank guarantee in the event the Contractor **fails to utilize the advance for the purpose of contract execution**.

13.3 Invocation of Bank Guarantee

- 13.3.1 The Bank Guarantee shall be **payable on demand and irrevocable**, and the Employer's written statement regarding Contractor's default shall be **conclusive** for the purpose of encashment.
- 13.3.2 The Bank Guarantee shall remain valid regardless of any disputes under the Contract, until it is **released in writing by the Employer**.

14 Liquidated Damages

- 14.1 If the Contractor fails to complete the Works or any part thereof within the time specified in the Contract, the Contractor shall be liable to pay **liquidated damages** at the rate of **1% (one percent) of the Contract Price per week** of delay, unless otherwise specified in the Contract.
- 14.2 The total amount of liquidated damages shall not exceed **10% (ten percent) of the Contract Price**.
- 14.3 Liquidated damages shall be **deducted from any payments due to the Contractor**, including the Performance Security, without prejudice to any other rights of the Employer under this Contract.

14 Termination

14.1 Termination for Default

14.1.1 If the Contractor:

- a. Fails to commence, continue, or complete the Works in accordance with the Contract; or

b. Fails to remedy any breach, delay, or defect within the period specified in a written notice from the Employer; the Employer may, at its sole discretion, **terminate the Contract for default**, in whole or in part.

14.1.2 Upon termination for default, the Employer shall have the right to:

- a. **Cancel the Contract** immediately;
- b. **Engage another Contractor** to complete the Works at the risk and cost of the defaulting Contractor;
- c. **Recover from the Contractor all additional costs, losses, and damages** incurred as a result of the Contractor's failure, including legal and administrative expenses;
- d. **Forfeit any Performance Security or other guarantees** provided by the Contractor;
- e. **Restrict or debar the Contractor** from future contracts with the Employer for a period as deemed appropriate.

14.1.3 Termination under this Clause shall be **without prejudice to any other remedies** available to the Employer under the Contract or applicable law, including claims for additional damages or specific performance.

14.2 Termination for Convenience

14.2.1 The Employer may, at any time, **terminate the Contract, in whole or in part, for convenience**, without assigning any reason.

14.2.2 In such cases, the Contractor shall be entitled to payment for:

- a. Work executed up to the date of termination; and
- b. Reasonable costs incurred for materials or commitments directly related to the terminated portion, but **shall not be entitled to any loss of profit or unperformed work**.

14.3 Termination for Insolvency or Bankruptcy

14.3.1 If the Contractor becomes **insolvent, bankrupt, or enters into receivership or liquidation**, the Employer may **terminate the Contract immediately**.

14.3.2 The Employer shall have the right to **recover costs incurred to complete the Works** from any outstanding payments or Performance Security.

14.4 Termination for Force Majeure

14.4.1 If a **Force Majeure event** persists for a period exceeding [insert period, e.g., 90 days], the Employer or Contractor may terminate the Contract by giving written notice.

14.4.2 Upon termination due to Force Majeure:

- a. Neither party shall be liable for damages resulting directly from the termination;
- b. The Contractor shall be paid for all work executed up to the date of termination.

14.5 Acceleration and Material Breach

14.5.1 In case of delays or partial non-performance, the Employer may issue a **directive for accelerated performance**.

14.5.2 Failure to comply with the acceleration directive shall constitute a **material breach**, justifying immediate termination under Clause 14.1

14.6 Effect of Termination

14.6.1 Termination of the Contract under any of the above clauses shall be **without prejudice to any other rights or remedies** of the Employer under the Contract or applicable law.

14.6.2 All obligations of the Contractor regarding **confidentiality, indemnity, and warranty** shall survive termination.

14.7 Acceleration of Completion

14.7.1 In the event of any delay or failure to accomplish the task, the Employer may issue a **written directive for accelerated performance**, specifying the revised timeline and milestones.

14.7.2 Failure to comply with the acceleration directive shall be treated as a **material breach**, justifying immediate termination and enforcement of ITA 14.2.

15. Descope and Backcharge

15.1 Descope of Work

15.1.1 The Employer reserves the right to **descope, reduce, or modify the scope of work** under the Contract, in whole or in part, by giving written notice to the Contractor.

15.1.2 Upon receiving a descope notice, the Contractor shall:

- a. Immediately **stop work on the descoped items**;
- b. Submit a **revised work plan, cost estimate, and schedule** within 7 working days; and
- c. **Deliver any completed work, materials, or documentation** related to the descoped items.

15.1.3 The Employer shall **adjust the Contract Price** proportionally to reflect the descoped work. Such adjustment shall include:

- a. Reduction of contract payment corresponding to the value of descoped items; and
- b. Recovery of any **unapproved costs incurred by the Contractor** on the descoped items.

15.2 Back charge

15.2.1 The Employer may **back charge the Contractor** for costs or damages incurred due to:

- a. Non-performance, defective work, or delay caused by the Contractor;
- b. Failure to comply with specifications, drawings, or contractual obligations; or
- c. Additional work or remedial work carried out by the Employer or third parties to complete the Contractor's scope.

15.2.2 Back charge amounts shall be:

- a. **Deducted from any payment due** to the Contractor, including Performance Bank Guarantee; or
- b. **Payable by the Contractor directly** within 15 days of written notice.

15.2.3 The Contractor shall **not be entitled to any extension of time, additional payment, or claim** for costs related to the back charged items.

15.3 Procedure for Issuing Descope or Backcharge Notices

15.3.1 The Employer shall issue **written notice specifying**:

- a. The descoped work or backcharged items;
- b. The reason for descope or backcharge;
- c. The monetary amount, if applicable; and
- d. The time for compliance or payment.

15.3.2 The Contractor shall **acknowledge receipt of the notice** and comply with all instructions without delay.

15.4 Survival of Rights

All rights of the Employer to descope, backcharge, recover costs, or enforce compliance under this Clause shall **survive the termination or completion of the Contract.**

16 Engineer's Instructions

The Engineer may issue to the Contractor (at any time) instructions which may be necessary for the execution of the works, all in accordance with the Contract. The Contractor shall only take instructions from the Engineer or from the Engineer's Representative (if appointed) or an assistant to whom the appropriate authority to give instruction has been delegated under Sub-clause 3.4 (Delegation by the Engineer).

Subject to the following provisions of this Sub-clause, the Contractor shall comply with the instructions given by the Engineer or the Engineer's Representative (if appointed) or delegated assistant, on any matter related to the Contract.

If an instruction states that it constitutes a Variation, Sub-Clause 13.3.1 (Variation by instruction) shall apply.

If not so stated and the Contractor considers that the instruction:

- (a) Constitutes a Variation (or involves work that is already part of an existing Variation); or
- (b) does not comply with applicable laws or will reduce the safety of the works or is technically impossible.

the Contractor shall immediately, and before commencing any work related to the instruction, give a Notice to the Engineer with reasons. If the Engineer does not respond within 7 days after receiving this Notice, by giving a Notice confirming, reversing or varying the instruction, The Engineer shall be deemed to have revoked the instruction. Otherwise the Contractor shall comply with and be bound by the terms of the Engineer's response.

17 Defects and Rejection

If, as a result of an examination, inspection, measurement or testing, any plant, Materials, Contractor's design (if any) or workmanship is found to be defective or otherwise not in accordance with the Contract, the Engineer shall give a Notice to the Contractor describing the item of Plant, Materials, design or workmanship that has been found to be defective. The Contractor shall then promptly prepare and submit a proposal for necessary remedial work.

The Engineer may Review this proposal, and may give a notice to the Contractor stating the extent to which the proposed work, if carried out, would not result in the Plant, Materials, Contractor's design (if any) or workmanship complying with the Contract. After receiving such a Notice, the Contractor shall promptly submit a revised proposal to the Engineer. If the Engineer gives no such notice within 14 days after receiving the Contractor's proposal (or revised proposal), The Engineer shall be deemed to have given a notice of No-objection.

If the Contractor fails to promptly submit a proposal (or revised proposal) for remedial work, or fails to carry out the proposed remedial work to which the engineer has given (or is deemed to have given) a notice or No-objection, the Engineer may:

- (a) instruct the Contractor under sub-paragraph (a) and/or (b) of Sub-clause 7.6 (Remedial work); or
- (b) reject the plant, materials, Contractor's design (if any) or workmanship by giving a Notice to the Contractor, with reasons, in which case sub-paragraph (a) of Sub-Clause 11.4 (Failure to remedy defects) shall apply.

After remedying defects in any plant, materials, design (if any) or

workmanship, if the Engineer requires any such items to be retested, the tests shall be repeated in accordance with Sub-Clause 7.4 (Testing by the Contractor) at the Contractor's risk and cost. If the rejection and retesting cause the Employer to incur additional costs, the Employer shall be entitled Subject to Sub-Clause 20.2 (Claims for payment and/or EOT) to payment of these costs by the Contractor.

18 Employer's Entitlement to Remedy Default

If the Contractor fails to execute any part of the Works, to remedy a defect, or to complete outstanding work within a reasonable time following notice from the Employer, the Employer shall be entitled to carry out all necessary work at the Contractor's cost by employing other persons. All necessary costs so incurred shall constitute a debt due from the Contractor to the Employer, recoverable by deduction from payments due or otherwise; provided always that the Contractor's liability and obligations under the Contract shall not be affected or diminished by the exercise of this right by the Employer.

19 DISPUTES

In no event shall AUW be liable to the Contractor for payments for any extra work the Contractor performs in addition to that required under the Statement of Work above unless the Contractor performs such work by written directive of AUW and unless the contract is amended accordingly. No officer, director, employee, or agent of AUW is authorized to direct any extra work by oral order. In the event of any claims or disputes arising from or relating to this Purchase Order, the parties shall use their best efforts to settle the claims or disputes. To this effect, they shall consult and negotiate with each other in good faith and, recognizing their mutual interests, attempt to reach a just and equitable solution satisfactory to both parties. If they fail to reach such a solution within THIRTY (30) days, either Party may refer the matter to arbitration, as per the law of Bangladesh, which shall be the exclusive method of resolving such disputes. The arbitration shall be conducted in Chattogram, Bangladesh. The results of arbitration shall be final and binding on the Parties and shall be in lieu of any other remedy.

