

**PART 1 GENERAL**

- 1.01 SECTION INCLUDES  
Residential elevator with 1:2 roped hydraulic lift system.
- 1.02 WORK INCLUDED  
A. Furnish all labor and materials, equipment and incidentals necessary to assemble and erect a residential elevator, complete with a remote power unit and all hoses, rails, brackets, connections and controls essential for proper operation.
- 1.03 WORK BY OTHERS  
A. Construct a hoistway of the size required by the manufacturer, complete with all demolition, additional framing, headers, and framing components necessary to prepare the building to receive the elevator.
  - 1. Hoistway size: Dependant upon car size.
  - 2. The hoistway shall be vertical to within 1/2" throughout the entire height.
  - 3. Provide and fasten vertical structural members in hoistway, per manufacture's recommendation.
  - 4. Pit requirements: Provide 10" deep pit install reinforcement and concrete as necessary. Floor must sustain load specified in job drawings.
- B. Construct a machine room:
  - 1. Provide elevator electrical circuit: 208/230 volt AC/ 1 phase/ 60hz (30 amp)
  - 2. Provide elevator lighting electrical circuit: 115 volt
- C. Provide system to maintain hoistway and machine room temperature between 50-90 degrees Fahrenheit.
- 1.04 REFERENCES:  
A. General: The applicable provisions of the following standards shall apply as if written here in their entirety.  
B. American Society of Mechanical Engineers / American National Standards Institute (ASME/ANSI) publications: ASME/ANSI A17.1 "Safety Codes for Elevators and Escalators", Section 5.3.  
C. National Fire Protection Association (NFPA) publications: NFPA 70 National Electrical Code
- 1.05 SYSTEM DESCRIPTION:  
A. Travel: \_\_\_\_\_  
B. Stops: \_\_\_\_\_  
C. Load Capacity: 950 lb.  
D. Speed: 40 fpm
- 1.06 SUBMITTALS:  
A. Product Data: Submit product data, including manufacturer's specifications.  
B. Shop Drawings:  
C. Shop drawings showing all field construction, including dimensions.
- 1.07 QUALITY ASSURANCE  
A. Qualifications:  
Installer Qualifications: A company experienced in the assembly and erection of lifts and residential elevators of the type specified.  
Manufacturer Qualifications: A company specializing in the manufacture of residential elevators.  
B. Regulatory Requirements: The complete manufacture, fabrication and erecting of the elevator shall be in compliance with all Federal, State and local codes and ordinances. The installer shall verify requirements of the local authority having jurisdiction and shall comply with all local codes and ordinances.
- 1.08 DELIVERY, HANDLING & STORAGE  
A. All components shall be shipped to the site in substantial crates to protect from damage during shipping and handling. Upon arrival, inspect components and keep under cover until installed.
- 1.09 WARRANTY  
A. Unit shall have a two (2) year limited parts warranty.
- 1.10 MAINTENANCE:  
A. Maintenance of the private residential elevator shall consist of regular cleaning and inspection at intervals not longer than every 12 months.  
B. Inspection: ASME A17.1 requires all private residential elevators to be inspected every 12 months.

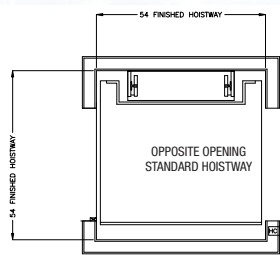
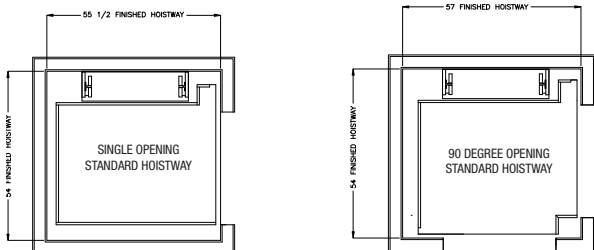
**PART 2 PRODUCTS**

