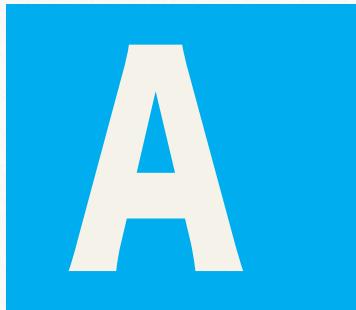


AMBA TIRUPATI ZETETIC ENGINEERING
PVT. LTD.

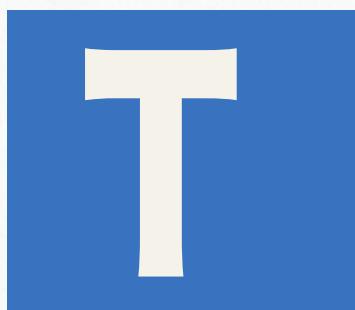
ATZ ELEVATORS CATALOG



A M B A T I R U P A T I Z E T E T I C
E N G G . P V T . L T D .



affordable pricing



technical expertise



zenith performance

1. Introduction

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INTRODUCTION

A

TZ Elevators started its operations in Patna in 1998 and has been growing ever since. In 2002, the company was incorporated under the Companies Act. Starting from our headquarters in Patna, we have expanded our services to many upcoming cities in Bihar, such as Bhagalpur, Muzaffarpur, Darbhanga, Chhapra, Motihari, Samastipur, and many others.

We also have regional offices in Kolkata and branch offices in Bhubaneswar and Jamshedpur to cater to the demands of our customers in West Bengal, Odisha, and Jharkhand, respectively. Our team of experts, technicians, and professionals work tirelessly to provide you with the best services.

ATZ provides custom solutions for their elevators, tailored to the specific needs of each client.

ATZ provides maintenance services for their elevators, ensuring that they always operate at peak performance

ATZ's solutions are designed with the latest technology to ensure smooth and safe transportation.

ATZ's elevators and escalators are designed to be energy-efficient, and are installed with a range of safety features,

ATZ elevators and escalators are available in various ranges, sizes and capacities, catering to the client's requirements

ATZ has extensive expertise in elevator design and installation, providing excellent customer service.





More than 2,000 lifts successfully installed

More than 4,000 elevators maintained through Annual Maintenance Contracts (AMCs)

A growing network of 10+ branch offices across India

A satisfied client base of over 1000 happy customers

Consistent compliance with safety and industry standards

FROM THE DESK OF M.D.

Amba Tirupati Zetetic Engineering Pvt. Ltd. has been fortunate enough to have earned the trust and loyalty of our clients and partners over the years. It is their unwavering support that has helped us achieve success and growth in the industry. The clients constitute the foundation of our enterprise, and we express our profound appreciation for their recurrent patronage and recommendations.

Our team is committed to providing exceptional service and products that meet and exceed their expectations. We take pride in our work and strive to ensure that each project is completed with precision, care, and attention to detail.

As we look towards the future, we are excited to continue expanding our client base and exploring new opportunities. To help achieve this goal, we have brought on a new member to our managerial and marketing team, my son Ambudhi Vishal, who brings fresh ideas and innovative thinking to the table.

We firmly believe that this company has enormous potential to continue growing, both vertically and horizontally. We remain committed to our core philosophy of putting our clients first and ensuring their satisfaction and happiness. This will always be at the forefront of our decision-making and will guide us in everything we do.

We are grateful for our clients and partners, and we look forward to continuing our journey together. Thank you for your continued support and trust in Amba Tirupati Zetetic Engineering Pvt. Ltd.

-Mrs. Amrita Jha
M.D.





FIND THE MOST VALUE IN YOUR BUDGET

Assuming all lifts are expensive is a common misconception. You'll be pleasantly surprised to know that lifts for houses in Bihar and all over India are now more common and affordable than ever before. We will work with you and go to great lengths to find the right lift solution suited to your budget.