Section 2. Application Data Sheet

ITA Clause	Amendments of, and Supplements to, Clauses in the Instructions to Applicants
	RFP IDENTIFICATION NO: _____
A. General	
ITA 1.1	<p>The Employer is <i>Asian University for Women represented by Deputy Project Director, Asian University for women, 20/A, M.M Ali Road, Chattogram-4000, Bangladesh.</i></p> <p>The Name of the Subsequent Tender is: <i>Elevator Supply, Installation & Commissioning for three storied with a semi- basement Academic Building for Asian University for women.</i></p> <p>Application Ref:.....</p> <p>Package No:.....</p> <p><i>[if there is more than one(1) lot, individual lots are to be identified]</i></p>
ITA3.1	The source of public funds is: <i>AUW own fund.</i>
ITA3.3	The name of the Development Partner is: <i>None</i>
ITA6.1	<p>Materials, Equipment's and associated services from the following countries are not eligible:</p> <p><i>Israel</i></p>

B. Qualification Criteria	
ITA13.1	Non-performance of a contract shall not occur within the last <i>5 (five)</i> years. [years counting backward from the date of publication of RFP]
ITA13.2	All pending litigation shall in total not represent more than <i>15 (fifteen)</i> percent of the Applicant's net worth.
ITA 14.1 (a)	The minimum number of years of general experience of the Applicant in public or private Elevator Supply, Installation & Commissioning as Prime Contractor shall be <i>10 (ten)</i> years. [years counting backward from the date of publication of RFP]
ITA14.1 (b)	The minimum specific experience as an Elevator Supply, Installation & Commissioning of at least <i>1 (one)</i> contract(s) of similar nature, complexity and methods/technology completed over a period of <i>5 (five)</i> years shall be required. [years counting backward from the date of publication of RFP.]
ITA 14.1(c)	A satisfactory completion of similar works of at least BDT <i>2 (Two) crore</i> under a single contract over a period of <i>3 (three)</i> years shall be required. [years counting backward from the date of publication of RFP.]

ITA 15.1	The required average annual Elevator Supply, Installation & Commissioning turnover shall be greater than BDT 5 (Five) crore over the last best (3) three years from last 5 (five) years . <i>[years counting backward from the date of publication of RFP.]</i>																								
ITA 15.1(c)	The minimum amount of liquid assets or working capital or credit facilities of the Applicant shall be greater than BDT 1.50 (one point five zero) crore on a day after publication of RFP.																								
ITA 16.1(a)	A Project Manager shall have the following qualifications and experience: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">No</th> <th style="width: 40%;">Position</th> <th style="width: 25%;">Total Works Experience (years)</th> <th style="width: 25%;">In Similar Works Experience (years)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1.</td> <td style="text-align: center;">Project Manager</td> <td style="text-align: center;">10 yrs</td> <td style="text-align: center;">8 yrs</td> </tr> </tbody> </table>	No	Position	Total Works Experience (years)	In Similar Works Experience (years)	1.	Project Manager	10 yrs	8 yrs																
No	Position	Total Works Experience (years)	In Similar Works Experience (years)																						
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ITA 16.1(b)	The minimum number of Engineers with qualifications and experience shall be as follows: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">No.</th> <th style="width: 40%;">Position</th> <th style="width: 25%;">Total Works Experience (years)</th> <th style="width: 25%;">In Similar Works Experience (years)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1.</td> <td style="text-align: center;">Project Engineer, B.Sc. Engr. (Civil)</td> <td style="text-align: center;">Min. 7 yrs</td> <td style="text-align: center;">Min. 5 yrs</td> </tr> <tr> <td style="text-align: center;">2.</td> <td style="text-align: center;">Project Engineer, B.Sc. Engr. (Electrical & Mechanical)</td> <td style="text-align: center;">Min. 7 yrs</td> <td style="text-align: center;">Min. 5 yrs</td> </tr> </tbody> </table>	No.	Position	Total Works Experience (years)	In Similar Works Experience (years)	1.	Project Engineer, B.Sc. Engr. (Civil)	Min. 7 yrs	Min. 5 yrs	2.	Project Engineer, B.Sc. Engr. (Electrical & Mechanical)	Min. 7 yrs	Min. 5 yrs												
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2.	Project Engineer, B.Sc. Engr. (Electrical & Mechanical)	Min. 7 yrs	Min. 5 yrs																						
ITA 16.1(c)	Other key staff with qualifications and experience shall be as follows <i>[state requirements]:</i> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">No.</th> <th style="width: 40%;">Position</th> <th style="width: 25%;">Total Works Experience (years)</th> <th style="width: 25%;">In Similar Works Experience (years)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1.</td> <td style="text-align: center;">Material Engineer, Dip-in Engr. (Civil)</td> <td style="text-align: center;">Min. 5 yrs.</td> <td style="text-align: center;">Min. 3 yrs</td> </tr> </tbody> </table>	No.	Position	Total Works Experience (years)	In Similar Works Experience (years)	1.	Material Engineer, Dip-in Engr. (Civil)	Min. 5 yrs.	Min. 3 yrs																
No.	Position	Total Works Experience (years)	In Similar Works Experience (years)																						
1.	Material Engineer, Dip-in Engr. (Civil)	Min. 5 yrs.	Min. 3 yrs																						
ITA 17.1	The Applicant shall own or have proven access to hire or lease of the major equipments to accomplish the tasks, Mention the equipment lists to accomplish the tasks as below: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">No</th> <th style="width: 60%;">Equipment Type and Characteristics</th> <th style="width: 30%;">Minimum Number Required</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1.</td> <td>Essential tools & equipment</td> <td></td> </tr> <tr> <td style="text-align: center;">2.</td> <td>Essential tools & equipment for small scale metal works</td> <td></td> </tr> <tr> <td style="text-align: center;">3.</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">4.</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">5.</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">6.</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">7.</td> <td></td> <td></td> </tr> </tbody> </table>	No	Equipment Type and Characteristics	Minimum Number Required	1.	Essential tools & equipment		2.	Essential tools & equipment for small scale metal works		3.			4.			5.			6.			7.		
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3.																									
4.																									
5.																									
6.																									
7.																									
ITA 18.2	In the case the Applicant's Leading Partner's country of origin is Bangladesh, the value of non-judicial stamp for execution of the Joint Venture agreement shall be BDT BDT 300 (three hundred) only																								
ITA 18.3	In the case the Applicant's Leading Partner's country of origin is Bangladesh, the Letter of Intent along with the proposed agreement shall be authenticated by a Notary Public.																								

ITA 18.5	The minimum qualification requirements of Leading Partner and other Partner(s) of a JV shall be as follows:			
	ADS Clauses References	Requirements by summation	Requirements for Leading Partner	Requirements for another Partner(s)
	ITA-14.1(a)	Summation not applicable	Same as stated in ADS	Same as for Leading Partner
	ITA-14.1(b)	100%	At least one characteristic	Not applicable
	ITA-14.1(c)	100%	At least one characteristic	Not applicable
	ITA-15.1(a)	100%	40%	25%
	ITA-15.1(b)	100%	40%	25%
	ITA-15.1(c)	100%	40%	25%
	ITA-16.1(a)	Summation not applicable	To be appointed by lead partner	Not applicable
	ITA-16.1(b)	100%	At least one characteristic	Not applicable
	ITA-16.1(c)	100%	At least one characteristic	Not applicable
ITA-17.1	100%	At least one characteristic	Not applicable	
ITA 19.4	The Employer intends to execute the following specific components of the proposed Works by the Nominated Subcontractor(s): <i>None</i>			
ITA 20.1	Domestic Preference <i>shall not</i> be applicable for eligible National Tenderers			
D. Application Preparation				
ITA 23.4	Use of Qualification Document posted in the website <i>is not</i> permitted for preparation of Applications.			
ITA 25.1	The Applicant shall provide with its Application the following additional documents: <i>None</i>			

E. Application Submission

ITA31.1

For Application submission purposes only, the Employer's address is:

For Tender submission purposes only, the Procuring Entity's address is:

TO AUW PROCURMENT COMMITTEE

Email address: tender153@auw.edu.bd

The deadline for the submission of Applications is:

Time & Date: 12:01pm. (GMT +6) - 8/03/2026

Section 3. Application Forms

Form Title

Application Forms

- F – 1 Application Submission Letter
- F – 2 Applicant Information
- F – 3 JV Partner Information (*if applicable*)
- F – 4 Subcontractor Information (*if applicable*)
- F – 5 Historical Contract Non-Performance
- F – 6 Personnel Information

Application Submission Letter (Form F-1)

[This letter should be completed and signed by the Authorized Signatory preferably on the Letter-Head Pad of the Applicant]

To:

Date:[dd/mm/yy]

[Contact Person]

[Name of Employer]

[Address of Employer]

Invitation for Qualification No:

[indicate RFP No]

Tender Package No:

[indicate Package No]

This Package is divided into the following Number of Lots ***[indicate number of Lot(s)]***

We, the undersigned, apply to be qualified for the referenced Works and Physical Services and declare that:

- (a) We have examined and have no reservations to the Qualification Document, issued by you on *[insert date]*; including *[state numbers]*.
- (b) We, including as applicable, any JVCA partner or Specialist Subcontractor for any part of the contract resulting from this Qualification process, have nationalities from eligible countries according to the ITA. *[insert the nationality of the Applicant, including that of all partners in case of a Joint Venture, and the nationality of each already identified subcontractor, if applicable];*
- (c) we are submitting this Application as a sole Applicant;
or
we are submitting this Application as the partners of a JVCA, comprising the following other partners;

Sl. No	Name of Partner	Address of Partner
1		
2		
3		

or

- (e) we, including as applicable any JVCA partner, declare that we are not associated, nor have been associated in the past, directly or indirectly, with a consultant or any other entity that has prepared the design, specifications and other documents in accordance with ITA;
- (f) we intend to subcontract an activity or part of the Works, to the following Specialist Subcontractor(s);

Activity or part of the Works	Name of Specialist Subcontractor with Address

- (g) we, including as applicable any JVCA partner, confirm that we do not have a record of poor performance, such as abandoning the works, not properly completing contracts, inordinate delays, or financial failure as stated in ITA, and that we do not have, or have had, any litigation against us, other than that stated in the Applicant Information (**Form -2**);
- (h) we, including as applicable any JVCA partner, confirm that we do not have a record of insolvency, receivership, bankrupt or being wound up, our business activities were not been suspended, and it was not been the subject of legal proceedings in accordance with ITA;
- (i) we, including as applicable any JVCA partner, confirm that we have fulfilled our obligations to pay taxes and social security contributions applicable under the relevant national laws and regulations of our country(s) of origin in accordance with;
- (j) we, including as applicable any JVCA partner or Specialist Subcontractor for any part of the contract resulting from this Qualification process, have not been declared ineligible by any International Development Agency or the Government of Bangladesh on charges of engaging in corrupt, fraudulent, collusive or coercive practices in accordance with ITA; or by an act of compliance with a decision of the United Nations Security Council.
- (k) furthermore, we are aware of ITA concerning such practices and pledge not to indulge in such practices in competing for or in executing the Contract;
- (l) we are not participating as Applicants in more than one Application in this pre-qualification process;
- (m) we understand that you may cancel the prequalification process at any time and that you are neither bound to accept any Application that you may receive nor to invite the pre-qualified Applicants to tender for the contract subject of this prequalification, without incurring any liability to the Applicants.

