

resolute **ELEVATOR**

INTRODUCTION TO
Elevator Modernization
The Innovation - High Quality Elevator Solution



resolute
ELEVATOR

The Carolina Hotel - Pinehurst, NC
4-Stop Traction

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A modernization is no small undertaking. Our hope is that this brochure will help you understand the need, deciding on the type of modernization, and making decisions about the largest moving object in your building.



Why Modernize?

Simply put an elevator modernization is the process of upgrading critical and cosmetic parts and components of an existing elevator system. It is a time to improve the elevator's performance, reliability, safety, and compliance with current codes and technology standards.

It is also a time to update and improve the interior design of the elevator when warranted.

It does not matter what the make or model of elevator; the capacity or number of floors. All elevators will eventually need an update. Usually, a well maintained elevator will provide 20 years of service or more in usual circumstances.

But like anything mechanical, they wear out and need some tender loving care provided by a high-quality modernization.

Keep in mind a modernization does not always require replacing the entire elevator and every piece. As a result it requires a professional analysis weighing all the possibilities and your input to determine the extent of the update.

After the improvements, your elevator will give another 20+ years of reliable service if they continue to be maintained properly.



Benefits of modernization with Resolute Elevator

- Increased property value
- Lower energy cost
- Maximized ride performance
- Increased reliability
- Code compliance
- Improved travel times with better dispatching
- Reduced travel and wait times
- Elevator safety

Should You?



When is it time to consider modernization?

The elevator becomes unreliable or slow. An elevator should not need monthly visits for major repairs or constant adjustment to keep it running.

Costly to maintain. Cost keep going up due to increased repairs, a lack of available parts, and wear and tear.

Out of code. Codes change. Most of the changes are grandfathered in, however you own the public a safe and accessible ride.

Outdated Technology. Are the internal settings restricting efficiency? Is the elevator slow?

Outdated Appearance. Does your elevator just look worn out, and reflect the wrong image for the building by being completely out of style?

If your elevator has one or more of these signs you need to consult Resolute Elevator for a full review. Our goal is to extend the useful life of your elevator while meeting modern expectations.

Why Choose Resolute Elevator

A modernization is complex and partnering with just any company is a bad idea.

Responsiveness and communication are key with a project as big as a modernization and simply put the large corporate elevator companies often fail at this crucial need.

With Resolute Elevator you will have a single point of contact with a dedicated project manager. You will be provided updates consistently so you will be able to keep your team informed. We will support you every step of the way.

Experience. We have decades of experience in modernizing elevators. Modernization is a very specialized type of elevator service few companies have significant experience in performing.

You can relax with Resolute Elevator Modernizations because we believe in analysis and planning before we start and everything is up front. You will have a very clear understand of

what will take place when. We also use only the very best non-proprietary parts and components giving you peace of mind.

Everything we do is for one goal. To provide you with excellent service so you can provide a more safe and efficient elevator for the riding public.

**We provide
peace of mind
in the
following
ways**

- Decades of experience
- Single point of contact ensures responsiveness
- Clear communication
- Clear analysis and planning
- Reliable timelines for project completion
- Fair pricing
- The highest quality parts

Questions about Modernization

There are some questions you probably have. Not all can be answered immediately. As a matter of fact the first couple questions most ask will take some time as an inspection of the unit in question is needed. With that said, here are some common questions:

– **Why modernize at all?** It is for functionality, safety, performance, compliance, and aesthetics. All will be addressed before any work takes place.

– **What happens if we don't do it?** Like any other piece of machinery an elevator has a useful life. If a modernization is not complete it will continue to deteriorate until repaired.

– **Can work be done in phases or after hours?** Business interruption is the last thing we want to do, so to accommodate our clients we work with them on the schedule.

– **Can we get a breakdown of costs by component?** We will offer a complete pricing breakdown, based on the needs of the unit. You will not be in the dark.

– **Will the modernization bring the elevator up to current safety codes?** When we undertake any job we comply with all codes, fire safety and the ADA.

– **Is the current elevator unsafe?**

Usually an older elevator is not compliant with current codes. That does not mean they are unsafe. Each elevator is different so some maybe functioning with no potential harm to the riding public, others may need immediate improvements.

