

SECTION 14325

TABLE OF CONTENTS

1.01	AGREEMENT INTENT .....	1
1.02	AGREEMENT TERM .....	1
1.03	CONTRACTOR SERVICES .....	1
1.04	CONTRACTOR'S EMPLOYEES .....	3
1.05	CONTRACTORS HOURS AND MANNER OF WORK.....	3
1.06	CONTRACTOR'S EXECUTION OF SERVICES .....	4
1.07	CONTRACTOR COMPLIANCE WITH LAWS .....	5
1.08	SPECIAL CONDITIONS .....	5
1.09	EQUIPMENT PERFORMANCE REQUIREMENTS .....	6
1.10	PURCHASER'S RIGHT TO AUDIT SERVICES.....	7
1.11	AGREEMENT AMOUNT AND ANNUAL LABOR/MATERIAL ADJUSTMENT.....	7
1.12	INSURANCE .....	8
1.13	INDEMNIFICATION .....	8
1.14	AGREEMENT CANCELLATION.....	8
1.15	NOTICES .....	9
1.16	PURCHASER'S RESPONSIBILITIES .....	9
1.17	PREVIOUS REPRESENTATIONS .....	9
1.18	EXTENT OF LAW .....	10
1.19	TIME.....	10
1.20	EXECUTION .....	10
	APPENDIX A CONTRACTOR'S MAINTENANCE CONTROL PROGRAM .....	11
	APPENDIX B EQUIPMENT TYPE AND PERFORMANCE REQUIREMENTS.....	13

SECTION 14325

VERTICAL TRANSPORTATION MAINTENANCE AGREEMENT

This Agreement, between City of Carrollton hereinafter called "Purchaser" and ..... hereinafter called "Contractor" shall pertain to the vertical transportation equipment in the following property(ies):

City of Carrollton  
City Hall  
1945 E. Jackson  
Carrollton, Texas 75006  
EQUIPMENT DESCRIPTION:  
One (1) hydraulic elevator

1.01 AGREEMENT INTENT

- A. Provide pro-active preventive maintenance for the equipment covered by this Agreement to facilitate the following:
  - 1. Consistent safe operation of equipment
  - 2. Maximum operational performance of equipment
  - 3. Maximum beneficial usage of equipment
  - 4. Maximum life cycle of equipment
- B. Contractor expressly acknowledges that Purchaser is relying on Contractor's professional expertise in performance of Services to achieve and maintain Agreement intent.
- C. For clarification elevators, escalators, moving walks, etc. may be referred to as "units" or "equipment" in this Agreement.

1.02 AGREEMENT TERM

- A. **Term of this Agreement shall be one (1) year beginning from expiration of warranty maintenance period.**

1.03 CONTRACTOR SERVICES

- A. Services shall include all labor, transportation, supplies, materials, parts, tools, scaffolding, machinery, hoists, employee safety equipment, equipment, lubricants, supervision, applicable taxes, and all other work and materials expressly required under this Agreement or reasonably inferred whether or not expressly stated herein.
- B. Contractor shall submit a written Maintenance Control Program (MCP) specifically designed for this property defining its planned preventive maintenance procedures to facilitate Agreement intent and "Services" for all equipment included under this Agreement. Routine maintenance procedures shall include any unique or product specific procedures or methods required to inspect or test the equipment. MCP shall identify weekly, bi-weekly, monthly, quarterly, and annual maintenance procedures, including statutory and other required equipment tests. When accepted by Purchaser, Contractor's Maintenance Control Program (MCP) shall become Appendix A to this Agreement.
- C. Coordinate and follow the directives of Purchaser with respect to scheduling Services and any deliveries hereunder or at time or times further specified in other provisions of this Agreement.