Signature:	<i>[insert signature of authorised signatory of the Applicant]</i>
Name:	<i>[insert full name of signatory with National ID Number]</i>
In the capacity of:	<i>[insert capacity of signatory]</i>

Duly authorized to sign the Application for and on behalf of the Applicant

[If there is more than one (1) signatory, or in the case of a JVCA, add other boxes and sign accordingly]

Attachment 1:

Written confirmation authorizing the above signatory to commit the Applicant and the subsequent Tenderer
[and, if applicable]

Attachment 2:

JV Agreement / Letter of Intent to form JV with draft proposed Agreement



**ASIAN UNIVERSITY
FOR WOMEN**

Applicant Information (Form -2)

[This Form should be completed only by the Applicant, preferably on its Letter-Head Pad]

Invitation for Qualification No: *[indicate IFP No]*
 Tender Package No: *[indicate Package No]*
 This Package is divided into the following Number of Lots: *[indicate number of Lot(s)]*

1. Eligibility Information of the Applicant [According to ITT]	
1.1	Nationality of individual or country of registration
1.2	Applicant's legal title
1.3	Applicant's registered address
1.4	Applicant's legal status <i>[complete the relevant box]</i>
	Proprietorship
	Partnership
	Limited Liability Concern
	Government-owned Enterprise
	Others <i>[please describe, if applicable]</i>
1.5	Applicant's year of registration
1.6	Applicant's authorised representative details
	Name
	National ID number, if any
	Address
	Telephone / Fax numbers
	e-mail address
1.7	Litigation ITT
	Information on non-performance of contract and pending litigation furnished in Form F-5
1.8	Applicant to attach photocopies of the original documents mentioned aside
	<i>[All documents required under ITT Clauses]</i>
The following two information are applicable for national Applicants	

1.9	Applicant's Value Added Tax Registration (VAT) Number					
1.10	Applicant's Tax Identification Number(TIN)					
[The foreign Applicants, in accordance with ITT Clause 5, shall provide evidence by a written declaration to that effect to demonstrate that it meets the criterion]						
2. Qualification Information of the Applicant [According to ITT Clause]						
2.1 General Experience in HVAC Works of Applicant						
	Start Month Year	End Month Year	Years	Contract No and Name of Contract Name and Address of Employer Brief description of Works		Role of Applicant [Prime/Sub/Management]
2.2 Specific Experience in HVAC Works of Applicant Completed Contracts of similar nature, complexity and methods/ technology						
	Contract No		[insert reference no] of [insert year]			
	Name of Contract		[insert name]			
	Role in Contract <i>[tick relevant box].</i>		Prime Contractor	Subcontractor	Management Contractor	
	Award date		[insert date]			
	Completion date		[insert date]			
	Total Contract Value		[insert amount]			
	Employer's Name Address Tel / Fax <u>e-mail</u>					
	Brief description with justifications of the similarity compared to this Employer's requirements		[state justification in support of its similarity compared to the proposed works]			
2.3 Average annual turnover <i>[total certified payments received for contracts in progress or completed for each year of works in progress or completed; using selling exchange rate quoted by the source being Bangladesh Bank on the date reported, if applicable]</i>						
	Year	Amount & Currency				

2.4	Existing commitments and works [targeted to be completed by the Intended Completion Date of the proposed works]		
	Name of Contract Contract No [reference] of [year] Name of Employer Contact Address Tel/fax e-mail	Target Completion Date	Value of Existing Commitments and Works
			Amount & Currency
2.5	Financial Resources available to meet the HVAC System cash flow		
	No	Source of Financing	Amount Available
			Amount & Currency
In order to confirm the above statements the Applicant shall submit, as applicable, the documents			
2.6	Contact Details [According to ITT]		
	Name, address, and other contact details of Applicant's Bankers and other Employer(s) that may provide references, if contacted by this Employer		
2.7	Qualifications and experience of key technical and administrative personnel proposed for Contract administration and management [According to ITT]		
	Position Name Years of General Experience	Years of Specific Experience	
<i>[Tenderer to complete details of as many personnel as are applicable .Each personnel listed above should complete the Personnel Information (Form-6)]</i>			
2.8	Major Construction Equipment's proposed to carry out the Contract [According to ITT]		
	Item of Equipment	Condition (new, good, average, poor)	Owned, leased or to be purchased (state owner, lessor or seller)
<i>[Applicant to list details of each item of major construction equipment, as applicable]</i>			

JVCA Partner Information (Form -3)

[This Form should be completed by each JVCA partner].

Invitation for Qualification No:

[indicate IFP No]

Tender Package No

[indicate Package No]

This Package is divided into the following Number of Lots

1. Eligibility Information of the JVCA Partner <i>[According to ITT]</i>		
1.1	Nationality of Individual or country of Registration	
1.2	JVCA Partner's legal title	
1.3	JVCA Partner's registered address	
1.4	JVCA Partner's legal status <i>[complete the relevant box]</i>	
	Proprietorship	
	Partnership	
	Limited Liability Concern	
	Government-owned Enterprise	
	Other (please describe, if applicable)	
1.5	JVCA Partner's year of registration	
1.6	JVCA Partner's authorised representative details	
	Name	
	National ID number, if any	
	Address	
	Telephone / Fax numbers	
	e-mail address	
1.7	Litigation	
	Information on non-performance of contract and pending litigation furnished in Form-5	
1.8	JVCA Partner to attach copies of the original documents mentioned aside	<i>[All documents required under ITT Clauses]</i>
The following two information are applicable for national JVCA Partners only		
1.9	JVCA Partner's Value Added Tax Registration (VAT) Number	

1.10	JVCA Partner's Tax Identification Number(TIN)				
[The foreign JVCA Partners, in accordance with ITT, shall provide evidence by a written declaration to that effect to demonstrate that it meets the criterion]					
2. Key Activity(ies) for which it is intended to be joint ventured [According to ITT]					
		Elements of Activity	Brief description of Activity		
3. Qualification Information of the JVCA Partner [ITT]					
3.1	General Experience in Construction Works of JVCA Partner				
	Start Month Year	End Month Year	Years	Contract No and & Name of Contract Name and Address of Procuring Entity Brief description of Works	Role of JVCA Partner [Prime/Sub/Management]
3.2	Specific Experience in Construction Works of JVCA Partner Completed Contracts of similar nature, complexity and methods/construction technology				
	Contract No		[insert reference no] of [insert year]		
	Name of Contract		[insert name]		
	Role in Contract [tick relevant box]		Prime Contractor	Subcontractor	Management Contractor
	Award date		[insert date]		
	Completion date		[insert date]		
	Total Contract Amount		[insert amount]		
	If partner in a JV, specify participation of the total Contract Amount		_____ %	Amount & Currency [insert amount] <u>USD/GBP/EUR/JPY</u> Equivalent [insert amount] delete not appropriate	
	Employer's Name Address Tel / Fax e-mail		[state justification in support of its similarity compared to the proposed works]		
	Brief description with justifications of the similarity compared to this Employer's requirements				
3.3	Average annual construction turnover <i>[total certified payments received for contracts in progress or completed for each year of works in progress or completed; using selling exchange rate quoted by the source being Bangladesh Bank on the date reported, if applicable]</i>				
	Year	Amount & Currency			

3.4	Existing commitments and works [targeted to be completed by the Intended Completion Date of the proposed works;]		
	Name of Contract Contract no [reference] of [year] Name of Employer Contact Address Tel/fax e-mail	Target Completion Date	Value of Existing Commitments and Works
			Amount & Currency
3.5	Financial Resources available to meet the construction cash flow		
	No	Source of financing	Amount Available
			Amount & Currency
	In order to confirm the above statements the JVCA Partner shall submit, as applicable, the documents mentioned in ITT Clause 28.		
3.6	Contact Details		
	Name, address, and contact details of Tenderer's Bankers and other Employer(s) that may provide references if contacted by this Employer		
3.7	Qualifications and experience of key technical and administrative personnel proposed for Contract administration and management		
	Position Name Years of General Experience	Years of Specific Experience	
	<i>[Tenderer to complete details of as many personnel as are applicable. Each personnel listed above should complete the Personnel Information (Form -6)]</i>		
3.8	Major items of Construction Equipment proposed for carrying out the works [ITT Clause 28]		
	Item of Equipment	Condition (new, good, average, poor)	Owned, leased or to be purchased (state owner, leaser or seller)
	<i>[Tenderer to list details of each item of Major equipment, as applicable]</i>		

 Signatur
 e (Name of Authorized Signatory of the JVCA
 Partner)

Specialist Subcontractor Information (Form F-4)

[This Form should be completed by each Subcontractor, preferably on its Letter-Head Pad]

Invitation for Qualification No:

[indicate IFP No]

Tender Package No

[indicate Package No]

This Package is divided into the following Number of Lots

1. Eligibility Information of the Subcontractor <i>[ITT]</i>		
1.1	Nationality of Individual or country of Registration	
1.2	Subcontractor's legal title	
1.3	Subcontractor's registered address	
1.4	Subcontractor's legal status <i>[complete the relevant box]</i>	
	Proprietorship	
	Partnership	
	Limited Liability Concern	
	Government-owned Enterprise	
	Other (please describe)	
1.5	Subcontractor's year of registration	
1.6	Subcontractor's authorized representative details	
	Name	
	Address	
	Telephone / Fax numbers	
	e-mail address	
1.7	Subcontractor to attach copies of the following original documents	All documents to the extent relevant to ITT Clause in support of its qualifications
The following two information are applicable for national Subcontractors		
1.8	Subcontractor's Value Added Tax Registration (VAT) Number	
1.9	Subcontractor's Tax Identification Number (TIN)	

[The foreign Subcontractors, in accordance with ITT, shall provide evidence by a written declaration to that effect to demonstrate that it meets the criterion]

2. Key Activity(ies) for which it is intended to be Subcontracted

2.1	Elements of Activity	Brief description of Activity
2.2	List of Similar Contracts in which the proposed Subcontractor had been engaged	
	Name of Contract and Year of Execution Value of Contract Name of Employer Contact Person and Contact details Type of Work Performed	

Signature (Name of Authorized Signatory of the Proposed Sub-Contractor)



