

Elevating Your Elevator ROI

By Sasha Bailey



In today's economy, it's more important than ever for building owners and managers to ensure that they are preserving one of a building's most critical assets—the elevators. Having a sound maintenance program and service contract from a reliable and trusted company is vital for owners and managers to stay on top of their capital investment and minimize shut-downs and downtime. This not only ensures that the elevator meets its expected life-cycle and runs at peak performance, but over time it can save an owner money.

One way to “elevate” a return on investment is to consider these seven elements when selecting an elevator service and maintenance provider: experience, preventative maintenance frequency, around-the-clock service, troubleshooting capabilities, inventory of parts, remote monitoring and modernization.

Experience

It is essential for service professionals to be knowledgeable and up to date on all new products and technology, industry standards and, most importantly, safety precautions. Participation in periodic training programs, including field programs that are dedicated to education on new technologies and local sessions to stay abreast of industry

standards and safety requirements, is paramount.

Building managers should ensure that their selected contractor is accredited to work in their specific market. Some states require service providers to have a contractor's license. Others have specific licensing programs for the vertical transportation industry.

Preventative Maintenance Frequency

Even after an elevator's warranty expires, it is important it receives ongoing preventative maintenance to ensure optimal and safe performance. This maintenance should involve fast, reliable service and trained technicians.

It is also important that service providers evaluate the existing elevator equipment on a regular basis, as well as the wear and performance of parts.

Around-the-Clock Service

Most elevator service providers offer a monitoring program for the elevator telephones 24 hours a day, 365 days a year. Because of the potential impact of a shut-down on a building's tenants, it is critical for building owners and managers to have a service provider that responds to service calls both during and after business hours, ensuring reliable response. It is also important to find out how many service technicians

are available to respond to calls, which can ultimately improve response time.

When a problem arises, many service providers guarantee around-the-clock emergency services. Whether it's a small or large building, knowing that a service provider is dependable no matter the time of day can grant peace of mind to any building manager and to the building's tenants. As some service contracts only guarantee 24-hour service in emergency situations, property professionals should thoroughly read the service guidelines to better understand whether or not around-the-clock service is provided in non-emergency situations.

Troubleshooting for Multiple Elevators

Property owners and managers with multiple buildings, which may have elevators from more than one manufacturing company, have an additional issue to address when selecting an elevator service company. In this case, in addition to diagnosing problems, the service provider must be able to troubleshoot and fix multiple elevators from different elevator manufacturing companies. Whether it's for single or multiple buildings, service providers that have the capacity to troubleshoot a variety of elevators increase the ability of building managers to streamline the

maintenance process by only having to rely on one service provider for all their elevator-related needs.

Parts Inventory

It is essential to review a service company's inventory and evaluate whether it has adequate access to spare parts, as well as the appropriate logistics to get them to the jobsite efficiently. Managers and owners should examine where the parts are stored and the maintenance providers' delivery process. The hassle of having to wait for parts to arrive can be detrimental to business operations, decreasing the building's efficiency.

Remote Monitoring

Remote monitoring is an innovative service feature for control systems that monitors the performance of an elevator at all times. These systems provide real-time progress reports that can be enabled and viewed by service providers and building managers at any time and from anywhere. If something out of the ordinary occurs, or if an elevator stops performing optimally, the monitoring system immediately alerts the service provider, sometimes before a problem is even exposed to the facility managers, thus ensuring seamless adjustments and repair and minimizing costly elevator downtime. An added bonus is the elimination of unnecessary service calls and the accompanying paperwork, which, in turn, helps decrease an elevator's environmental footprint through a decrease in both vehicle and paper use.

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Modernization

Elevator modernization products can dramatically improve an old elevator's performance, as well as its appearance. Experienced technicians and engineers can customize a modernization package that is both energy- and cost-efficient. Here are just a few modernization options:

CAB MODERNIZATION. Installing light-emitting diodes (LEDs) can save up to 80 percent of the energy costs associated with traditional elevator lighting. LED lighting reduces heat loss and increases life span—in some cases up to 10 years per light. LEDs also eliminate potential cab interior fading that can occur over time due to ultraviolet light. In addition, they do not contain harmful mercury common in traditional fluorescent lighting.

Energy savings are further increased by enabling the elevator controller to automatically shut off the cab's lights and fans when the elevator meets certain criteria related to inactivity. According to a study conducted by the Swiss Agency for Energy Efficiency based on their review of varying elevator types and models, stand-by energy consumption can account for between 25 and 80 percent of an elevator's total energy consumption.

Another consideration is to replace elevator panels with urea-formaldehyde-free (UF-free) panels, which can improve the indoor air quality of the building as well.


UPGRADING THE MOTOR. Upgrading older technology, such as upgrading a motor generator (MG) drive to a newer variable voltage variable frequency (VVVF) drive, can save approximately 30 to 40 percent of energy consumption, depending on the elevator type and size. The move away from the old MG sets also eliminates potential indoor air quality issues associated with carbon dust created by the use of carbon brushes in the machines themselves.

In addition, the oil that has traditionally been used in hydraulic elevators can be replaced with biodegradable

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hydraulic oil, designed to minimize environmental impact.

RECYCLING ENERGY. Another modernization strategy involves putting some of the elevator's unused energy back into the building. This can be done by installing regenerative drives. The power that is transferred back into the building would traditionally be dissipated via heat into the machine room. With the regenerative drive, the excess energy is captured and reused, and the system also reduces costly traditional cooling of the elevator machine room.

Having a sound preventive maintenance program and engaging a high-quality service provider maximizes elevator performance and ensures that the equipment is maintained to the highest of industry standards. Elevators that run at peak performance use less energy, improve building efficiency, increase overall property value and are more likely to meet their maximum life-cycle, giving property owners and managers peace of mind. 

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