- D. Services shall be performed as follows:
1. In conformance with all provisions of this Agreement.
  2. In conformance with all legal statutes and code requirements.
  3. In conformance with all applicable original equipment manufacturer's specifications.
  4. In conformance with the written Maintenance Control Program (MCP).
  5. In conformance with Purchaser's rules, policies, regulations, and requirements for work at the Property, as modified and supplemented during term of this Agreement.
  6. In conformance with Purchaser's requirements for cleanup using containers supplied by Contractor.
  7. To Purchaser's satisfaction.
  8. By qualified, careful, and efficient employees in conformity with best industry practices.
  9. Diligently and in a first class, complete, and workmanlike manner, free of defect or deficiency.
  10. In such manner as to minimize any annoyance, interference, or disruption to occupants of Property and their invitees.
- E. Materials: The term "materials" shall include all tangible property, whether designated as materials, goods, parts, or otherwise. All such materials shall be:
1. New.
  2. Best quality and suitable for their intended uses.
  3. Obtained from or recommended by original manufacturer(s) of equipment for replacement or repair, including parts redesigned by and recommended as replacement parts by the original equipment manufacturer(s). Equivalent parts may be used if approved by Purchaser in writing.
  4. Parts requiring repair shall be rebuilt to "like new" condition.
  5. All lubricants shall be suitable for purpose intended and shall meet or exceed minimum requirements specified by original manufacturer of equipment to which the lubricant is applied.
  6. All materials delivered and stored at the Property which are intended to become part of the completed Services shall pass to Purchaser upon installation.
  7. Provide metal cabinets of suitable size for storage of materials in each machine room. No open storage of materials shall be permitted. Contractor shall stock cabinets with adequate renewal parts and lubricants to maximize beneficial usage of equipment covered by this Agreement.
  8. Lubricants, cleaning fluids, and all combustible liquids shall be stored in a metal cabinet in machine room and shall be disposed of in accordance with Federal or local jurisdiction guidelines. A metal can with lid shall be provided in each machine room for temporary storage of oily rags.
  9. Consideration shall be given in regard to obsolescence of systems, materials, or parts only when both the original equipment manufacturer(s) and after-market elevator industry suppliers no longer manufacture or rebuild required parts or assemblies. Rebuilt parts and/or assemblies are acceptable when documentation is provided indicating parts and/or assembly meets all design requirements of the original part and/or assembly.
- F. No parts or equipment required by Services may be removed from the Property without written approval of Purchaser. This does not include renewal parts stocked on site by Contractor, which shall remain Contractor's sole property until installed on the equipment. Expeditiously replenish parts/materials as utilized.
- G. Initiate, maintain, and supervise all safety precautions and programs in connection with Services and comply with all applicable safety laws. Take all reasonable precautions for

safety of Purchaser, Purchaser's tenants, Purchaser's employees, Contractor's employees, and other persons on or about Property.

- H. Repair, to satisfaction of Purchaser, any damage to the Property and adjacent areas caused by performance of Services.

#### 1.04 CONTRACTOR'S EMPLOYEES

- A. This Agreement is not one of agency, partnership, master-servant, or joint employer, but one with Contractor engaged in the business of providing Services hereunder as an independent contractor. Contractor shall have sole responsibility for means, methods, techniques, procedures, and safety precautions in connection with performance of Services.
- B. Contractor shall be responsible for the supervision and execution of Services by its employees.
- C. Contractor shall employ a sufficient number of trained and capable employees to properly, adequately, safely, and promptly provide Services. All matters pertaining to employment, training, supervision, compensation, promotion, and discharge of Contractor's employees are the responsibility of the Contractor, who is in all respects the employer and Purchaser shall have no liability with respect thereto.
- D. Contractor agrees each of its employees is properly qualified and will use reasonable care in the performance of Services. If Purchaser, in Purchaser's sole opinion, determines for any reason that the qualifications, actions, or conduct of any particular Contractor employee has violated this Agreement by performing unsatisfactory Services, interfering with operation of Property, bothering or annoying any occupants, other contractors or subcontractors then at Property, or that such actions or conduct are otherwise detrimental to Purchaser, then upon receipt of Purchaser's written notice, Contractor shall immediately provide qualified replacement person(s).
- E. Contractor shall not engage any subcontractors or other parties to perform Services unless first approved in writing by Purchaser. Purchaser's acceptance of subcontractors or other parties shall not relieve, release, or affect in any manner any of Contractor's duties, liabilities, or obligations hereunder, and Contractor shall at all times be and remain fully liable hereunder.

#### 1.05 CONTRACTORS HOURS AND MANNER OF WORK

- A. Services, except as otherwise noted under this Agreement, including unlimited emergency callback service, shall be performed during regular hours of regular working days of the Elevator Trade Monday through Friday. Provide overtime callback service at no additional cost under the following conditions:
  - 1. Passenger entrapments.
- B. Response time for callback service:
  - 1. During the hours identified in Item 1.05, A., Contractor shall arrive at Property within sixty (60) minutes from time of notification of equipment problem or failure by Purchaser.
  - 2. During the hours identified in Item 1.05, A., Contractor shall arrive at Property in response to passenger entrapment calls within thirty (30) minutes from time of notification by Purchaser.
  - 3. After hours, Contractor shall respond to callback service within ninety (90) minutes from the time of notification by Purchaser.

