# Zenith

**Residential Elevator**

## Owner's Manual

savaria®

## IMPORTANT

Ensure that only an authorized Savaria Dealer installs and services the Zenith Residential Elevator. Under no circumstances is anyone other than a dealer with Savaria training and authorization to install, adjust, service or modify any mechanical or electrical device on this equipment. Failure to follow this warning can result in safety system compromises or defeat; this can result in serious injury or death. Savaria accepts no liability for property damage, warranty claims or personal injury, including death, in this circumstance.

Passenger safety is the result of countless details in the equipment's design, manufacture, and installation. After installation, reliable operation and continual safe operation requires regular service and inspection at least twice per year, or more frequently where usage, environment, or local jurisdiction requires. As the Owner, you are responsible for ensuring that regular service and inspections occur in a timely manner.

Refer to this manual for specifications, operating instructions and maintenance of the Zenith Residential Elevator.

Upon completion of installation, the dealer must provide you with the following information and ensure it is recorded in this manual. In addition, either the dealer or you must keep any service and/or maintenance records in the Maintenance Record section of this manual.

## WARRANTY

Ensure your Savaria Dealer provides you with a copy of the manufacturer's limited parts warranty and documentation relating to any Dealer labour warranty.

## FOR OWNER'S RECORDS

Customer Name: _____

Installing Dealer: _____

Dealer's Telephone Number: _____

Date Installed: _____

Serial/Job Number: _____

# TABLE OF CONTENTS

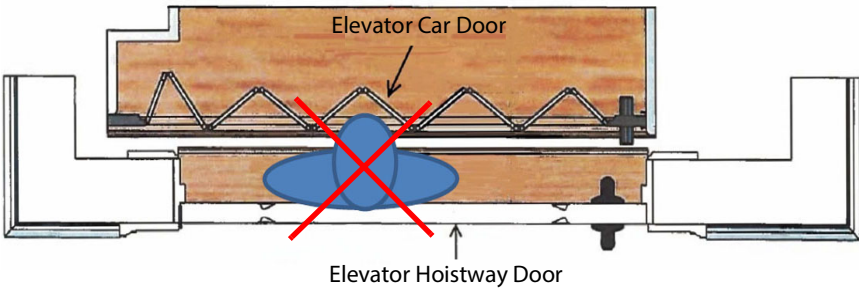
## TO ENSURE SAFE OPERATION

To ensure safe operation of this equipment, pay careful attention to the important notes below.

- Read this manual carefully before using the equipment.
- To prevent accidents, adhere strictly to the instructions and keep clear of moving parts at all times.

**IMPORTANT**

- **Be aware of hazardous space between the hall door and car, especially for small children.**
- **Space should be no larger than 3" and 3/4" for units ordered after September 2021.**
- **No modifications shall be made to the hoistway doors after the elevator has been turned over.**
- **If the door has been fit with a door liner, it shall not be removed.**
- **Please contact service company for assistance.**




- This unit is intended for use by a mature person who understands its proper operation as set out in this manual.

**⚠ WARNING**

**At no time should children under the age of 16 use the elevator/lift while unsupervised.**

- Test your keys and emergency stop button every month.

- Prior to operation, make sure that:
    - All doors and gates are locked and secure.
    - All areas in and around the lift are clear of any obstructions.
    - All lights are functioning properly.
- Follow instructions on all equipment labels at all times. Replace any damaged labels immediately.
- Ensure that only qualified personnel perform maintenance and service on the unit.
- When replacing parts, be sure that only genuine Savaria parts are used

