



*Evolution*  
*LU/LA Elevator*  
*(Limited Use/Limited Application Elevator)*

# The Evolution - LU/LA Low Rise Commercial Elevator



Opposite Opening Car

The Limited Use/Limited Application (LU/LA) elevator was developed to provide an additional type of vertical transportation for today's accessibility marketplace. It bridges the gap between the commercial elevator and the vertical platform lift. The LU/LA has the look and feel of a large commercial elevator but on a smaller scale.

National Wheel-O-Vator's LU/LA, the Evolution, has been designed to meet the requirements of ASME A17.1 and ICC/ANSI A117.1. It allows the architect or specifier to take the guesswork out of integrating this type of elevator into their application. Typical applications include schools, libraries, low rise commercial buildings, churches and multi-family housing.



90 Degree Opening Car

National Wheel-O-Vator provides the functionality of a commercial elevator with the elegance and warmth of a residential elevator. Our optional handcrafted wood interior walls are manufactured in a variety of hardwoods, such as Cherry, Maple, Hickory, Oak, Birch, Alder and others.



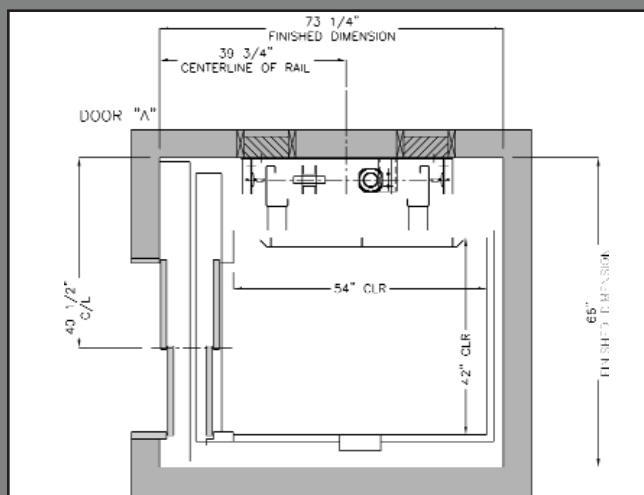
Single Opening - Std.

A 90 degree car is an available option when you purchase an Evolution. The car itself is offered with a 51" x 51" clear car with 36" sliding doors. Placing an Evolution in your project has now become *easier than ever*.

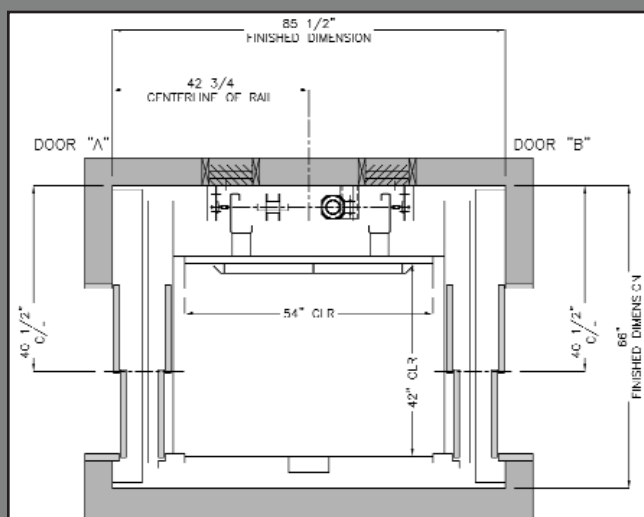
Our goal at National Wheel-O-Vator is to provide solutions that address architectural barrier issues, thus making access available for all persons. Please call us at 1-800-968-5438 or visit [www.wheelovator.com](http://www.wheelovator.com).