– **Will the elevator be faster or more reliable?** Several factors come into play regarding speed, but the overall quality and therefore reliability will be significantly improved.

– **Will it save energy or reduce operating costs?** In all likelihood yes. Elevators are much more energy efficient today.

– **Will there be progress updates or a point of contact?** You will be assigned a specific and single contact person for the project with Resolute Elevator.

– **Are we getting a non-proprietary system?** We only provide cost saving non-proprietary components.

There are plenty of other questions that you may have. Please contact us for a consultation.

We have the answers you are looking for. Contact us for a consultation.

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Serving Your Tenants

When an elevator is being modernized, it can be a major inconvenience for the people who rely on it every day. Tenants or building occupants may worry about access, delays, and how their daily routines will be affected.

That's why it's essential for building owners and managers to approach the process with clear communication, thoughtful planning, and genuine consideration for those living or working in the building.

It starts with transparency. Long before the first tool is lifted, tenants should be informed of what's coming—what the modernization involves, why it's necessary, and how long it will take.

A clear and honest timeline helps set expectations. Also, regular updates throughout the project keeps everyone in the loop. Communication through posting updates or emails, reassures tenants that they're not being left in the dark. Assign a point of contact to insure information flow and to address concerns.

Communication alone isn't always enough—tenants need practical support, too. Those in upper floors, especially seniors or people with disabilities may need help. Property managers should create a plan to assist these individuals.

The work itself will be scheduled thoughtfully. If the building has

more than one elevator, only one will be updated at a time. For single-elevator buildings, doing the loudest work during business hours and keeping common areas clean can help reduce stress and frustration.

At Resolute we will help you through the modernization by keeping you informed with updates and progress reports. By keeping people informed, accommodating their needs, and treating them with respect, we can work together to ensure a successful project.



Ideas to Help Your Tenants

- Make a temporary accessibility plan
- Provide portable lifts or ramps if possible
- Consider relocating some to a lower floor
- Help with deliveries and service
- Keep elevator landings clear of debris
- Update tenants with signs, emails, or letters
- Consider possible free amenities



Hydraulic Modernizations

Over time, a hydraulic elevator can become a source of frustration and risk. Breakdowns, slow performance, and outdated controls not only inconvenience users but also raise serious safety concerns.

Older systems can use buried cylinders that can leak oil creating both environmental and liability issues. Components wear down, leading to jerky rides, unreliable leveling, rising maintenance costs, and extended downtime due to obsolete parts.

Modernizing the elevator addresses these problems head-on as well as increasing the property value. Also, by upgrading to newer, energy-efficient equipment, energy bills are reduced and the ride is improved. Upgrades also meet safety as current codes and accessibility standards are met.

Appearance matters, too. A refurbished elevator cab with brighter lighting, updated fixtures, and faster, quieter doors leaves a better impression on the riding public. Improving aesthetics can increase the building's value.



At Resolute Elevator we will always be fair and up front on costs and the timetable of the improvement.

Hydraulic Mod - What We Do

Modernizing a hydraulic elevator improves safety, efficiency, performance, increases building value, and code compliance. Here is a general breakdown of the process:

1. Assessment and Planning - We complete a site survey by evaluating the existing equipment, ride quality, performance issues, and code compliance. We determine with you the scope of the project.

We then give you budget numbers and timeline so you can understand cost and downtime.

2. Permits and Code Review - We secure permits and verify that upgrades meet current elevator and building codes.

3. We complete the upgrades. They may include:

- A. Control System - Replace outdated controllers with modern microprocessor-based controls improving efficiency, leveling accuracy, and diagnostics.
- B. Hydraulic Power Unit - Upgrade or replace the pump, motor, and valve for quieter operation, energy savings, and smoother ride.
- C. Jack and Cylinder - We replace old jacks with a double-bottom or sleeved jack to reduce the risk of oil leaks and meet modern code.
- D. Fixtures and Cab Interior - Upgrade the cab interior. Replace halls and fixtures for improved accessibility (ADA) and aesthetics. Upgrade the lighting.
- E. Door Equipment - We modernize door operators, tracks, and safety edges to improve reliability and safety.
- F. Electrical and Machine Room

Upgrades include electrical panels, wiring, and disconnects as needed. Also, ensure machine room ventilation, lighting, and space comply with current codes.