# 1. GENERAL SPECIFICATIONS

| | |
|---|---|
| Load capacity | 1400 lb (635 kg) if 40 ft/min (standard)<br>1000 lb (454 kg) if 50 ft/min (optional) |
| Rated speed | 40 ft/min (0.20 m/sec) - standard<br>50 ft/min (0.25 m/sec) - optional |
| Power supply | 208 volt, three phase, 30 amps, 60 Hz or 240 volt, single phase, 40 amps, 60 Hz |
| Lighting supply | 110 volts, 60 cycle, 15 amps |
| Drive system | Counterweight traction with slack cable safety device<br>Geared motor, 1:1 sheave<br>Two 3/8" diameter steel cables<br>Rope wedge sockets |
| Operating temperature | -10 degrees C to +40 degrees C (+14 degrees F to +104 degrees F) |
| Cab sizes | • 36" x 48" (914 mm x 1219 mm)<br>• 36" x 54" (914 mm x 1372 mm)<br>• 36" x 60" (914 mm x 1524 mm)<br>• 40" x 54" (1016 mm x 1372 mm) |
| Cab panel finish | Solid melamine or MDF panels (standard), unfinished oak veneer panels (optional), finished recessed veneer panels (optional), solid hardwood raised panels (optional) |
| Maximum travel | 50 feet (12.24 m) - 60 feet (18.29 m) available where code permits |
| Control system | Micro-6 controller |
| Distance between landings | 7" (178 mm) minimum |
| Noise level (typical installation) | 56 dBA (up and down directions)<br>Measured at a height equal to motor, distance of 1m, in front of motor, no hoistway |
| Daily cycle | Normal: 200<br>Maximum starts in 1 hour on standard installation: 45 |
| Levels serviced | Up to 6 stops |
| Pit depth required | 10" (254 mm) minimum |
| Overhead clearance (minimum) | 108" (2743 mm) |
| Control system | Single automatic push button |
| Floor selection | Magnetic selector |
| Hall station and control panel finish | Clear or bronze anodized aluminum (standard), or stainless steel (optional), or brass (optional), or architect white (optional)<br>Rectangular (standard) or oval (optional) hall stations, keyless (standard) or keyed (optional) |

| | |
|---|---|
| Standard features | Double 8 lb/ft T-rail modular system<br>Anti-creep device<br>Oxford white melamine ceiling<br>Automatic cab ON/OFF lighting<br>Car top stop switch<br>Data plates, capacity tags and rope tags<br>Digital floor and directional indicator<br>Stop key switch and alarm buttons<br>Emergency battery back-up for lighting, alarm and emergency lowering<br>Floor specific battery lowering<br>Illuminated cab operating buttons<br>Magnetic floor selection, stopping and re-leveling<br>Slack rope safety switch (manual reset)<br>Car top safety rail (for maintenance)<br>Pit switch (emergency stop)<br>4 standard pot lights<br>Recessed plywood floor<br>Upper and lower terminal limits<br>Overspeed governor<br>Panel-fold doors |
| Options | Custom cab size<br>96" (2438 mm) high cab; 84" (2133 mm) high cab<br>Rated speed - (50 fpm (0.250 mps) available where code permits)<br>Accordion car gate (choice of style)<br>Automatic gate operator<br>Bi-fold doors<br>Automatic slim doors<br>Automatic swing landing door operator<br>Buffer springs (11" pit depth minimum)<br>Interlocks for doors by others and Savaria landing doors (fire rated door or wood door)<br>Keyed on/off control panel and hall stations<br>Optional cab finishes: raised hardwood, unfinished veneer<br>Optional fixture finishes: brass #4 finish or blackened stainless steel (handrail, cab operating panel, hall call stations); hall call stations available in rectangular or oval<br>Telephone cabinet to match trim<br>Digital position indicator (PI) in hall calls<br>Savaria Link remote monitoring |

## 2. DESCRIPTION

### 1 Cab Key Switch (Figure 1-A)

The key switch turns the cab controls ON and OFF. It is provided to limit the use of the elevator to authorized persons only.

**NOTE**

*If the COP switch is turned OFF and there are passengers in the cab with the landing door closed and locked:*

- *For automatic car application such as slim door, bi-fold door or automatic gate, push the ALARM button to open the car door and the slim landing door (if equipped) will open at the same time, or unlock the swing door with the manual unlocking lever protruding from the side of the lock cover.*
- *For manual gate, open the gate manually and unlock the swing door with the manual unlocking lever protruding from the side of the lock cover.*

**Figure 1: Sample COP**


### 2 Cab Operating Panel Buttons (Figure 1-B)

Automatic control panel buttons facilitate the UP/DOWN movement of the cab between landings. Once the selected landing button is pressed, the cab will automatically move to the landing. The cab will stop when the selected landing is reached.