- 2.01 MANUFACTURER  
A. Accredited Home Elevator integrity model
- A. Substitutions: No substitution shall be considered unless written request for approval has been submitted and received by the architect at least ten (10) days prior to the bid date.
- 2.02 COMPONENTS  
A. Car:
  - 1. Size: Dependant upon shaft size. Car dim not to exceed 15 FTSQ
  - 2. Enclosure: Securely fastened to the car frame and platform. The car shall be constructed of minimum 3/4" wood walls. Floorboard shall be constructed of 3/4" AC plywood.
  - 3. Gate: Accordion type equipped with a positively opened mechanical switch to indicate that the door is closed. Handrail: One located on the car wall.
  - 4. Telephone: installed in recessed phone box
  - 5. Control panel: Provide one momentary pressure illuminated button for each landing, emergency stop and alarm button all mounted in a control panel having a stainless steel or brass cover.
  - 6. Interior lighting: Provide overhead light fixtures that automatically turn on when the car is in operation and turn off by means of a timer circuit.
- B. Hoistway door:
  - 1. Size: 3'0" W x 6'8"H swing Type (by Others)
  - 2. The general contractor or owner is to furnish and install hoistway doors, frames, hinges and passage sets at each landing. The type and installation of the doors and frames must comply with ASME A17.1, all local codes and manufacturer's layout drawings.
  - 3. Locking Device: Door shall have a locking device, interlocked with the car operation, to in turn electrical power when the door is not securely closed and a car is not at the landing. The door shall be locked when car is not in the landing zone.
- C. Hydraulic power unit:
  - 1. The pump, motor and valve shall be pre-wired, ready for connection to the controller in the field.
  - 2. Two speed operation.
  - 3. Adjustable pressure relief valves.
  - 4. Manually operated down valve and hand pump for emergency operation.
  - 5. Pressure gauges and pressure gauge isolation valves.
  - 6. Manual valve isolation between pump unit and jack.
  - 7. Negative pressure switch provided.
- D. Cylinder:
  - 1. Construction: Steel pipe with cylinder head having an internal guide ring and self-adjusting packing.
  - 2. Safety valve: Cylinder shall be equipped with a pipe rupture safety valve to prevent uncontrolled car descent.
- E. Plunger:
  - 1. Construction: Shall be a machined steel shaft equipped with a stop, electrically welded to bottom end, to prevent plunger from leaving shaft cylinder.
- F. Suspension system: 1:2 system using (2) 3/8" - 7x19 aircraft cables integrated with rams header sheave mounted to the plunger.
- G. Guide rail: Shall consist of two 8 lb. tee rails assembled and fastened. Provide brackets to hold rail assembly to walls. Rail shall be furnished with steel splice plates and hardware.
- H. Car frame: Shall be equipped with non-metallic faced roller guide wheels.
- I. Leveling device: Provide Position Sensor to maintain car within 1/4" of the landing.
- J. Control systems: Non-Selective collective microprocessor
- K. Motor: 2.5 HP, 208/230 VAC, single phase.
- L. Wiring:
  - 1. Provide flexible traveling cable for electrical lights and controls in car.
  - 2. All other electrical wiring shall be insulated, flame retardant and moisture proof copper wiring, installed in flexible metal conduit.
- M. Safety Devices:
  - 1. Slack cable protection: Provide a linkage device that stops and sustains the car in the event of breakage or slackening of cables.
  - 2. Terminal stopping device: Shall be provided at the top and bottom of the car travel.
  - 3. Provide a platform toe guard at the car entrance.
- N. Battery powered emergency operation system:
  - 1. Powers a light in the car.
  - 2. Powers an emergency alarm system.
  - 3. Powers a system to allow car to descend to floor selected by passenger.
  - 4. The batteries shall be a re-chargeable type complete with an automatic re-charging system.
- O. "Self Diagnostic System" utilizing diagnostic codes displayed in hall and car acknowledgement lights to provide information in the event the elevator will not operate.

**PART 3 EXECUTION**

- 3.01 INSTALLATION  
A. Inspect the hoistway and determine if the hoistway meets the manufacturer's requirements for clearances and plumb.  
B. All components shall be assembled and erected in strict compliance with manufacturer's printed instructions and applicable codes.  
C. All wiring shall be in accordance with the wiring diagram furnished by the manufacturer and NEC.
- 3.02 FIELD QUALITY CONTROL  
A. Static/Running Load Test: All load rating and safety factors shall meet or exceed those specified in ASME A17.1
- 3.03 ADJUSTING  
A. Test the elevator to assure proper operation under all conditions of use. Make proper adjustments and review operating components for proper operation.

**For more details, call Accredited Home Elevator 800-488-5905.**



**ACCREDITED HOME ELEVATOR COMPANY**  
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