4. Purchaser, at its sole discretion, may reduce monthly Agreement amount by \$100/occurrence for Contractor's repeated failure to meet callback response time.
- C. Callback is defined as any request for service or assistance by Purchaser or Purchaser's representative when any unit is not available for beneficial usage due to equipment shutdown or malfunction.
- D. If a unit is shut down due to equipment failure for more than seventy-two (72) continuous hours, maintenance billing for that unit shall be suspended until unit is restored to beneficial usage, excluding scheduled equipment repairs.
- E. Removal of units from beneficial usage to facilitate Services shall be coordinated with and approved by the Purchaser and identified in the MCP, unless removal is necessitated for emergency repair or adjustment. Purchaser agrees to permit Contractor to remove units from service for a reasonable time during hours identified in Item 1.05, A., to perform Services.

#### 1.06 CONTRACTOR'S EXECUTION OF SERVICES

- A. Regularly and systematically examine, clean, lubricate, adjust, and as conditions warrant, repair or replace all vertical transportation equipment covered under this Agreement. Consistently maintain machine room(s), hoistway(s), pit(s), car top(s), and equipment in or on these areas in a clean condition.
- B. Check and adjust operational system at planned intervals in accordance with the MCP to ensure all control circuits and time settings are properly adjusted to minimize system response time to registered car and hall calls and maximize car operational performance.
- C. Lubricate equipment at intervals recommended by original equipment manufacturer or in accordance with the MCP as dictated by equipment use or adverse environmental conditions.
- D. Paint equipment at intervals to maintain a consistent professional appearance, prevent rusting, and preserve the equipment. Floors in machine room and pit shall be painted "deck gray." All paint shall be suitable for the purpose intended, of high quality, and shall not emit noxious odors while curing. Schedule all painting procedures with Purchaser.
- E. Provide replacement lamps to maintain adequate lighting in elevator machine room and pit.
- F. Repair damage to car and hoistway door finish when caused by improper adjustment or maintenance of associated door equipment.
- G. When, as a result of examination or testing of the equipment, Contractor identifies corrective action is required, Contractor shall proceed expeditiously to make required repairs, replacements, and adjustments. If Contractor believes such work is not Contractor's responsibility, a written report signed by Contractor shall be delivered to Purchaser for further action with exception of a safety or potential safety situation, in which case, Contractor shall expeditiously correct the problem.
- H. Services shall be all inclusive with following exclusions only:
  1. Installation of new attachments or performance of newly mandated tests recommended or directed by inspecting entities, insurance companies, and federal, state, or municipal governmental authorities subsequent to the date of this Agreement. In the event of new or retroactive requirements, required by such

- authorities, Contractor shall provide written notice and proposal to Purchaser within ten (10) working days of effective date.
2. Callbacks, repairs, modifications, adjustments, or replacements required due to negligence, vandalism, accident, or misuse of the equipment by anyone other than the Contractor, its employees, subcontractors, servants or agents, or other causes beyond the Contractor's control except ordinary wear.
  3. Repair or replacement of Property items, such as hoistway or machine room walls, floors, car interior finishes, car finish floor material, hoistway entrance frames, car and hoistway door panels, car and hoistway door sills, signal fixture faceplates, and fire alarm initiating devices. Exception: see Item 1.06, F.
  4. Mainline and auxiliary disconnecting means, fuses, and electrical feeders to equipment control panel(s) in machine rooms.
  5. Lamps for normal car illumination.
  6. Failure or fluctuations of property electric power, air conditioning, or humidity control.
  7. Ingress by water or other material into machine room, hoistway, car enclosure, or pit.
  8. Purchaser loading unit in excess of its rated car capacity or load classification.
  9. Shrinkage, settlement, or movement of building.
  10. Underground hydraulic piping and cylinders.
  11. Above exclusions shall apply except to the extent that they arise out of or are caused by the negligence, breach of contract, or breach of statutory duty of the Contractor, his employees, agents, subcontractors, or others for whom he is responsible.