**ASIAN UNIVERSITY
FOR WOMEN**

Historical Contract Non-Performance (Form F-5)

[The following table shall be filled in for the Applicant and for each partner of a Joint Venture]

Applicant's Legal Name: *[insert full name]*

Date: *[dd/mm/yy]*

Joint Venture Party Legal Name: *[insert full name]* IFP No. and title: *[insert RFP number and title]*

Page *[insert page number]* of *[insert total number]* pages

Non-Performing Contracts in accordance with Qualification Criteria and Requirements			
<input type="checkbox"/> Contract non-performance did not occur during the <i>[number]</i> years specified in Qualification Criteria and Requirements, <input type="checkbox"/> Contract(s) not performed during the <i>[number]</i> years specified in Qualification Criteria and Requirements,			
Year	Non performed portion of contract	Contract Identification	Total Contract Amount (Current value)
<i>[insert year]</i>	<i>[insert amount and percentage]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Reason(s) for non performance: <i>[indicate main reason(s)]</i>	
Pending Litigation, in accordance with Qualification Criteria and Requirements			
<input type="checkbox"/> No pending litigation in accordance with Qualification Criteria and Requirements,. <input type="checkbox"/> Pending litigation in accordance with Qualification Criteria and Requirements, as indicated below.			
Year	Outcome as Percentage of Total Assets	Contract Identification	Total Contract Amount (current value)
<i>[insert year]</i>	<i>[insert percentage]</i>	Contract Identification: <i>[indicate complete contract name, number, and any other identification]</i> Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Matter in dispute: <i>[indicate main issues in dispute]</i>	Total Contract Amount (current value)



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Personnel Information (Form -6)

[This Form should be completed for each person proposed by the Tenderer on Form PW5-2& PW5-3, where applicable]

Name of the Applicant:	<i>[insert Title]</i>
Invitation for Tender No:	<i>[indicate RFP No]</i>
Tender Package No	<i>[indicate Package No]</i>
This Package is divided into the following Number of Lots	<i>[indicate number of Lot(s)]</i>

A. Proposed Position (tick the relevant box)		
<input type="checkbox"/> Electrical/Mechanical Engineer	<input type="checkbox"/> Prime Candidate	<input type="checkbox"/> Alternative Candidate
<input type="checkbox"/> Key Personnel	<input type="checkbox"/> Prime Candidate	<input type="checkbox"/> Alternative Candidate
B. Personal Data		
Name:		
Date of Birth:		
Years overall experience:		
National ID Number:		
Years of employment with the Tenderer:		
Professional Qualifications: 1.		
2.		
3.		
4.		
C. Present Employment <i>[to be completed only if not employed by the Applicant]</i>		
Name of the Employer:		
Address of the Employer:		
Present Job Title:		
Years with the present Employer:		
Tel No:	Fax No:	e-mail address:



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Contact [*manager/personnel officer*]:

D. Professional Experience

Summaries professional experience over the last twenty (20) years, in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

	From	To	Company / Project / Position / Relevant technical and management experience.
1			
2			
3			
4			
5			

(Name and Signature of the Proposed
Personnel)



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FOR WOMEN

TECHNICAL SPECIFICATIONS ELEVATORS



**ASIAN UNIVERSITY
FOR WOMEN
DETAIL SPECIFICATION
FOR**

Elevators

1.0 GENERAL SPECIFICATION

1.1 Scope of Works

Supply of passenger lift with car, control panels, driving motor, gear box, steel suspension ropes, safety devices, guide rails, signals, push buttons etc. with other necessary accessories suitable for installation & use in tropical country like Bangladesh & as per the following main parameter of the lift: -

Sl.	Headings	Short Description
a)	Origin	: EUROPE/JAPAN/GERMAN/SOUTH KOREA/SWITZERLAND/U.S.
b)	Brand	: The Bidder should mention brand. Brand should be from recent line of production, modern facility and meet international standard.
c)	Model	: The Bidder should mention Brand. Brand should be from recent line of production, modern facility and meet international standard. Preferably should have same model operating in Bangladesh.
d)	Manufacturer	: The Bidder should mention the name of manufacturer. The manufacturer should have past experience in manufacturing vertical transportation system for the last 10 years at least. They should have track record of supplying the lifts to different countries, tropical countries like us and preferably in Bangladesh.
e)	Associates	: The manufacturer may have associates for marketing and look after installation, servicing and maintenance. They should have local associates to handle lift installation properly certified by the Manufacturer. Local associates should have past experience in supply, installation, testing and commission of lift from the same Manufacturer.
f)	Type of the lift	: Passenger lift.
g)	Type of the Drive	: Traction ACVVVF controls.



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Sl.	Headings	Short Description
h)	Quantity	: Four numbers in total
i)	Dimension, Capacity & Speed.	: Lift-01: Passenger Lift, 3000mm Wide x 2044mm depth Capacity: 1800kg/24 person. Door: Center opening, 1000mm wide. 2400mm Height Car ceiling height : 2400 mm Speed: 1.50meter/sec. Pit Depth : 1500 mm Over Head : 3900 mm from last stop : Lift-02, 03: Passenger Lift 2695mm Wide x 2044mm depth Capacity: 1600kg/21 person. Door: Center opening, 1000mm wide. 2400mm Height Car ceiling height : 2400 mm Speed: 1.50meter/sec. Pit Depth : 1500 mm Over Head : 3900 mm from last stop Lift-04: Service Lift 1728mm Wide x 1650mm depth Capacity: 545kg/8 person. Door: Center opening, 1000mm wide. 2400mm Height Car ceiling height : 2400 mm Speed: 1.50meter/sec. Pit Depth : 1500 mm Over Head : 3900 mm from last stop



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- j) Number of Stops : 4 Stops including main entrance at Level-0.
- l) Machine Room : Lifts shall be machine room less having no machine room on the top of the lift shaft.
- n) Car Traveling Height : The Bidder should visit the site and assess the Traveling height for the lift. It is approximately 15 meters. (Enclosed drawing)
- p) Car Dimension : To be selected by the Manufacturer. Maximum accommodation should be considered. Ceiling height shall be 2400mm clear.
- q) Door : Double leaf center opening.
: Door drive shall be ACVVVF.
- r) Over head space : Manufacturer should confirm.
- s) Pit Depth : 1500mm Pit depth has been kept.

Sl.	Headings	Short Description
-----	----------	-------------------

- u) Main power source : AC 400V ($\pm 10\%$), 3-Phase, 50Hz.
- v) UPS with Voltage stabilizer & ERD : All lift shall be with UPS to travel down the lift to nearest floor and open the door during any power failure.
- w) Motor Capacity : The bidder has to inform the motor capacity of the lift along with starting current of each of the lift.
- x) Signal source : 80 volts/18 volts/24 volts D.C or as designed. 110 volts/400 volts A.C or as designed.
- y) Control system : Shall be Simplex/Duplex/Quadruplet collective selective with fully programmable microprocessor control, designed for optimum, efficient & energy saving elevator operation. All controls shall always be equipped with an alarm device in machine room car & maintenance control on car top.
- z) Safety features : Non-contact electronic full height door safety sensor, power supply phase reversal protection, friction clutch to avoid passengers to be trapped between doors.
: Emergency unlocking of door from landing for evacuation as well as for maintenance with a



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special key.

- : Facilities for opening of door from inside the car within the landing zone during power failure.
- : The gap between the car & the hoist way shall be maximum 30mm.
- aa) Evacuation features : Feature for moving the car manually to the nearest lower landing door to facilitate evacuation of passenger in case of power failure.
- ab) Additional features in the cabin. : 3 side hand rails of polished stainless steel.
- : Battery operated emergency power supply system shall be good to supply power to car light, ventilation fan, intercom, buzzer etc. during 30 minutes of power failure and charged by trickle charger battery.
- : Remote location emergency signal bell, speaker, preferably at maintenance room from lift cabin.
- : Wall mounted LCD monitor to display special announce, advertisement, news from remote station.
- : Stop the lift to a nearer floor and keep open the door on



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Sl.	Headings	Short Description
		receive of seismic signal over a predetermined rector scale.
		: Gong before stopping the selected floor.
		: Floor beam light to detect passenger call for lift and by pass the call on no person in front of lift.
		: Auto voice announcement system.
		: VIP operation
		: Up & Down Peak Operation.
		: The wrong floor selection can be cancelled by re-pressing the car call twice.
		: All the lift control shall be compatible to BMS control system to monitor the lift traffic.
		: Each lift car shall have self-contained AC system.
ac)	Traveling cable, wiring	: Flat traveling cables having conductors adequate in size & number.
ad)	Electrical Cable Conduit	: All electrical cables shall go through PVC conduits in machine room & shaft. The ckt. which supply current to the motor shall not be included in any twin or multi core traveling cable used in connection with the control & safety devices.
ae)	Suspension rope	: Rope shall be of bright steel wires with fiber cores as per international standards capable to take 14 times the total weight of lift with full occupancy.
af)	Safety gear	: Gradual type safety gear actuated by the speed governor to be installed in the machine room above the hoist way. In order to stop the car quickly & safely in case of exceeding 10% of designed speed during down ward travel for any reasons (i.e. breakages of all suspension elements).
ag)	Standard/conformity	: The manufactured & installation of the lift shall be in conformity with the relevant & valid regulation of the lifts (BS-5655) part I & II 1979. The international safety code for Lifts DNV/TUV/ISO/EN-81/BSI.

1.2 General:

1.2.1 Standards

All equipment specified by this tender shall conform to the requirements of this specification equivalent British or European Standard, and the Local Statutory Authority having jurisdiction over the works.

Maximum Platform Load: The maximum platform load which the lift is designed to sustain shall be equal to the sum of the load carried by the lift plus the load imposed by the industrial truck used only for loading and unloading.

The maximum platform load shall be not less than the rated load of neither the lift nor more than 150% of the rated load.

Where re-leveling is provided, the lift shall be capable of re-leveling the maximum platform load as shown on the load notice.

The driving machine, motor, brake and traction shall be adequate to sustain and level the maximum platform load for which the lift is designed. This load shall be clearly shown on the load notice in the lift car.

1.2.2 Accessibility of Equipment

All equipment specified by tender shall be accessible for operation and maintenance, and where necessary, shall include access ladders, platforms and associated equipment for the performance of such works.

1.2.3 Detailed Shop Drawings

The Contractor shall submit detailed shop/construction drawings to be prepared prior to installation and approved in writing by the Owner. The shop drawings shall show all working dimensions and operating clearances of the lift shaft, car and pit.

The performance characteristics and capacities of the lift equipment shall be as per schedule and the drawing.