### 3 Alarm Button (Figure 1-C)

This button can be pressed at any time to sound the alarm in case of an emergency.

### 4 Run/Stop Button (Figure 1-D)

This button can be used at any time to stop the cab and activate the alarm buzzer.

### 5 Keypad Phone (Figure 1-E)

For units that have a keypad phone, it is located on the COP.

- To dial a phone number, press the red **ON/OFF** button on the keypad to turn on the phone.
- Dial the phone number.
- Press the blue **VOL** key on the keypad to raise or lower the volume.
- Press the red **ON/OFF** button on the keypad to turn off the phone.

If the unit has a standard phone, it is located in the cab phone box (see below).

**Figure 2: Standard Phone and Phone Box**

### 6 Handrail

A single handrail is mounted on the Cab Operating Panel side of the cab.

### 7 Emergency light

The cab emergency light remains ON in the event of a main power failure. The emergency light uses a battery back-up system.

### 8 Landing Hall Call Station Controls (Figure 3)

Hall Call buttons are installed at all landings to move the cab to the landing from which it is being called. An optional key switch limits the use of the elevator to authorized persons only.

**Figure 3: Hall Call**

### 9 Landing Door and/or Gate Interlock

The Landing Door/Gate lock prevents the movement of the cab unless the door/gate is in the closed and locked position. If the door/gate is not completely closed, the cab will not move.

### 10 Emergency Battery Operation

In the event of a building power failure, the system is provided with a temporary power back-up system to allow the elevator to run down to the next available landing, or to the first floor landing. On resuming normal building power, the back-up system will turn OFF and begin automatic recharging.

## 3. OPTIONS

**Automatic Door Opener**

1. Press the Landing Hall Call button to call the elevator. The entrance door will open automatically once the elevator stops at the landing.
2. Push N Go allows the entrance door to open automatically with a slight push to the door itself. The door timer is inoperative when this feature is activated.

**Automatic Gate Opener**

1. Press the Landing Hall Call button to call the elevator. If the entrance door is equipped with an automatic door opener, it will open automatically once the elevator stops at the landing; otherwise, open the entrance door manually.
2. The gate will open automatically once the entrance door is fully open.

**NOTE**

*If the cab is equipped with a gate, the gate must be closed after exiting the cab. If the gate is left open, all controls will remain inoperable.*

# 4. OPERATION

## Operating from the Landing Controls

1 If equipped with a key switch, insert the key into the key switch on the Hall Call station and turn the key to the ON position.

2 Press the Hall Call button once and release. The elevator will automatically come to your landing.

3 Turn the key (if equipped) to the OFF position and remove the key.

4 If required, turn the door handle and pull the door open.

- Note that if you open the door and don't open the gate (or interrupt the light screen, if equipped), the unit will not take the next call and will beep three times.

5 If the cab has a manual gate, slide the gate open and enter the cab.

6 Once inside the cab, close the gate, insert the key (if equipped) into the key switch on the Cab Operating Panel, and turn the key to the ON position.

**NOTE**

*When using the landing controls, the cab can only be moved (called) to the level from which you are calling. When using the control buttons in the cab, the cab can be moved to any level.*

**⚠ WARNING**

**Wheelchair wheels must be locked at all times when the elevator is moving.**

## Operating from the Cab Operating Panel (COP) Controls

1. If equipped with a key switch, insert the key into the key switch on the Cab Operating Panel and turn the key to the ON position.
2. Press the selected Landing button once and release. The elevator will automatically travel to and stop at the selected landing.
3. Turn the key (if equipped) to the OFF position and remove the key.
4. Unlock the wheelchair wheels (if applicable) and exit the cab.

**NOTE**

*If the cab is equipped with a gate, the gate must be closed after exiting the cab. If the gate is left open, all controls will remain inoperable.*

*The outside landing door must be closed after exiting or entering the cab. If the outside landing door is left open, all controls will remain inoperable.*

## Cab Lights

If the cab door is left open and the cab lights turn off, there are two ways to get the lights back on again:

- Enter the cab, close the door and gate and then press a Landing button.
- Press a Hall Call button before entering the cab.