#### 1.07 CONTRACTOR COMPLIANCE WITH LAWS

- A. Contractor agrees to comply with all existing laws, codes, rules, and regulations set forth by appropriate authorities having jurisdiction in location where Services are performed. In the event of differing testing requirements between Agreement requirements and local codes or ordinances, the more stringent requirement shall prevail.
- B. Schedule, coordinate, and complete statutory and other equipment tests including, but not limited to:
  1. Annual pressure relief tests.
  2. Annual battery pack car lowering devices or car rescue devices.
- C. Provide Purchaser with a minimum of five (5) working days prior notification of tests so a Representative of the Purchaser may witness all tests.
- D. Contractor's failure to execute statutory tests mandated by either national codes or local jurisdictions or regulations prior to the TDLR date of inspection shall subject Contractor to any TDLR assessed fine per calendar day beginning on the day after the required date and continuing until Purchaser receives written notification from Contractor of completion of required test. Statutory tests include, but are not limited to, Items 1.07, B., 1-2. Contractor shall attempt to schedule said tests in the presence of local enforcing authority and/or persons designated by Purchaser. Scheduling difficulties shall not exempt Contractor from performing tests in compliance with applicable code or regulatory requirements with the exception of scenarios outside the control of the Contractor.

#### 1.08 SPECIAL CONDITIONS

- A. Upon arrival and departure from property, all Contractor employees shall report to designated property personnel (location) and manually sign a log book indicating name of person, time of arrival, purpose of visit, i.e. callback, preventive maintenance, scheduled repair, Supervisor's inspection, etc., a brief description of work accomplished, including car and/or group designation, and time of departure. Manual log provided by Purchaser.

- B. Conspicuously post written Maintenance Control Program (MCP) and work log in each machine room or instructions for locating the MCP in or on the car controller(s). Maintain preventive maintenance history and testing logs in accordance with the MCP either in the machine room, building management office, or electronically within unit computer control system. Data shall be accessible by Purchaser via manual log or web access and hard copy printout at all times. Log or electronic printout shall include all entries for routine preventive maintenance, repairs, tests, callbacks, and Supervisor's inspection. Entries shall include date work is completed, Mechanic's or Supervisor's name, brief description of work completed, including unit number and number of units serviced, repaired or inspected, and the approximate time required for work excluding travel time to and from property. Purchaser shall be allowed to inspect and copy log or electronic printout and maintenance history and schedule at any time.
- C. Maintain Purchaser's complete set of straight line wiring diagrams in good condition. Drawings shall be consistently updated and properly noted with "as built" conditions with any changes or modifications to circuits resulting from control modifications, parts replacement, or equipment upgrades made by Contractor during Agreement term. Purchaser shall be allowed to reproduce these "as built" drawings and retain sole possession of these drawings in event Agreement is cancelled. If Agreement is cancelled, Purchaser will withhold final payment due Contractor until all as built/as modified set(s) of wiring diagrams are delivered to Purchaser.
- D. Equipment manufacturer's electronic diagnostic devices required to facilitate services, including fixed and hand held devices, shall be maintained and upgraded by Contractor during the term of this Agreement.
- E. Local or National inspection fees in regard to operation of equipment covered by this Agreement shall be paid by the Purchaser. Fees for re-inspection due to Contractor's failure to expeditiously eliminate deficiencies covered by Services shall be paid by Contractor.
- F. Purchaser may provide information to enable Contractor to render Services hereunder, or Contractor may learn information about Property or develop such information from Purchaser. Contractor agrees:
  - 1. To treat and to obligate Contractor's employees, subcontractors, and suppliers to treat as confidential all such information whether or not identified by Purchaser as confidential.
  - 2. Not to disclose any such information or make available any reports, recommendations, and/or conclusions which Contractor may make on behalf of Purchaser to any person, firm, or corporation or use the same in any manner, whatsoever, without first obtaining Purchaser's written approval, except to the extent necessary in connection with performing Services or when required by law.
  - 3. Contractor shall not, in the course of performance of this Agreement or thereafter, use or permit the use of Purchaser's name or the name of any affiliate of Purchaser, or the name, address, or any picture or likeness of or reference to the Property in any advertising, promotional, or other materials prepared by or on behalf of Contractor without the prior written approval of Purchaser.

#### 1.09 EQUIPMENT PERFORMANCE REQUIREMENTS

- A. Equipment listing, type, and individual car performance requirements are covered under Appendix B of this Agreement. Equipment performance requirements indicated are the minimum standard and are not the sole criteria for judging Contractor's performance.

Consistent failure to meet performance requirements shall be grounds for cancellation of this Agreement.