4. Testing and Inspection - The last step is testing. We test all systems to verify functionality and schedule an official inspection.

5. Turnover and final activation. Train the owner of any new operating procedures. Provide the building manager with updated manuals, maintenance schedules, and warranty info.



Here's why
we use
only the best
non-proprietary
parts and
components

- Any elevator company or tech can service and maintain the elevator
- They allow for competitive bids for long-term maintenance contracts
- Fewer supply chain issues with getting replacement parts
- More cost efficient and decreased lead times
- You are not held hostage by annual increases in maintenance contracts.
- The same quality components



Traction Elevators Modernization

As traction elevators age, safety can quietly become a growing concern. Worn out brake systems, ropes, outdated controls, and aging components can lead to unreliable operation, slower response times, and greater risk of malfunction. Modernization brings systems up to current safety expectations.

A critical upgrade is the control system. New microprocessor-based controllers are a leap forward in technology. They detect faults, allowing for faster emergency responses and preventing dangerous failures. Brake systems are also replaced or refurbished to ensure consistent stopping power.

Hoist machines and motor drives are upgraded to improve speed regulation and ride control. This reduces stress on the system and improves passenger comfort.

Door systems, a leading source of accidents, are modernized with advanced sensors and protective edges.

Additionally, new wiring, fire-service features, and emergency communication systems are installed to comply with current codes and jurisdictional requirements. This not only improves the elevator's safety profile but also helps ensure the building passes required inspections and reduces liability.

In short, traction elevator modernization isn't just about improving performance—it's about restoring confidence. It ensures the elevator is not just functional, but fully prepared to protect the people who ride it every day.



Traction Mod - What We Do

Here's a breakdown of the key steps:

1. Initial Assessment - Evaluation of current system Including: the motor, hoist machine, control system, ropes, and safety components. Then decide the scope. Decide if it will be a partial or full modernization.

2. Permits and Code Review - Secure all permits. Ensure the planned upgrades meet current codes.

3. Equipment Upgrades

A. Control System - Install New Microprocessor-Based Controller that offers better diagnostic capabilities.

B. Motor and Hoist Machine - Install new, to generate more energy-efficiency for improved performance.

C. Safety Features - Modernize or replace the brake system to ensure proper stopping power. Upgrade safety mechanisms like overspeed governors, buffers, and safety gears.

D. Upgrade to new door operators. Ensure doors open and close smoothly and install modern sensors for safety, preventing accidents during entry/exit.

E. Electrical/Mechanical - Replace outdated wiring, electrical panels, and transformers to improve efficiency and reduce risks.

4. Update Emergency Features including communication systems, lighting, and fire-service features.

5. Testing and Inspection - Test all new systems to ensure proper function and safety. Schedule an inspection for final approval.

6. Final Adjustments and Notification - Make necessary tweaks to optimize performance. Notify building owners and hand off the unit. Train the building management team on any changes to procedures.

This approach ensures that the elevator not only meets current standards but provides better service, improves safety, and reduces maintenance costs in the future.



Cosmetic Mechanical or Both

Determining whether an elevator modernization should include both cosmetic and mechanical upgrades starts with understanding the full picture. To do this it is important to understand how the elevator is perceived by the riding public.

Often, building owners focus on fixing what's broken: replacing aging motors, controllers, or door operators to improve reliability and meet current codes. But functionality is only part of the elevator's impact.

A reliable elevator that looks outdated will still create a negative impression. If the elevator cab has scratched panels, buzzing lights, or old buttons, it can make the entire building feel neglected—even if the ride is smooth. This can even lead to a lower value of the building itself.

At the same time, some owners are tempted to only refresh the cab without addressing the aging machinery behind the scenes. Cosmetic improvements may boost aesthetics temporarily, but if the mechanical systems remain unreliable, the building is still at risk.