## 5. EMERGENCY BATTERY LOWERING

In the event of a power failure, the elevator is equipped with a Battery Back-Up system that allows you to lower the elevator from the inside of the cab. This device operates on batteries and is only activated if a main power supply failure occurs. The operation is as follows:

1. Press any Landing button below the floor where the elevator is located.
2. On arrival at the selected floor, the landing door will automatically unlock.
3. If there is an automatic gate, the gate will open.
4. Remove the key, open the manual gate (if equipped) and exit the cab.

## 6. EMERGENCY LIGHT

In the event of a main power failure, the emergency cab light will light automatically.

## 7. EMERGENCY LOWERING CLUTCH SYSTEM

In the event of a power failure, the battery backup UPS lowers the cab to the next landing and opens the doors. If the UPS fails, use the telephone to call for help. The emergency lowering device can then be used from outside the elevator to lower the cab to the closest landing.

**If you have not been trained to use the emergency lowering call for help.**

**1** Instruct the passenger(s) in the elevator to stay well back from the elevator door.

**2** Obtain the special elevator door release key and open the bottom landing door to locate the cabin.

**3** Go to the landing where you think the cabin is and open the landing door Maximum 6 inches to check if the cabin is at that location. If the cabin is close to this location ans is safe to remove the passenger(s), open the landing and cab doors to remove the passenger(s). If not, follow the next steps. After passenger(s) have exited the cab, close the doors and do not use the elevator.

**4** Locate the manual lowering pendant and the manual lowering electrical box.

**5** Use the manual lowering device to lower the cab.

- **a** Unscrew the cover of the manual lowering electrical box.
- **b** Plug the manual lowering pendant into the connector in the box.
- **c** Open the landing door closest to the manual lowering electrical box no more than 6", DO NOT ENTER TO THE HOISTWAY. Ensure you can see the cabin.
- **d** Pull and hold the OSG reset handle, then press COM and DN buttons to lower the cab pull and hold the OSG reset handle. The cabin will move down at a speed of 15.6 in/min. Look at the cabin to ensure it is lowering. DO NOT ENTER TO THE HOISTWAY.
  If the cabin is not lowering, do the following for 10 seconds: Press the COM button and insert a screw driver through the hole on the pendant marked with “Mechanic use only”. Inspect if the cabin moves up.

Try again to lower the cab pressing COM and DN buttons, pull and hold the OSG reset handle. If the cab is not lowering, do not use this system to evacuate the passenger(s). Call for help

**e** If the cabin is moving, stop lowering the cabin (release the buttons) when it reaches the next available landing. Observe the cab at the landing or note the doors zone relay lights in the controller.

**6** Once in the landing zone or you observe the car is close enough to the landing to evacuate, assist the passenger(s) to exit the cab.

**7** After the passenger(s) have exited the cab, make sure the landing door is closed and lock the door behind you.

**8** Unplug the manual lowering pendant.

**9** Return the special elevator door release key to its original storage area.

**10** Do not use the elevator and call your local service provider for inspection.

**NOTE**

*After use of any emergency function (access key or manual lowering device), ensure that all doors/gates are secure and locked. While the emergency function is in use, DO NOT leave the area unattended.*

## 8. OVERSPEED GOVERNOR RESET

In the event of a power failure, the Overspeed Governor (OSG) may trip and will need to be reset. Contact your Authorized Dealer for assistance.

## 9. DIAGNOSTICS

Diagnostic beep codes are provided to help you diagnose a problem. All beep codes that begin with a long beep (on for 2 seconds) are Service codes (contact your authorized Savaria dealer).

If you press a Hall Call button and hear a beep from the car top, but the car doesn't move, refer to the information in the following table.

| **Beep code** | **Action to take** |
|---|---|
| ***Service codes*** | |
| 1 long beep (2 seconds) followed by 1 short beep (1/2 second) | Contact your authorized Savaria dealer for service. There is a problem in one of the following areas: overload trip, run timer trip, main safety chain open, door lock fault, or auto shutdown counter. |
| 1 long beep (2 seconds) followed by 2 short beeps (1/2 second) | Contact your authorized Savaria dealer for service. There is a problem with re-level shutdown or the low pressure switch is activated. |
| 1 long beep (2 seconds) followed by 3 short beeps (1/2 second) | Contact your authorized Savaria dealer for service. There is a selector fault, selector encoding error, or position error. |
| ***User codes*** | |
| 1 short beep (1/2 second) | Make sure the "Stop" switch in the car in the Run position.<br>Check that the car gate is closed. |
| 2 short beeps (1/2 second) | Check that the landing door is closed. |
| 3 short beeps (1/2 second) | Manually open and close the gate. |

## 10. MAINTENANCE

Regular maintenance will keep your Zenith in proper operating condition. As the owner of this elevator, you are responsible for making sure that maintenance and upkeep are done on a regularly scheduled basis.