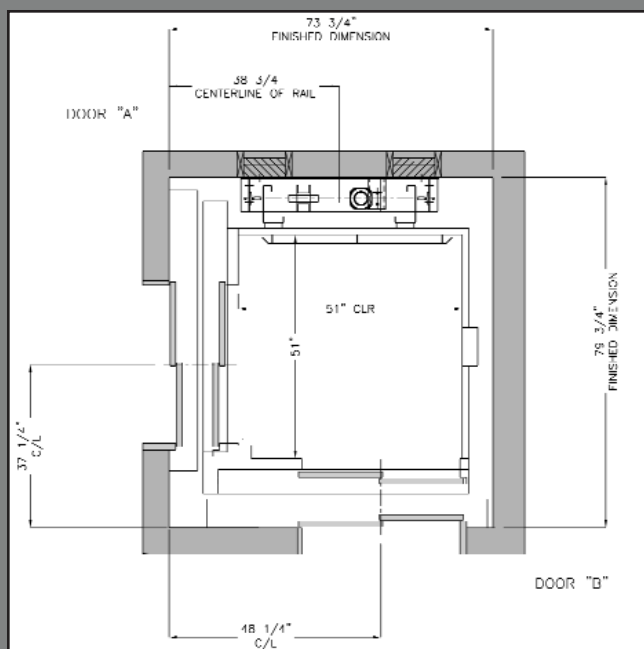
\*Note: Features and options subject to change.



Single Opening



Opposite Opening



90 Degree Opening

### Drive System

- 1:2 Roped hydraulic drive system

### Configurations

- Single opening - 42" x 54" car size (standard)
- Opposite opening - 42" x 54" car size
- 90 degree opening - 51" x 51" car size (only)

### Doors

- 36" wide doors
- Automatic, horizontally sliding, two-speed hoistway and car doors

### Features

- 1400 lb. capacity
- Travel up to 25'
- Pit depth
  - 38" - standard
  - less than 38" to 14" (with alternative means)
  - (Pits over 35" require extra space for pit ladder)
- Overhead requirement
  - 11' (refuge space) - standard
  - 9'6" (alternative means)
- Rated speed: 30 fpm
- Controller: selective collective microprocessor
- Brushed Stainless Steel Car Operating Panel and Hall Calls
- Safety descent - bottom terminal floor
- Emergency lighting and alarm button
- Car and hall call acknowledgement lights
- Speed governor and/or overspeed valve
- Handrail
- Tactile/Braille characters; audible and visual signals
- Homing timer
- Full height photo electric screen
- 2 year limited parts warranty
- Buffer springs

### Options

- ADA phone
- Fire service phase 1 and 2
- 42" x 60" or 48" x 54" car size
- Travel up to 35' with variance
- 32" wide doors (62" wide hoistway)
- Pit ladder (additional hoistway space required)
- Custom car sizes
- Wood and stainless steel car interiors
- Suspended ceiling with translucent panels

# Evolution

Limited Use/Limited Application  
Low Rise Elevator

Standard Color for Car & Car Doors

Autumn White

\*Note: Color may vary due to printing process.

Custom colors available upon request.

Hoistway door and frame are prime coated.

*Along with our Evolution LU/LA elevator, we also carry vertical platform lifts, inclined platform lifts (the Pegasus), and residential elevators (the Destiny). National Wheel-O-Vator's products will add value and utility to your home or business. We are proud to provide our partners unequalled value by offering products of the highest quality, complimented by unrivaled customer service. This commitment has allowed National Wheel-O-Vator to become the premier manufacturer in the industry today.*