The best approach is to conduct a full modernization assessment with Resolute Elevator. Resolute Elevator will evaluate both the performance of the mechanical systems and the condition of the cab.

If the equipment is nearing the end of its useful life, or if parts are hard to



find, mechanical upgrades are likely essential. If the cab looks dated or fails to meet ADA standards, cosmetic modernization should also be considered.

In the end, both aspects matter as an elevator should be safe and reflect the design of the building and show the same level of quality.

Resolute Elevator will evaluate both the performance of the mechanical systems and the condition of the cab.

You Are In Control

It is your project and you are in control. You and your team with our help will be making the primary determination regarding cab interior as well as the look and feel of the hall calls and lanterns.

We can accommodate any laminate for your cab as well as a variety of metal finishes including stainless steel.

Also, we will give you an honest assessment and design help where needed. We have been in the elevator business for decades and are well equipped and informed in all the possibilities. If you choose you can use our online cab configuration tool to assist you as well.

Overall, we provide flexibility so you can have the look and feel you desire and we are here to help.



How We Help:

- We provide expert consultation to assist you with your design choices. We give you advice but you are in control.
- A full catalog of laminates is available for you to choose from. You can match the look and feel of your building.
- We provide stainless steel options and wide variety of metal finishes for you to consider.
- Our online cab configuration tool is ready for you to experiment with a variety of options.



Our Work

We are very proud of the modernization projects we have completed. Over the next few pages you will see some of our most recent modernizations.

The projects featured show our projects span from elegant historical landmarks to high-rise office buildings. We know that all elevators have a life span and will someday need a modernization. We can do any and all.

Each project had its own challenges that we were able to navigate for our customers with great success. We feel the results speak for themselves.

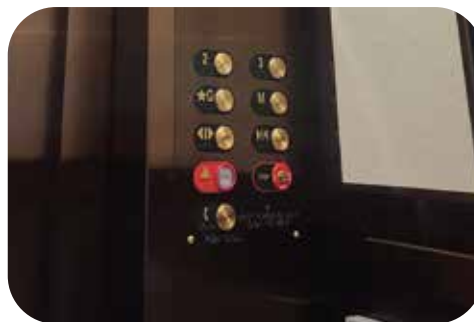
You can find even more projects at: resoluteelevator.com. There you can also find out more about what makes us perfect for your next elevator modernization or other elevator project.



The Carolina Hotel

This historic hotel needed an upgrade as the elevator was well past the need for a modernization. The Resolute team jumped in and worked hand in glove with the hotel staff to create a truly unique elevator that fit seamlessly with the design of the historic building.

Not only was it aesthetically pleasing but the modernization incorporated a full upgrade of all the systems making it code compliant and smooth running.



Self Help

The Self Help Building in downtown Greensboro was in a little need of help itself. The ten-story complex located in the heart of the city leases office space solely to nonprofit agencies.

The build was constructed in 1971 and was well used for decades. All of that use included a lot of trips in the three elevators in the main lobby. After all that time a modernization for the units was greatly needed.

Resolute is the Solution

To get the project going the experts from Resolute met with the build team and made the recommendations for a full modernization. The plan and schedule was agreed to and we went to work.

The three elevators were improved one at a time so the building could remain open. When completed the new cabs and conveyance systems were in place. It greatly improved the look and functionality of the elevators. The modernization was a significant upgrade and will give decades of reliable service. Another success story for Resolute Elevator.



Government Projects

Just one of the many government modernization projects that we have completed is in the North Carolina Department of Natural and Cultural Resources Building.

This project took multiple elevators that were past their prime and updated them completely from the top of the hoistway to the bottom of the pit.

These traction elevators required a new motor as well as cab interiors.

Efficiency was Important

This project also involved updating older controllers to make the units run more efficiently. However the state elected not to update some lesser used elevators that still were in limited use.

It is important to know that regardless of the building type, we know one size does not fit all. We will work with you to reach your goals, giving you a great consultation, clear goals and timelines.

Contact Resolute Elevator to arrange your one on one consultation today.





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Department of Natural and Cultural Resources
Raleigh, NC

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Resolute Elevator System

The Innovation - High Quality Elevator Solution

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