1.2.4 Special Tools

The Contractor shall supply special tools required for maintenance of the lifts and hand over these to the owner before the Final Certificate is issued. The tools shall be provided with a sturdy lockable box designed to last for the life of the plant. The tools may be used for erection provided they are finally handed over undamaged to the owner of the plant.

1.2.5 Spare Parts

For trouble free operation list of spare parts shall be submitted, for each lift separately, by the tenderer specifying all parts necessary for the maintenance of all lifts over a period of five

years.

1.2.6 Electrical supply

The lift contractor shall co-ordinate with the Electrical Services Contractor in providing required sizes of Power/Control cable up to lift motor room switchboard. Lift contractor has the assist the electrical contractor to keep correct electrical provision for the lift.

1.3 Quality Control

1.3.1 Uniformity and Quality of Materials

Uniformity of type and manufacture of each individual item of apparatus, fitting and/or accessory shall, as far as possible, be preserved throughout the whole of the works. All the component of lift preferably should be from the country of origin.

All materials shall be new, of the best quality and of the class most suitable for the purpose specified.

The contractor shall keep in mind that continuity of operation of the apparatus is of paramount importance and components shall be chosen primarily from consideration of recorded reliability under similar operating and environmental conditions.

No prototype equipment will be accepted.

The contractor shall submit samples of relevant components such as Hall Position Display unit, call buttons, Car Operating Panel etc. to confirm quality of workmanship and finishes for approval by the Owner prior to shipment and installation.

1.3.2 Co-ordination with Other Services

The contractor shall have to co-ordinate with contractors of other specialty during execution of the work and may have to re-schedule his time table if required.

1.4 Painting and Finishes

1.4.1 General Workmanship

All materials used in the fabrication of the lifts shall be treated, handled, applied and finished in accordance with the lift maker's recommended practices.

Finishes shall be consistent in all lift in quality and workmanship.

All parts of the lift installation, except those were finishes such as stainless steel, Formica etc. are specified, shall be painted on site.

No coat shall be applied on any surfaces that are not clean and smooth or are wet, damp, rough, or greasy, or until the preceding coats are thoroughly dry, or on metal or any exposed work in wet and dusty weather.

All exposed ferrous metal parts of machine, car doors and other material in the hoist way including guide rail fixation brackets (except guide rails) will have one coat of rust protecting paint. Final paint over prime coating shall be done at work site by the supplier up to the satisfaction of the owner. All final paint shall be epoxy of approved quality.

Before painting of metal work is proceeded with, surfaces shall be cleaned of dirt, grease, rust etc.

An ample supply of dustsheets shall be provided for protection of work during the painting, etc.

1.5 Lift Equipment

All equipment shall be factory finished prior to delivery to site and shall be coated with grease or other protective material to minimize corrosion.

Exposed machinery in the shaft's foundations and other permanent parts of the installation, including Guide rails, trimmers, frameworks, brackets, supports, fixing and conduits shall be painted.

1.6 Linseed Stainless Steel

All linseed stainless steel shall be to a finish available from the supplier with vertical graining and constructed from stainless steel type 302 or 304.

1.7 Preservation of Decorative Metal Finishes

During shipment and installation every reasonable precaution shall be taken to preserve the decorative metal finishes, which shall be protected with a wax coating or protective wrapping. Upon completion of the installation work the surfaces so treated shall be cleaned down and where required polished.

1.8 Maintenance of Finishes

The contractor shall furnish the lift manufacturer's recommendations for the preservation and maintenance of the finishes to lift car interiors, landing frames and doors, landing buttons and lanterns. Three (3) copies of such recommendation shall be supplied.

1.9 Testing and maintenance

1.9.1 Testing

The lift installation shall be tested in accordance with the lift Code, and the Owner requirements. All testing shall be witnessed and verified by the Owner.

The contractor shall notify the Owner in writing one week prior to the commencement of tests.

Completion certificate of the lift installation will not be given until satisfactory test and

commissioning results are submitted in writing and accepted by the Owner.

The contractor shall ensure that all facilities, labour, weights, apparatus, instruments, recording charts, etc. are provided for carrying out the tests.

The contractor shall ensure that:

- a) Thorough cleaning of lift machine rooms, lift cars, shafts and equipment, door locks and tracks, etc. has taken place prior to commencement of the testing of the lifts.
- b) Adequate protection of the above areas and systems is provided during and after the testing period to reduce the incidence of system malfunction.
- c) The intercommunication systems are in full working order before testing is carried out,
- d) All landing call buttons and lanterns and indicating devices are operating correctly,
- e) All doors are operating smoothly and correctly.
- f) All noises in cars and shafts have been eliminated and that the car ride is smooth and leveling is accurate.

1.9.2. **Tuning**

Each lift shall be completely tuned and system proven prior to hand over.

1.9.3. **Maintenance**

The contractor shall produce, in conjunction with the lift manufacturer a schedule of maintenance activities for 52 weeks maintenance guarantee period.

During this period the contractor shall ensure that all maintenance is carried out satisfactorily by him.

The contractor shall prepare a report stating that all works in accordance with the comprehensive and detail schedule has been carried out. One copy of which shall be displayed in the motor room and a duplicate copy shall be lodged with the owner.

All routine maintenance items as scheduled, shall be initialed and dated in the appropriate column, of the maintenance schedule by the person carrying out the work.

The works shall include the replacement of fluorescent tubes and lamps in lift shafts and motor rooms and keeping lift motor rooms and overrun pits in a clean and tidy condition free of accumulated rubbish.

1.10 **Documentation for Operation & Maintenance Instructions and Manuals**

1.10.1. **General**

The contractor shall submit Operating and Maintenance instructions and Manuals in accordance with the following specification:

All instructions, manuals, labels on equipment and the like shall be written in English, with quantities stated in SI units.

The following diagrams and instruction shall be provided on fade proof material and mounted in positions to be nominated by the owner.

- a) Operating procedures for the lifts, and in particular operating instructions during emergencies or power failure.
- b) A set of concise operating and maintenance instructions with detailed description of the operation of all the control systems.
- c) Test report covering commissioning and works testing.

1.10.2. **Operating and Maintenance Manuals**

Comprehensive ‘Operating and Maintenance Manuals’ shall be compiled for all lifts installed. Three (3) sets of such package of the manual are required to be submitted.

A draft of the proposed manuals shall be submitted to the Owner for assessment not less than four (4) weeks prior to the date of practical completion. A further draft copy of each manual shall be submitted for approval by the Owner prior to final printing. After approval, the completed manuals shall be compiled and supplied not later than the practical completion of the work.

1.10.3. **Presentation**

Manuals shall be of international A4 size, with stiff plastic covers. The binding shall be of the loose-leaf type with all page’s machine punched and shall permit pages to lie flat to enable easy insertion and removal of pages.

Drawings, illustrations, diagrams and photographs shall appear on sheets of a height not exceeding the major dimension of other pages.

Electrical/Electronic wiring drawings shall be laminated in A3 size and fixed securely to the wall inside the lift motor room in a prominent position.

Each section shall be started on a new page, separated from other section by stiff indented divider.

Each paragraph shall be numbered or otherwise identified for quick and easy reference.

Each manual shall contain the information shown below set out in logically divided sections including the following:

- Scope and Contain
- Emergency information
- General Equipment Description
- Controls Operating Instructions

- Maintenance and Repair Instructions

- Equipment Suppliers and Spare Parts Schedule
- Equipment Data Schedules
- As Built Drawings.
- Test Data Sheets

Sufficient illustration diagrams, drawings, pamphlets and photographs shall be included for the efficient operation, maintenance and repair of the various plants and equipment.

2.0 TECHNICAL SPECIFICATION

2.1 Scope

This part of the specification contains performance and capacity requirements for three numbers of passenger lifts.

2.2 Hoisting Machines

The hoisting machine shall comprise a geared traction machine with a direct coupling through a worm gear and drive arrangement to a variable speed alternating current motor. The brake system shall form an integral part of the drive arrangement.

a) Power supply

400 Volts ($\pm 10\%$) 3 Phase 50 Hz and
230 Volts ($\pm 10\%$) 1 Phase 50 Hz.

b) Emergency Supply:

Emergency battery along with auto-charger of 30 minutes capacity shall be supplied to feed emergency light, ventilation fan, alarm and intercom system in case of power failure.

This supply shall also be used to travel the lift to the nearer lower landing level in case of power failure.

2.3 Hoisting Machines and Associated Equipment

Hoisting machines drive motors and generators shall be suitably sized to provide the required duty.

a) Base Frame:

The machine shall be mounted on a common rigidly formed base structure. The machine shall be of robust and compact design, providing ready access to all working parts and lubricating points.

b) Brake:

The brake shall be spring applied and magnetically released and brake shoes shall be self aligning, easily adjustable with renewable, non-combustible linings. The brake assembly shall be smooth and quiet in operation and shall transmit no sudden impulses to the car.

The car shall be stationary or very close to being stationary before the brake is applied.

c) Sheave:

Hoisting and diverting sheaves shall be precision machined and grooved so as to provide uniform traction quiet running and long rope lift. Shaft of diverting sheaves shall be supported in brackets fixed to the machine beams or machine bed-plate and shall be suitably locked in position to prevent shaft rotation.

2.4 Motor Generator

Motor generator sets shall be of unit type construction incorporating both the AC motor and DC Generator on a single frame.

2.5 Over Speed Governor

The speed governor shall be of robust construction with a minimum of moving parts. The governor shall be designed to continuously and accurately monitor the speed of the car with immediate response to over speed conditions.

The governor shall be adequately supported to withstand all loads to which it may be subjected during normal application of the safety gear.

The governor shall operate quietly and in the event of tripping shall mechanically clamp the governor rope without causing damage to the rope or subjecting it to undue wear.

2.6 Machine Room Equipment

a) Temperature Limit

All the equipment with controls shall be able to operate at 40° Celsius ambient temperature without any problem.

b) Machine Beams:

All machine beams shall be cast into the floor slabs or sit on plinths.

Where machine beams are to be attached to structural steel members, the method of attachment shall be approved in writing by the Owner.

Close all apertures between machine beams and over shafts, etc. with removal checker plate covers painted black.

c) Machine isolation:

Provide all necessary arrangement to keep noise and vibration of lift machinery and equipment at a minimum level.

Machine and other support beams shall be sound isolated from the main building structure.

Isolating pads shall be designed to support the weight of the equipment without undue compression and shall be impervious to oil, water and other foreign substances with which they may come in contact.

2.7 Lift Switchboard

The switchboard shall be of sheet steel construction and front connected type with main switches, circuit breakers, fuses and control switches and shall be provided with suitable termination for accepting the incoming sub-mains.