- B. Contractor shall maintain a quiet and comfortable car ride with smooth acceleration, deceleration, and accurate stop. Door operation shall be smooth and quiet.

**1.10 PURCHASER'S RIGHT TO AUDIT SERVICES**

- A. Purchaser reserves the right to make, or cause to be made, such audits and tests whenever necessary to ascertain that Services are being fulfilled. Deficiencies noted shall be submitted, in writing, to the Contractor. Contractor shall expeditiously correct deficiencies within thirty (30) working days at its expense.
- B. A qualified vertical transportation consultant acceptable to both parties may be retained by Purchaser to perform audit of Services and mediate disputes.

**1.11 AGREEMENT AMOUNT AND ANNUAL LABOR/MATERIAL ADJUSTMENT**

- A. During term of this Agreement, Purchaser shall pay Contractor on or before last day of each and every month the sum of \$....., including all applicable taxes, for faithful performance of Services completed for prior month subject to the following:
  - 1. Agreement amount shall be subject to review and adjustment beginning with expiration of warranty maintenance period on <>date..... and at the end of each 12 month period thereafter. 80% of Agreement price shall be adjusted to reflect increase or decrease in labor cost based on the straight time rate of Elevator Mechanics in area wherein equipment covered by this Agreement is located. The remaining 20% shall be adjusted to reflect increase or decrease in material cost based on Producer Price Index for Metals and Metal Products as published by United States Department of Commerce, Bureau of Labor Statistics. Total price escalations shall be limited to a maximum of 5% in any one (1) year period. Contractor shall provide thirty (30) day advance notification to Purchaser of pending price adjustment for both labor and material. Initial Agreement base rates are as follows:

Mechanic Labor Rate Including Fringe Benefits Applicable: \$.....  
U. S. Metal Products Index: .....

- 2. The words "fringe benefits" mean employee benefits granted in addition to direct hourly labor rate, and include but are not limited to accruals for pensions, vacations, paid holidays, group life, and group health insurance. Fringe benefits shall not include any direct or indirect costs based on labor.
- 3. If straight time work is required, outside scope of Services, hourly rates below apply. If overtime work is required, within the scope of Services, Purchaser will pay only difference between straight time and overtime labor at hourly rates indicated below. If overtime work is required outside scope of Services, straight time rate plus applicable overtime premium will be basis for hourly charges. Contractor may adjust rates in accordance with Item A. above, labor portion only.



Billing Rates	Mechanic	Helper	Crew
Straight Time	\$.....	\$.....	\$.....
Overtime Premium (1.5 Time)	\$.....	\$.....	\$.....
Overtime Premium (1.7 Time)	\$.....	\$.....	\$.....
Overtime Premium (Double Time)	\$.....	\$.....	\$.....

4. Payment for Services shall not be deemed acceptance of defective, deficient, or non-conforming Services.

1.12 INSURANCE

- A. Prior to commencing work, Contractor shall secure insurance as required by Purchaser.

1.13 INDEMNIFICATION

- A. The Contractor acknowledges that it has reviewed site and equipment conditions covered by this Agreement prior to the date of commencement of this Agreement. The Contractor shall indemnify the Purchaser against any claims during the Term of this Agreement for adjustment, repair, or replacement of all equipment for which the Contractor is responsible under this Agreement and as required by the Purchaser's terms and conditions.

1.14 AGREEMENT CANCELLATION

- A. Purchaser shall have the right to cancel this Agreement at the end of its initial term or at the end of any subsequent term.
- B. If Contractor violates any provision or fails to properly provide Services required by this Agreement, Purchaser shall advise Contractor of deficiencies and shall allow Contractor a reasonable period, thirty (30) working days unless otherwise agreed, to correct deficiencies at Contractor's expense and to Purchaser's sole satisfaction. If Contractor fails to comply in allotted time, Purchaser shall have right to cancel Agreement upon thirty (30) calendar days written notice to Contractor, or Purchaser, after an additional ten (10) calendar days written notice to Contractor, may perform or cause to be performed all or any part of Services and Contractor agrees that it will reimburse Purchaser for any expense incurred. Purchaser shall deduct said expense from any sum owing Contractor. The waiver by Purchaser of a breach of any provision of this Agreement by Contractor shall not be construed as a waiver of any subsequent breach by Contractor.
- C. If Property is sold or a change of management occurs, this Agreement shall remain in force unless cancelled by Owner.
- D. Purchaser may choose to modernize all the vertical transportation unit during term of this Agreement. Modernization is defined as replacement of elevator motion and supervisory control systems. If Contractor is considered in compliance with terms of this Agreement, Contractor shall be one of the Elevator Contractors requested to submit a modernization proposal. If Contractor is not the selected Modernization Contractor, this Agreement shall, upon written notice by Purchaser to Contractor, be immediately cancelled.