## The National Wheel-O-Vator Co., Inc.

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## PART 1 - GENERAL

- 1.01 **Section Includes:** Limited Use/Limited Application (LU/LA) commercial elevator with 1:2 roped hydraulic lift system.
- 1.02 **Work Included:** Furnish all labor and materials, equipment and incidentals necessary to assemble and erect the commercial elevator.
- 1.03 **Work by Others:**
- A. Construct a hoistway of the size required by the manufacturer.
  - B. Construct a machine room.
  - C. Provide system to maintain hoistway and machine room temperature between 50-90 degrees Fahrenheit.
  - D. Provide electrical power per the manufacturer and the approved drawings.
- 1.04 **References:**
- A. ASME/ANSI A17.1 "Safety Codes for Elevators and Escalators", Section 5.2
  - B. ICC/ANSI A117.1
  - C. NFPA 70 National Electrical Code
  - D. NFPA 101 Life Safety Code
- 1.05 **System Description:**
- A. Travel: \_\_\_\_\_ (25' max)
  - B. Stops: \_\_\_\_\_ (up to 6)
  - C. Load Capacity: 1400 lb.
  - D. Speed: 30 fpm
- 1.06 **Submittals:** Submit product data, including manufacturer's specifications and submittal drawings.
- 1.07 **Quality Assurance:**
- A. Installer Qualifications: A company experienced in the assembly and erection of elevators of the type specified; trained and certified by the manufacturer.
  - B. Manufacturer Qualifications: A company specializing in the manufacture of lifts for the disabled and LU/LA elevators.
- 1.08 **Warranty:** Unit shall have a two (2) year limited parts warranty.
- 1.09 **Maintenance:**
- A. Maintenance of the LU/LA elevator shall consist of regular cleaning and inspection at intervals not longer than every 6 months.
  - B. Inspection: ASME A17.1 requires all LU/LA elevators to be inspected every 6 months.

## PART 2 - PRODUCTS

- 2.01 **Manufacturer:** The National Wheel-O-Vator Co., Inc.
- 2.02 **Components:**
- A. Car:
    - 1. Size 42"W x 54" D clear (others available).
    - 2. Enclosure: Securely fastened to the car frame and platform. Shall be constructed of formed sheet steel panels with powder coated finish. Floorboard shall be constructed of 1 1/2" AC plywood with fire retardant coating.
    - 3. Car Entrances: Automatically operated, horizontally sliding steel doors with a full height safety screen.
    - 4. Car Doors: Shall be 3'0" x 6'8" with powder coated finish.
    - 5. Handrail: Stainless steel handrail.
    - 6. Telephone: Recessed phone box.
    - 7. Control Panel: Provide one momentary pressure illuminated button for each landing, keyed in car stop switch and alarm button.
    - 8. Visual feedback indicating call for car and car's next travel direction.
    - 9. Standard Color: Autumn White (optional colors available).
    - 10. Audible Feedback: Provide audible signal indicating car arrival and direction of travel.
    - 11. Tactile Feedback: Provide tactile/Braille characters on car, hall call push buttons and hoistway door jambs.
    - 12. Interior Lighting: Provide with automatic operation.
  - B. Hoistway Entrances:
    - 1. Provide each entrance with an automatically operating, horizontal sliding door in frame with primed finish.
    - 2. Fire Rating: Hoistway doors and frame shall be UL certified for 1 1/2 hour fire rating.
    - 3. Doors shall be provided with an interlock.
  - C. Drive System: Roped hydraulic (1:2) with a two speed valve and a submerged motor.
  - D. Cable System: 1:2 system using (2) 3/8" - 7x19 aircraft cable.
  - E. Guide Rail: Shall consist of two 8 lb tee rails.
  - F. Car Frame: Shall be equipped with non-metallic faced roller guide wheels.
  - G. Leveling device: Provide hall effect switch system to maintain car within 1/4" of the landing.
  - H. Control Systems: Selective collective microprocessor, UL listed.
  - I. Motor (submerged): 5.0 HP, 1750-RPM 208/230 VAC, single phase, (three phase available).
  - J. Wiring:
    - 1. Provide flexible traveling cable for electrical lights and controls in car.
    - 2. All other electrical wiring shall be insulated, flame retardant, moisture proof and installed in conduit.
  - K. Safety Devices:
    - 1. Slack cable protection with stainless steel linkage.
    - 2. Terminal stopping device.
    - 3. Over speed protection.
    - 4. Platform toe guard at the car entrance.
  - L. Two battery emergency operation system, which powers a car light, emergency alarm system and allows car to descend to bottom terminal floor.

## PART 3 - EXECUTION

- 3.01 **Installation:**
- A. All components shall be assembled erected in strict compliance with manufacturer's printed instructions.
  - B. All wiring shall be in accordance with the wiring diagram furnished by the manufacturer.
- 3.02 **Field Quality Control:**
- A. Static/Running Load Test: Load rating and safety factors shall meet or exceed those specified in ASME A17.1.

*Your Authorized Dealer Is:*