Under all variation of load, pressure, ambient and atmospheric conditions the switchboard and associated components shall give satisfactory performance.

Components shall be capable of withstanding all fault levels, overloads and short circuit conditions without causing any mechanical or electrical damaged to Bus Bars, wiring or equipment associated with the switchboard.

All cables entering the switchboard shall be fitted with cable glands.

The Switchboard shall be painted X-15 Orange Gloss or approval alternative.

2.8 Control and Relay Cubicles

Cubicles shall be of the front access type with hinged doors of sheet steel construction. Equipment inside the cubicles shall rigidly fix and air shall be allowed to flow free around that equipment.

All sub-circuit and control cabling shall be loomed and run in a neat and tidy manner.

All wiring entering control and really cubicles shall be fitted with cable glands.

2.9 Switch Gear

All relay, contractors, switchgear and printed circuit boards shall be specially designed for use with lift machinery and applicable for environmental conditions.

Connected to print circuit boards shall be via disconnecting able plugs. Direct soldering of wiring to printed circuit boards is acceptable. All equipment shall be suitable for operating under high ambient temperature without faults, under arcing or vibration.

2.10 Labeling

The Switchboard, cubicles and equipment shall be labeled clearly and each cubicle shall be labeled externally.

Label shall be made of white surface sandwich ivorine or trifoliate material engraved to black laminate level, fixed with chromed screws and nuts. Self-taping screws and adhesives are unacceptable.

2.11 Guards

All the equipment mainly moving parts in the equipment room, counter weight etc. shall be provided with adequate guards. All floor punches for ropes etc. shall be provided with coatings. Rope nip-point's governor tension sheaves shall be adequately guarded.

2.12 Machine Room Wiring

All wiring shall be run overhead cable ladders and ladders shall be run in truly horizontal and vertical plains. Suitable suspension hangers shall be provided as required.

2.13 Manual Winding Equipment

Manual winding equipment shall be supplied and installed in the suitable place to enable each car to be moved to the nearest floor in the event of breakdown.

2.14 Access Ladders

Ladders, handrails, kick rails to secondary floor etc. shall be included to facilitate the efficient services of the lift.

2.15 Maintenance Cabinet

A lockable cabinet of a suitable size shall be provided to accommodate different spare parts, tools etc. The type of construction, materials and finishes shall be as per control and relay cubicles.

2.16 Wiring Diagrams

One complete set of schematic wiring diagrams for the lift installed shall be provided.

All diagrams shall be A3 size and laminated envelopes. The diagrams shall hang from a suitable support fixed to wall in a prominent position.

2.17 Car and Landing Equipment

a) Car Size

Car size shall be as per schedule of items and as per drawings. Car size shall be selected by the Manufacturer good to accommodate within the shaft provided.

b) Car frame

Car frame shall be of welded and bolted structural steel sections of adequate strength and rigidity to withstand deformation from eccentric or impact loading. The passenger lift car frames and flooring shall be designed for the particular class of loading relative to the proposed usage of the lift.

Equipment such as door operators, hangers, retiring cams, etc. shall be supported by the car framework, independent of car superstructure.

A toe guard of sufficient length shall be secured to the car frame to keep no opening into the lift well when the car is in the leveling zone.

The overall design of the car will have provision for elastic isolators between metal parts to ensure low vibration and low noise during car travel.

Car frame members of lift, including shafts for sheaves, shall be capable of sustaining the weight of the car and its associated equipment, static loading, inertia forces, loading due to traveling cables, rope or chain compensation sheave lockdown, etc.

In designing car frame members the relevant static loading shall be considered as rated load distributed over one-half of the area of the platform adjacent to the side, for each side.

c) Car Superstructure

The car superstructure shall be vibration and sound isolated from the main structural car frame.

Particular attention shall be taken in the method of suspension of care, quality of car ride, vibration and noise.

Poor quality car rides will not be acceptable.

The car superstructure shall utilize best quality materials of a good wearing and durable nature, easy to be maintained and cleaned.

An emergency access manhole in the ceiling shall be provided.

The car front wall comprising car control panels, door jamb, over door panel and doors, shall be of satin finish linseed stainless steel.

Cars shall be suitably constructed to retain its shape and appearance during normal service, safety tests and operation of safety equipment.

All wall and ceiling surfaces and joints shall be truly aligned and straight. All

ceiling and wall panels shall be removal from the inside of the cars.

One set of non-combustible padded protection quilts shall be provided for each of the side and rear walls of a lift car and shall be held in position with suitable fittings fixed to the walls with concealed fixings.

On top of the car, a 240 Volt light fitting locally controlled shall be provided. In addition, a light fitting

shall be provided on the underside of the car with the switch located in an easily accessible position.

d) **Hand Rail**

Lift 01,02 & 03 shall be provided with handrails of anodized light metal section on two side walls. A mirror from handrail level up to the ceiling and full width of the deck at the rear wall shall be provided.

e) **Car Ventilation**

Lift cars shall be adequately ventilated by a suitably sized supply air fan mounted on top of the car and delivering approximately 10m³ of air per minute through a duct system designed to ensure that the air is uniformly distributed the car without excessive noise, draughts or turbulence.

The fan shall be silent operating type set on vibration free mountings and with flexible duct work connected to the car. Car shall be taken in the selection of the type of fan and the method of mounting to ensure that the fan is quiet when running.

The fan shall be powered from the lift distribution board.

f) **Car Lighting**

Car ceiling shall be completely and evenly illuminated by recessed fluorescent lighting or approved type of lighting.

All light fittings shall be completely sealed to prevent ingress of dust and moisture from the shaft.

An emergency lighting system shall be provided above the car door for recognition of the surroundings. The system shall operate automatically whenever the power supply to the normal lighting fails.

It shall provide good general illumination of the car of sufficient intensity to distinguish the call buttons, emergency alarm button and telephone dial, where provided and shall be maintained for a period of up to four hours.

On reconnection of the normal lighting, the emergency light shall be automatically switched off and the battery recharged on full capacity by an electronic battery charger. The emergency light shall be completely concealed.

No bar lamps shall be installed in the lift car interior.

g) **Car Fan**

A car fan will be given with a push button with fan symbol in the car panel. The fan is switched On/OFF with alternate push of the button.

2.18 Car and Landing Doors

Doors shall be of robust pressed steel construction. Car and landing door shall be covered on the internal side and leading edge with satin finished “BRONZE” Vs Stainless steel.

Car and landing doors for lift shall be two panel center opening.

The real ace of doors shall be corrosion resistant furniture quality steel.

Landing doors shall be fitted with heavy duty sight guards finished to match leading edges of doors.

Doors shall be fitted with hangers, tracks, pulleys, locks and where required, counterweights.

All conduits and door linkages, etc. shall be fully concealed in such a manner that they cannot be seen by passenger entering and leaving cars.

a) Landing Door Frames

Door frames shall rigidly form from pressed steel and all welds shall be ground smooth and free of pit marks.

Door frames shall conform to the standard detailed profiles and shall be of a linseed “BRONZE” Vs stainless steel finish.

Door frames shall be securely fixed in position and mounted true and level. Grout

stops shall be provided where required.

Landing Sills: Landing sills shall be securely fixed to the door frames to form an integral part of the door frame assembly, and shall be designed to accept the rated point load of the lift.

Landing sills to be of a durable material and finished to resist scuff marks caused by foot and trolley traffic.

b) Door Operation

Car and landing doors shall be operated through a linkage system by a heavy-duty AC electric motor.

The door operator shall be mounted on the car, above the opening, and shall be supported off the car frame members.

The operator shall act to open or close both car and landing doors simultaneously.

Door operators shall provide smooth, quiet and rapid door operation. All components shall provide long lasting performance with minimum of maintenance.

High-speed heavy-duty door operation with same opening and closing speeds shall be provided. Door will be driven by a quiet ACVVVF motor connected to a door operating system. Car and landing doors will open and close in full synchronization being connected to each other.

Door motors shall be effectively protected against burn-out or other damage which may arise from the

doors stalling, becoming jammed or being held, manually or otherwise during their opening or closing operation.

In case of power interruption or failure of the operator, it shall be possible to open the doors manually from within the car or from outside the car.

c) **Safety Measures**

The gap between the car and the hoist way door will not be more 30mm. Emergency unlocking from landing for evacuation as well as for maintenance shall be performed by special key.

d) **Door Control**

Door shall be fitted with the latest type controls to achieve maximum efficiency relative to the type of usage of the lift and system operation.

Doorways shall be fitted with detector, curtain of light or twin ray and safety fender type control and monitoring system.

All equipment shall be of robust construction and mounted such that it is not able to be subjected to abuse. However, equipment shall be readily accessible for adjustment or replacement of parts.

Where safety fenders are employed, the safety shoe shall be of a strong, durable material.

The doors and associated equipment shall operate quietly and smoothly without the transfer of vibration to the lift car.

If car and landing doors are held open at any floor more than a selected period, there shall be some audible device or other approved method to signify to passengers that the doors must be released. The doors shall then close slowly to “nudge” the passenger out of the doorway.

A friction clutch to avoid passengers to be trapped between doors shall be provided in each type. A

door reversal feature in case of obstruction of doors shall be provided for all types of lift.

2.19 **Fixtures**

a) Hall Position Display:

On each floor, above each set of lift doors, or on front wall there shall be a recessed alpha numeric dot matrix hall position display unit with satin finish linseed stainless steel flange plat.

The display unit shall provide the following indication:

- i) Current floor location of lift car.
- ii) Direction of travel of lift car.
- iii) Operational messages (eg. “Out of Service”).
- iv) Time display

Recessed wall boxes shall be of rigid construction and manufactured from minimum 2mm thick mild steel.

b) Call Buttons:

A recessed call button panel shall be situated next to each set of lift doors on each floor. All call button panels shall be engraved with the warning “In Case of Fire Do Not Use Lifts”.

The call button panel shall comprise two recessed buttons which, when pressed, shall illuminate to show requested direction of travel. All buttons shall be of the micro-movement type. The hall button front panel shall be satin finish stainless steel. Recessed wall boxes shall be of rigid construction and manufactured from minimum 2mm thick mild steel.

c) Electronic Gong:

An electronic gong shall be installed at each lift on each floor to alert waiting passengers of the arrival of the lift car at the floor. The electronic gong shall be concealed from view.

2.20 Car Operating Panel

The lift car shall incorporate a recessed car operating panel. The car operating panel shall provide the following features:

- An engraved maximum load and passenger capacity sign.
- Overload indicator with buzzer.
- Emergency stop button.
- Alarm button.
- Key switch for priority control.
- Door close button.
- Door open button
- Recessed compartment with telephone and hinged door.
- Alphanumeric dot matrix floor indicator.
- Light key switch.
- Fan key switch.
- An illuminated press button with numeral for each floor served.