STRESS-FREE INSTALLATION FOR YOUR PEACE OF MIND

From liaising with architects, designers and builders to regular site inspections and updates, our dedicated project management team oversees the whole project for you to make sure it's completed on time and with minimal disruptions.



ENGINEERING EXCELLENCE AND QUALITY ASSURANCE

Carefully engineered for safety and reliability, all our lifts are 100% made in India, designed and manufactured by ATZ Elevators to ensure a consistent and high quality finish.



24/7 PERTH CUSTOMER CARE & SERVICE

Our local customer support team pan- India has the knowledge and training to provide you with answers to any questions or direct you to someone who can help. We have a team of qualified technicians on call ready to get your lift up and running quickly.

SOLUTIONS FOR NEW BUILDINGS

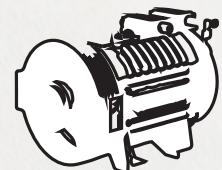
Supply, Installation, Testing, And Commissioning Of Elevators and Escalators

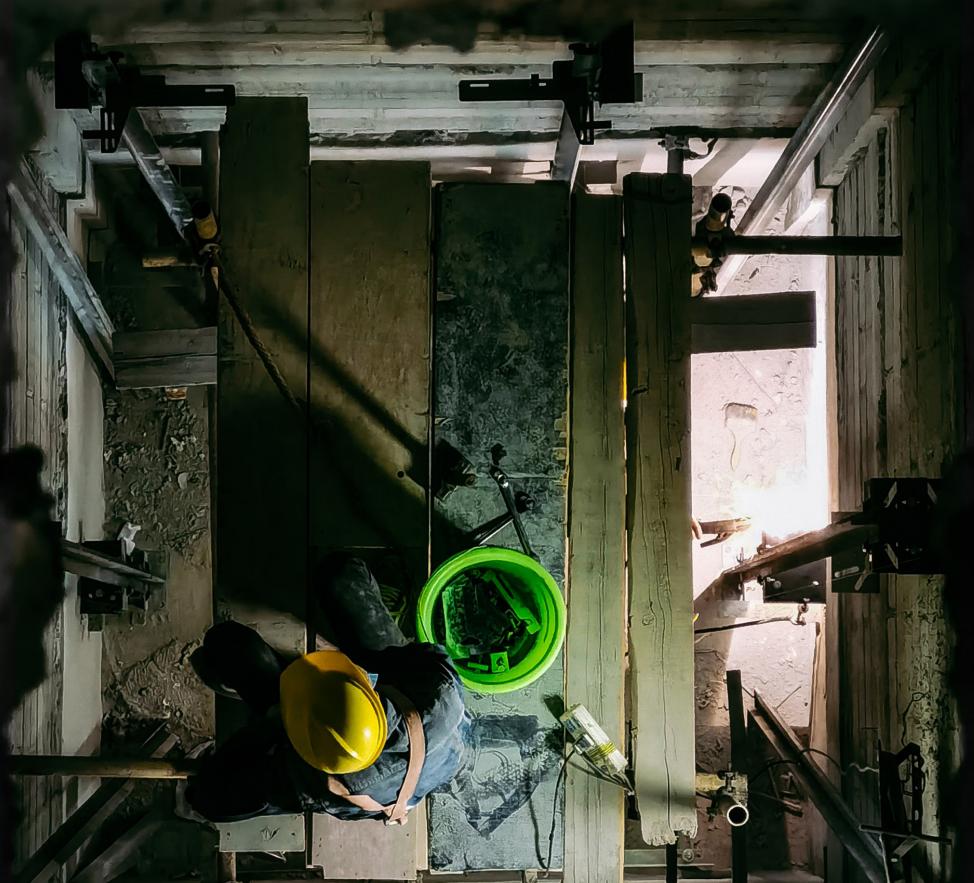
ATZ offers a wide range of lift systems designed specifically for new construction projects. Our experienced team of engineers and designers work closely with architects, builders, and developers to ensure that the lift system seamlessly integrates into the new building design and meets the specific functional requirements of the project.