**IMPORTANT:** Please test the phone in your elevator during every maintenance. If the phone is inactive, please shut down the elevator until the phone line is active.

**NOTE**

*Elevator maintenance **must** be performed by an authorized Savaria dealer every 6 months. Units installed in adverse environments will require additional maintenance on a monthly basis.*

**IMPORTANT:** Please test the phone in your elevator during every maintenance. If the phone is inactive, please shut down the elevator until the phone line is active. This applies to all lifts in a hoistway or enclosure models

To ensure proper operating condition of your unit, the items listed below must be inspected and serviced every 6 months by an **Authorized Savaria Dealer**. Additional inspections may be required depending on usage.

1. Tighten all rail and cab fastening bolts.
2. Lubricate the door hinges and adjust the door closure if required.
3. Lubricate the counterweight rails with light grease, such as white lithium.
4. For a Gatemate operator, lubricate the shaft and bushing using a general silicone lubrication spray (lubricate on installation as well).
5. Inspect the traveling cable for wear. Replace if any cuts or damage to the jacket is evident.
6. Inspect the elevator cables for wear or damage and replace if necessary. Always replace the safety washers at the swaged end of the cable when replacing cables. The washers are provided with replacement cables.
7. Inspect the safety washers at the swaged end of the elevator cables. Put the elevator on slack rope high enough so you can safely get under the elevator. Activate the manual lowering device so there is enough slack in the rope to pull the rope with the swag fitting down to view the washer. Replace the washer if there is any visible damage.
8. Inspect the OSG cables for wear or damage and replace if necessary.
9. Replace the batteries in the control panel as indicated on the battery label.
10. Activate and test the safety mechanism.
11. Check that the phone is functioning properly.

## 11. MANUAL LOWERING MAINTENANCE

**Complete shutdown inspection:**

Every time the elevator is under maintenance inspect the Manual lowering system.

While performing the inspection, power off the controller and the UPS.

**Belt inspection**:

Look for any signs of belt wear or damage. Belt should be replaced if show any signs of fraying, cracking, unusual wear or loss of teeth.

Inspect the tension on the belt using a pencil tension tester. Use a straight edge across the belt, place the tool in the center and push. The force on the pencil must be 2 lb under a displacement of 0.1". The recommended pencil tension tester is: Brand: Gates, Product #74010076

**Pulley inspection:**

Check pulleys for signs of unusual wear or obvious signs of damage. Inspect proper alignment and mounting, place a level on top of both pulleys and ensure they are at the same level:

## 12. MANUAL LOWERING TEST PROCEDURE

To test the operation of the manual lowering system the UPS must be on. Follow these steps to operate the system**:**

1. Locate the manual lowering pendant in the door buck cabinet OR the manual lowering box (if the controller is located remotely).
2. Use the pendant to lower the cab following the procedure provided in the Orion MRL Owner's Manual.

   When the COM and DW buttons are pressed the clutch connects the auxiliary gearmotor to the pulleys/synchronous belt system connected to the main motor of the elevator. The auxiliary gearmotor is energized rotating the shaft of the main motor of the elevator, causing the cabin to move down.

Run the elevator in normal operation and ensure there no noises coming from the manual lowering system.

## Maintenance Record

| Date | Time | Reason for call | Comments | Dealer |
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# Zenith
## Residential Elevator
## **Owner's Manual**

For service or questions about this product,
please contact your installing dealer.

Dealer Name: _____

Dealer Phone: _____

Authorized Savaria Dealer

**Savaria Concord Lifts, Inc.**
2 Walker Drive Brampton ON L6T 5E1 Canada

savaria

**savaria.com**

Part No. 001237