All buttons shall be micro movement type.

The recessed car operating panel shall have a satin finish linseed stainless steel fascia panel.

2.21 Shaft Equipment

a) Trimmer Beams:

The Tenderer shall specify the provision and installation of all necessary horizontal and vertical trimmers including all standoff and fixing brackets that may be required.

Horizontal and vertical trimmer shall be rolled steel beams or channels, sufficiently strong and rigid

to ensure maintenance of guide rail position under all normal and emergency operating conditions of the lift.

b) Guide Rails:

Guide rails shall be of standard tee section steel machined with joints tongued and accurately grooved and suitably connected with splicing plates.

Guide rails shall be installed true and plumb and so fixed to withstand any eccentricities on loading resulting from operation of the safety gear without causing displacement or undue deformation of the guide rails.

The method of fixing the guide rails to the building structure shall allow for building settlement and expansion. Guide rail supports shall be secured to the building structure with approved type fixings and at regular intervals to ensure smoothness of ride prior to and after safety gear applications and under all conditions of load and speed. Installation and support of guide rails shall be such that excellent riding qualities shall prevail under all conditions of operation.

c) Counterweights:

Counterweights shall be suitably sized and constructed to provide smooth and silent running as well as providing an economical system operation.

Counterweights shall be fabricated from structural steel and arranged for ready modification of balance weights. The total weight of the counterweight shall be based on the entire weight of the empty car, plus certain percentage of the car design load.

d) Guide Roller and Shoes:

The car and counterweight shall be fitted with guide rollers or shoes which shall be mounted on top and bottom members of the car and counterweight frames.

Roller guides shall be supplied for all lifts.

Roller guides shall be spring loaded, rubber faces, self lubricating type and quiet running under all conditions of load and speed. The roller guides shall run on dry unduplicated guide rails.

Substantial cast iron or mild steel retainers shall be fitted to each guide assembly to ensure retention of car or counterweight should failure of a roller occur.

e) Buffers:

Spring/Hydraulic buffers shall be sized in accordance with the duty of the lift equipment and constructed such that the car and counterweight are brought to a smooth stop under all conditions of load and speed.

Provide and fix all necessary beams, if any, for supporting the buffers.

2.22 Safety Gear

Car safety gear shall be of the flexible guide clamp type mounted underneath the car platform and forming an integral part of the car frame.

A car safety gear shall be provided to stop the car whenever excessive descending speed is attained. The safety will operate by a centrifugal speed governor located in the machine room and connect to the safety gear through a continuous steel rope.

Suitable means shall be supplied to cut off the power from the motor and apply brake on application of the safety, that is in case of speed exceeds by about 25% of the nominal speed of the lift.

On application of the safety gear, the car shall be brought to a gradual and smooth stop. Operation of the safety gear shall cause only minor wear on the guide rails and shall not cause rails to move of alignment.

2.23 Compensation Equipment

Compensation ropes, frames and tension sheaves shall be supplied as required. Supply and fix all necessary support beams.

The compensator sheave and frame unit shall be of the floating type of sufficient weight to provide adequate rope tension. The sheave and frame assembly shall travel on adequately supported guides braced to prevent lateral movement.

The compensating sheave shall be mounted on a fixed or rotating shaft. All bearings shall be of ball or roller type with suitable lubrication provisions.

2.24 Governor Tension Sheaves

Governor tension sheave and frames shall be provided together with suitable support brackets.

2.25 Ropes and Sheaves

Hoisting, governor and compensating ropes shall be of a size and type that exhibits long wearing qualities; all anchor point shall be of an approved type.

All ropes shall be of the high grade bright steel wire type having lubricated hemp cores. All ropes shall be new, clean and in first class condition when installed.

Rope attachments shall include the means of adjustment to ensure even tension on a rope. Connection shall preferably be by wedge clamp sockets and rope grip. Proper tensioning has to be ensured and recorded.

All sheaves shall be machined true and smooth.

2.26 Trailing Cables

Trailing cables shall be specially designed for elevators and shall have long wearing qualities.

Spare conductors shall be provided in trailing cables; the number of spare conductors being at least 30% of the number of initially used conductors.

All cables used for telephone or intercom services shall be suitably screened.

Cables shall be installed in a manner that will prevent stresses being imposed on the conductors and terminals and shall be free of twists and kinks.

2.27 Automatic Terminal Stops

Lifts shall be equipped with an automatic stopping device, arranged to bring the car to a halt at the terminal landings independent of regular operating device in the car. Final limit switch shall be provided in the lift well, operated by the car, and arranged to stop the car should the car travel beyond the zone of the normal stopping device.

2.28 Maintenance Platforms

Where necessary, provide diamond grid steel platforms to approval in each of the lift overruns for maintenance and access to underside of lifts as required. In addition, provide screens between overruns terminating at different levels and ladders from lowest floor service in to each one run as required. Provided diamond grid plates between machine beam and over opening into lift shafts.

2.29 Safety Mesh Screen

All safety and protective mesh screens for trailing cables and separation between banks of lifts, as may be required, shall be provided.

2.30 Well Flushing and Guards

All flushing and guards, as necessary around equipment, shall be provided.

Well flushing shall include bottom overruns and top and bottom faces of lift well door entrances including blind section of shafts.

Flushing panel shall be of galvanized iron sheet with suitable reinforcement.

2.31 Conduits

All conduits shall be galvanized metallic where exposed to mechanical damage. After conduits have been cut, the ends shall be reamed out, plugged and kept dry during the installation period. All other conduits, not exposed to mechanical damage shall be Heavy Duty PVC type suitable for installation underground, on surface or cast into slabs.

Under no circumstances shall surface conduits be installed within lift cars. All conduits shall be run in true vertical and horizontal directions and rigidly saddled at frequent intervals.

2.32 Temporary Staging & Hoisting

All temporary staging over lift shafts including any hoisting facilities in the shafts shall be provided.

2.33 Cleaning

On completion of construction and prior to handover of the various sections of the work as set out on the building works program, the lift contractor shall clean down the lift shafts including landing doors and locks, car superstructure, counterweights, safety gear, etc including the bottom of the lift shaft.

Particular attention shall be given to the cleaning of door tracks, door operators and contacts, and any special control equipment located within the well or on the car.

2.34 Control Systems

a) General:

All lifts shall operate under automatic control without an attendant.

The control system of the lift or lifts shall provide service in the most efficient manner.

b) Control System Features:

All calls shall be answered in sequence regardless of the order in which they are registered.

When traveling in the “UP” direction, the car travels to the highest call stopping at any intermediate floor for which a pre-registered car call or down landing calls that have been registered.

Operation of either landing call button at the floor at which the car is standing, causes the doors to open. Under these conditions, car preference is established. This allows the passenger to select the required direction of travel regardless of other landing calls, which are subsequently registered in the system.

The door control system shall be arranged to minimize door operating time. the system shall adjust door time to conform to traffic movement.

The system shall have a quick smooth and positive run-in to each floor with accurate floor leveling.

Acceleration, deceleration, floor leveling and re-leveling accuracy shall be consistent for each lift and all variations in load, speed and direction of travel.

For each lift, a main switch capable of breaking the supply to the lift on all the live connectors shall be installed in the machine room. The switch shall be capable of interrupting the highest current involved in normal conditions of use of the lift.

The switch will not cut the circuits feeding the following:

- i) Car light and ventilation
- ii) Socket outlet on the car roof
- iii) Lighting of the elevator well

iv) Alarm device.

c) **Priority Control**

Switching on the key contact and at the same time pressing the required floor buttons will allow a direct travel to the selected floor while the already registered car commands will be canceled.

d) **Micro self leveling**

The lift shall be supplied with a micro self leveling feature that will automatically take the car to the floor landings. This micro self leveling will be entirely automatic and independent of the operating device and will correct for over-travel, under travel and rope stretch.

2.35 Fireman's' Service

As a future provision to meet the National Building Code requirements, independent keyed facility for use by the fireman during a fire or emergency shall be kept in Lifts.

2.36 Leveling Equipment

Provide the equipment that shall achieve the highest degree of leveling accuracy, while keeping leveling times to a minimum.

Leveling equipment shall be suitable to maintain accuracy up to $\pm 3\text{mm}$ max.

2.37 Alarm System

Each car shall be fitted with an alarm system which will be operated by the alarm button on the car control panel.

When the alarm button in the car is pressed, an alarm bell on the top of that car and in the building maintenance room shall operate.

In case of blackout the alarm device will remain operative.

The alarm bell on top of the car shall also operate whenever the emergency stop button in the car is operated or when for any reason any part of the safety circuit operates, thus showing that the lift should receive attention.

2.38 Communication System

From passenger or goods lift car, the supply and installation of telephone cabling shall be done to a telephone Floor Distribution Frame outside each lift machine room. The wiring shall be arranged such that lift car shall have a separate telephone line. In case of blackout this intercom system will remain operative for at least one hour.

2.39 Safety Devices

All necessary limit switch and safety devices shall be provided to enable the lifts to operate in a safe manner at all times and in the case of an emergency automatically bring the lifts to a smooth stop and render the lifts inoperative until the fault is rectified.

2.40 Evacuation Devices

During a power failure the car can be moved manually from the machine room to the nearest higher or lower landing for evacuation of passengers.

2.41 Keys

Three sets of keys with suitable engraved trifoliate label shall be supplied for all locks and key switches associated with the respective lift operation.

2.42 Spare Parts

Spare parts supplied along with the lift shall be good for five years trouble free operation.

2.43 Form of Notice

For all the lift load notice shall also give the maximum passenger capacity.

3.0 INSTALLATION, BALANCING, TESTING & COMMISSIONING

The lift with all accessories shall be installed as per direction, site condition and recommendation of the equipment manufacturer. All cutting, patching and mending well the damage shall be done up to the satisfaction of the engineer in charge.

After complete installation the system shall be tested as per recommendation of the manufacturer and test shall be done in presence of the Consultant. Three copies of test report shall be submitted without which final bill shall be with held.

Supplier must submit three sets of manufacturers original technical catalogues including installation manuals along with the offer.

Shop drawing and detail installation drawing matching with actual site condition shall be prepared by the contractor and shall get approved by the Consultant. The contractor will bear all the responsibility of matching the manufacturing of the equipment and accessories as per site condition.

Three copies of as built drawing, technical catalogue, operation and maintenance manual shall be submitted after satisfactory testing, commissioning and balancing.