ATZ offers various lift technologies, including gearless, machine room-less, hydraulic, and traction elevators, each with its unique features and benefits. Our team works with clients to determine the best option based on the building's needs, budget, and design preferences. In addition, we offer different car sizes, finishes, and door types to provide a customized lift system that fits the building's aesthetic and functional requirements.

We understand that lift systems are essential for the smooth operation of any building, and that's why we prioritize safety, reliability, and efficiency. We offer ongoing maintenance and support services to ensure the lift system's continued reliability and performance throughout its lifespan. Our team of highly trained technicians is available 24/7 to respond to any emergency repair needs, ensuring minimal downtime and maximum safety for building occupants.

With a focus on safety, reliability, and efficiency, our lift systems provide building owners and occupants with a seamless, convenient, and enjoyable lift experience. Our team of experts is committed to delivering exceptional customer service, working closely with clients throughout the entire installation process and beyond to ensure their satisfaction.





Gearless Traction Motor -630kg- 1.5m/s



Gearless Traction Motor -3000kg- 2m/s



Steel Suspension Rope



Single phase motor - 0.4m/s



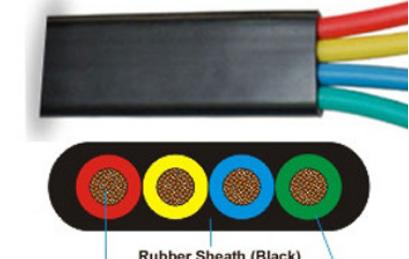
Standard Speed Governor



Geared Traction Motor



Hydraulic Elevator Motor



Flat Ribbon Travelling Cable

ELEVATOR COMPONENTS AND TERMINOLOGY

- **Elevator Controller:** The Elevator Controller is a complex computer system that coordinates and manages the various functions of an elevator, including speed, direction, and door operation. It provides smooth and efficient operation while ensuring passenger safety.

- **Traction Machine:** The Traction Machine is a powerful motor that drives the elevator's movement through cables and pulleys. It provides smooth and reliable operation and is used in modern high-rise buildings.

- **Hydraulic System:** The Hydraulic System is an alternative to traction elevators that uses hydraulic fluid to drive the elevator's movement. It is commonly used in low-rise buildings and provides a smooth and quiet ride.

- **Limit Switches:** Limit Switches are safety devices that prevent the elevator from traveling beyond its designated limits. They are critical components for ensuring passenger safety.

- **LOP (Landing Operating Panel):** The LOP is a control panel located outside of the elevator car that allows passengers to call and control the elevator from the landing. It displays the current floor and direction of travel of the elevator and can be customized to suit the building's style.

- **COP (Car Operating Panel):** The COP is a control panel located inside the elevator car that allows passengers to select the desired floor and control the elevator's various functions, such as door operation and emergency stop. It displays the current floor and direction of travel.



STAINLESS-STEEL FINISH COP

- **Emergency Communication System:** The Emergency Communication System allows passengers to call for help in case of an emergency. It is a critical safety feature that is required by law in most countries.

- **Overload Protection:** Overload Protection is a safety feature that prevents the elevator from operating if it exceeds its weight capacity. It ensures the safety of passengers and the elevator system.

- **Elevator Pit:** The Elevator Pit is the area at the bottom of the elevator shaft that houses the elevator's mechanical components.

- **Elevator Shaft:** The Elevator Shaft is the vertical space in which the elevator car travels. It must be designed and constructed to precise specifications to ensure the safe and efficient operation of the elevator.

- **Emergency Power Supply:** The Emergency Power Supply ensures that the elevator can operate during power outages or other emergencies. It is a critical safety feature that ensures passenger safety and convenience.

A. Control System: The Control System in a gearless traction elevator manages the operation of various components, including the motor, brake, and door operator, to ensure smooth and efficient elevator movement.