- E. If Agreement is cancelled, Contractor agrees to take action reasonably necessary to cause an orderly cessation and transition of Services to Purchaser or another Contractor designated by Purchaser without detriment to rights of Purchaser or to continued operation of Property including, but not limited to, refraining from any interference or disruption of occupants or other contractors. Without limiting generality of foregoing, Contractor shall immediately deliver to Purchaser all reports, records, as-built wiring diagrams, portable electronic diagnostic devices, access codes, and other materials and documentation related to and required to facilitate Services required by this Agreement. Purchaser shall withhold payments due Contractor until receipt of required information and devices.

#### 1.15 NOTICES

- A. All notices which are required to be given hereunder shall be in writing and shall be sent to the address of the parties to Agreement or such other address as the parties may designate by notice given in accordance with the provisions of this clause. Any such notice may be delivered personally or by first-class pre-paid letter, email or facsimile transmission, and shall be deemed to have been served by hand when delivered, if by first class mail forty-eight (48) hours after posting, and if by email or facsimile transmission when dispatched, provided that a confirming copy is sent by first class pre-paid post to the other party at the address specified within twenty-four (24) hours after transmission.
- B. Each party will notify the other when they become aware of the death or injury to any person or damage to property arising from the use of the Equipment

#### 1.16 PURCHASER'S RESPONSIBILITIES

- A. Provide clear, safe, and convenient access to Property and equipment rooms.
- B. Maintain car lighting, telephone lines to controller terminal(s), equipment room electrical switch gear, and electrical feeders to unit controllers.
- C. Maintain equipment room heating and air conditioning systems.
- D. Maintain fire alarm initiating devices in elevator lobbies, machine rooms, hoistways, etc.
- E. Prevent storage of Property or other Contractors' equipment or supplies in unit equipment rooms and obstruction of equipment room access corridors and doors.
- F. Maintain standby power generator systems and related switch gear and feeders.
- G. Maintain equipment rooms, hoistways, wellways, and pits in code compliant dry condition.
- H. Coordinate with Contractor in regard to equipment retrofits such as security systems, new car interior finishes, car interior TV systems, etc.
- I. During Property construction and/or modernization, make provisions to limit infiltration of dust and debris into equipment and equipment spaces.

#### 1.17 PREVIOUS REPRESENTATIONS

- A. All previous communications or agreements, written or verbal, are hereby abrogated and this writing constitutes the whole Agreement between the parties hereto.

1.18 EXTENT OF LAW

A. This Agreement shall be interpreted in accordance with the laws of the State of Texas .

1.19 TIME

A. Time shall be of the essence in the performance of the terms of this Agreement.

1.20 EXECUTION

A. IN WITNESS WHEREOF, the parties have executed this Agreement the date noted below.

\_\_\_\_\_  
CONTRACTOR

\_\_\_\_\_  
PURCHASER

BY: \_\_\_\_\_

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

TITLE: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

END OF SECTION

APPENDIX A  
CONTRACTOR'S  
MAINTENANCE CONTROL PROGRAM

<>Insert MCP Here

APPENDIX B  
EQUIPMENT TYPE AND  
PERFORMANCE REQUIREMENTS

A. Elevator Performance Requirements:

Floor To Floor Time (Seconds)	Door Open Time (Seconds)	Door Close Time (Seconds)	Stopping Accuracy (Inch)
15.0 – 18.0	2.0	3.6	±1/4"

1. Floor-to-floor time is measured from start of door(s) close until car is stopped at next typical successive floor, in either direction of travel, and door(s) is 3/4 open. Typical floor height 11' 6".
2. Door open time is measured from start of door(s) open until door(s) is fully open.
3. Door close time is measured from start of door(s) close until door(s) is fully closed.
4. Door closing force shall be no more than 30 lbf. Door closing force is measured with door(s) at rest and between 1/3 and 2/3 closed.
5. Car stopping accuracy shall be measured under all load conditions.
6. Rated car speed, regardless of load, shall not vary more than ± 10%.