Installation, balancing, testing, commissioning and maintenance work after commissioning for one year shall be incorporated.

The contractor shall ensure that all motor, bearing, all moving parts of the equipment including controls have been properly installed before the operation of machine or equipment. All safety

protections of the system shall be tested individually in presence of the Consultant. Performance the control accessories such as thermostat, etc. shall also be tested individual. The contractor shall follow the test procedure of the manufacture.

Electrical system testing shall be done conforming to IEE regulation or NEC.

System testing shall be done jointly with the Consultant.

3.1 Balancing/ Trial Run & Commissioning

It shall be the Contractor's responsibility to put the unit to work and to certify that the specified commissioning procedure have been carried out as per recommendation.

In preparing the program, the Contractor shall allow a commissioning period of at least two weeks prior to completion.

During the period, the Contractor shall complete all specified tests and adjustments so that all services are fully operational for hand over to the Authority.

On completion of testing the contractor shall inform the Authority about the final stage of commissioning and shall provide full facilities to the Consultant to witness the tests, but this shall not absolve the Contractor of his responsibility to carryout all the tests himself. To facilitate adjustment and regulation the installation must have been in operation for a reasonable period before the final tests are performed. The contractor shall be responsible for providing all instruments necessary for carrying out the commissioning tests.

After accepted testing and commissioning the Contractor shall clean all the equipment, filter, lubricate all the moving parts as required and do all the necessary work to put the system for 15 days trial operation. after accepted functional test of 15 days, the system shall be ready for hand over for yearly operation and maintenance.

All other standard testing, commissioning and balancing as per manufacturer's instruction shall also be done.

4.0 DOCUMENTATION

Within seven days of work order the contractor has to submit detail installation and fabrication drawing on the basis of tendered drawing for approval. Fabrication detail drawing, site modification drawing etc. shall also be done by the contractor during construction work and submit to the Consultant for approval.

To maintain proper condition of installation the contractor may change the layout drawing as per approval of the Consultant.

The contractor has to modify the electrical layout drawing for the system as per actual requirement of the offered equipment and accessories. Detail of the panel drawing showing location of all component shall be submitted. Control system with sequential diagram shall be submitted which shall bear the approval of the Manufacturer.

Compilation of all the technical document including operation and maintenance manual, technical booklets for all the equipment etc. shall be done and three copies of them shall be submitted to the Consultant.

5.0 WARRANTY

The equipment shall carry the standard guarantee of twelve (12) months or at least 4000 running hours whichever occurs first.

6.0 PRODUCT

Mitsubishi (Japan) / Schindler (Switzerland) / Otis (U.S.) / Hitachi (Japan) / Hyundai (South Korea)/ Thyssenkrupp-TKE (Germany)

7.0 TRAINING

After successful testing and commissioning, the contractor has to arrange a one-week training program for 3 persons from the Consultant selected staff. The selected person has to be provided with a short training about most of the equipment and accessories to handle.

The supplier shall provide a description of the scope of recommended training and shall submit a training program along with the offer.

8.0 INSTALLATION, COMMISSIONING AND MAINTENANCE

After installation, testing and commissioning, maintenance works for one year, after commissioning shall be incorporated.

9.0 PRE-SHIPMENT INSPECTION

The contractor at his own cost shall be arranged per-shipment inspection of the lift for 3(Three) persons including 2(Two) Persons from AVE & VITTI, Recommended by the owner. The contractor shall bear all the cost of up-down air fair, land transportation, feeding - lodging and other expenses. He has to arrange visa for the visit. The country of inspection shall be the country of manufacturing. The contractor has to show at least one project where similar types of lift and components with testing facilities & QC are in operation in the same country of manufacturing.

10.0 BIDDER TO FILL

The lift manufacturer shall fill up the following chart,

Sl. No	Requirement	Manufacturer to fill	Unit
1.	Lift Acceleration		Meter/sec ²
2.	Lift Jerk		Meter/Sec ³

3.	Door Weight		Kg.
4.	Door opening Velocity		Meter/sec
5.	Door closing velocity		Meter/sec
6.	One floor traveling time (Door Close, travel, door open) Floor height 11'-0"		Sec
7.	Motor starting delay time		Sec
8.	Motor stopping delay time		Sec
9.	Average leveling delay		Sec

Notes: TECHNICAL EVALUATION MUST BE CALCULATED BY AVE ENGINEERS & CONSULTANTS



ASIAN UNIVERSITY
FOR WOMEN

Supply, Installation, Testing & Commissioning of Elevator for
Three Storied with a Semi-Basement Academic Building
for Asian University for Women, Pahartoli, Chattogram.

SL NO	DESCRIPTION	AMOUNT IN TAKA
1	GENERAL WORKS	
2	PASSENGER LIFT	
TOTAL IN TAKA		

Taka in word:

Supply, Installation, Testing & Commissioning of Elevator for Three Storied with



a Semi-Basement Academic Building for Asian University for Women, Pahartoli,
Chattogram.

A: BILL NO.:1: GENERAL WORKS:

Item No	Description	Quantity	Unit	Rate in Taka	Amount in Taka
1	<p>Erection and maintenance of site office and removal of the same after completion of work in accordance with the conditions of contract. In addition to the office required for his own use, the contractor shall provide and maintain furnished field office for the use of the Engineer-in-charge and his staff. The field office is to have a concrete floor, adequate foundation, brick walls, false ceiling of hard board with seasoned Garjan wood frame and painted, and all windows are to be glazed and provided with steel grill. Outside and inside wall surface are to be painted on plaster acceptable to the Engineer-in-charge. The field office shall be maintained in a secure and watertight condition by the contractor until the completion of the contract and shall be provided with electricity, running water and sewerage. All doors shall be fitted with approved locks and windows shall be provided with screen/blinds. Before construction the contractor shall submit plans and drawings showing.</p> <p>Proposed details and location for the field office, including foundations, access roads, shades, layout of electrical and water supply and hard standings thereto for the approval of the Engineer-in-charge.</p>				

Item No	Description	Quantity	Unit	Rate in Taka	Amount in Taka
	<p>The Engineer-in-charge may require revision of the plans prior to giving approval for construction. The contractor shall also submit details proposed furniture, fittings and other items of equipment and plant to the Engineer-in-charge for approval. The office, complete with furnishings, fittings, access roads and hard standings shall be ready for occupation by the Engineer-in-charge</p> <p>(This is a time related item; proportionate payment for this item shall be made distributing in each bill on the basis of percentage progress of the whole works under contract)</p>				
1.1	<p>Engineer's site office of minimum 10 sqm plinth area with providing necessary facilities including office furniture, consumables, stationeries etc.</p>	1.00	Job		
2	<p>Providing necessary facilities in construction site for maintaining site safety including safety helmet, safety belt , apron, gumboot, goggles etc.</p>	1.00	Set		
3	<p>Supplying and providing of first aid box with necessary materials/medicine (hygienic gown, thermometer, adhesive dressings, antiseptic solutions, bandages, cotton balls or swaps, emergency blanket, gloves, hand sanitizer, ice pack, saline etc). All complete as per direction of Engineer-in -charge.</p>	1.00	Each		

Item No	Description	Quantity	Unit	Rate in Taka	Amount in Taka
4	<p>Providing 3 sets as-built drawings subject to Engineer's approval produced in AutoCAD software in 584.5 mm x 413.5 mm (A-2 size) standard drawing paper, and operating and maintenance manual of the equipment and plant incorporated in the works, if any, in original by the date stated in the particular conditions of contract (PCC). If the contractor does not supply the as-built drawings and operating & maintenance manuals by the date stated in the particular conditions of contract (PCC), or they do not receive the Engineer-in-charge's approval, the Engineer-in-charge shall withhold the due to the contractor PCC from the payments.</p> <p>The as-built drawings must show the permanent works as actually constructed and reflect the revision of drawings supplied to the contractor during the Contract as well as revisions of drawings supplied to the contractor during the contract.</p> <p>(One set of as-built drawings shall be considered for measurement and payment)</p>	1.00	Per Tender		

Item No	Description	Quantity	Unit	Rate in Taka	Amount in Taka
5	Mobilization and cleaning site before commencing actual physical work and during contract period and demobilization after completion of the Works under contract accepted by Engineer-in-Charge/Consultant. This work shall also covers clayey cleaning and clearing, and in the ground to the project can be executed an extent that all the events of works of smoothly in a working environment with a particular attention on safety and security in all respects, agreed by the Engineer / Consultant, where payments are to be based on ground area determined by the Engineer-in-Charge / Consultant. and be proportionate to the percentage progress of work under contract as a whole in all respects and approved by the Engineer-	1.00	LS		
TOTAL COST BILL NO:1 TK.					

COST ESTIMATE

Supply, Installation, Testing & Commissioning of Elevator for Three Storied with a Semi-Basement Academic Building for Asian University for Women, AUW, Pahartoli, Chattogram.

Special Notes: All the lift shall be inclusive of all component and accessories as per specification. The Bidder has to visit the site before costing.

Sl. No.	Description of Items	Quantity	Unit	Unit Rate in Taka	Amount in Taka
1	LIFT-01 :		1 Set		
	Passenger Lift : Shaft Size: 3000mm(W)x 2044mm(D) Machine Room : Room Less Capacity: 1800kg (24 Person) Door: Center Opening, 1000mm wide 2400mm Height Car ceiling height : 2400 mm Speed: 1.5m/sec Stop: 4 Stops, including, main landing at L-0 Pit Depth : 1500 mm Over Head : 3900 mm from last stop				
2	LIFT-02, 03 :		2 Set		
	Passenger Lift : Shaft Size: 2695 mm(W)x 2044mm(D) Machine Room : Room Less Capacity: 1600kg (21 Person) Door: Center Opening, 1000mm wide 2400mm Height Car ceiling height : 2400 mm Speed: 1.50m/sec Stop: 4 Stops, including, main at L-0. Pit Depth : 1500 mm Over Head : 3900 mm from last stop				

Sl. No.	Description of Items	Quantity	Unit	Unit Rate in Taka	Amount in Taka
3	LIFT-04 :	1	Set		
	Service Lift : Shaft Size: 1728 mm(W)x 1650mm(D) Machine Room : Room Less Capacity: 545kg (08 Person) Door: Center Opening, 1000mm wide 2400mm Height Car ceiling height : 2400 mm Speed: 1.50m/sec Stop:2 Stops, including, main at L-0. Pit Depth : 1500 mm				
4	ELECTRICAL & MECHANICAL SYSTEM (If any power cables, distribution boards & earthing system)	1	Lot		
5	TESTING & COMMISSIONING AND SPARE PARTS	1	Lot		
TOTAL TK					