B. Drive and Brake System: The Drive and Brake System comprises the motor and brake that work together to move the elevator car and ensure its safe operation by controlling the speed and stopping the elevator.

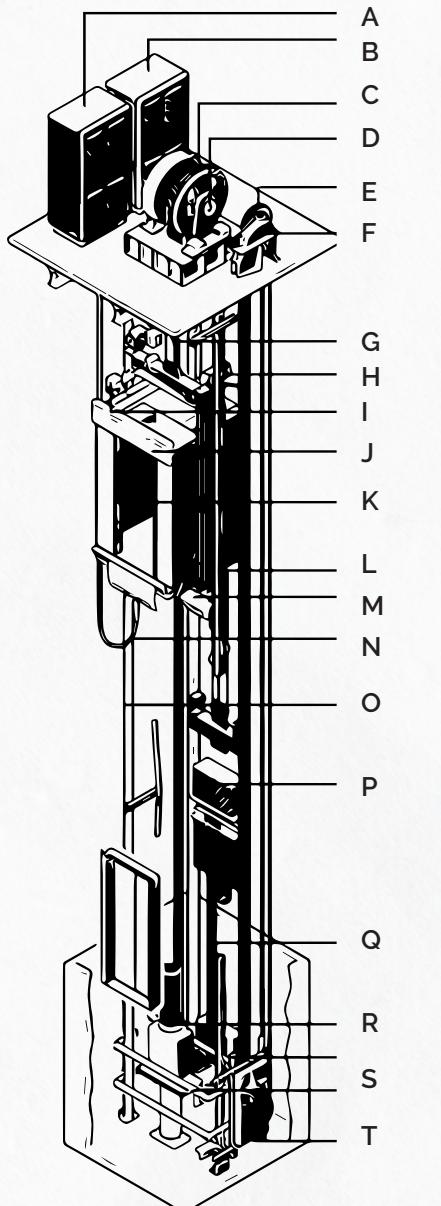
C. Gearless Machine: The Gearless Machine is a type of elevator motor that uses a direct drive system to eliminate the need for gears and reduce energy consumption while providing a smooth and quiet ride.

D. Primary Velocity Transducer: The Primary Velocity Transducer measures the elevator car's speed and acceleration to provide data to the elevator control system for accurate speed and position control, to ensure accurate floor leveling and smooth operation.

E. Smart Primary Position Transducer: The Smart Primary Position Transducer tracks the position of the elevator

F. Governor: The Governor is a safety device that activates the brake in case of overspeed by sensing the rotation of the elevator's sheave and activating the brake if the speed exceeds a preset limit.

G. Hoisting Ropes: Roller Guides: The Hoisting Ropes and Roller Guides work together to lift and lower the elevator car and keep it centered in the shaft while ensuring smooth and quiet operation.



Gearless Traction Elevator Diagram

I. Door Operator: The Door Operator controls the opening and closing of the elevator car doors and ensures their safe and reliable operation.

J. Entrance-Protection System: The Entrance-Protection System ensures the safety of passengers by preventing the doors from closing if something is blocking the entrance.

L. Car Safety Device: The Car Safety Device is a safety mechanism that prevents the elevator from falling in case of a failure in the hoisting system.

M. Traveling Cable: The Traveling Cable provides power and communication between the elevator car and the control system.

N. Elevator Rail: The Elevator Rail guides the elevator car along its path and supports its weight, ensuring smooth and stable operation.

O. Counterweight: The Counterweight balances the weight of the elevator car and reduces the load on the hoisting system, improving energy efficiency and reducing wear and tear.

P. Compensation Ropes: The Compensation Ropes work with the counterweight to reduce the load on the hoisting system and ensure the elevator car remains level at all times.

Q. Car Buffer: The Car Buffer is a safety device that absorbs the energy of the elevator car in case of a collision with the top or bottom of the shaft.

R. Counterweight Buffer: The Counterweight Buffer absorbs the energy of the counterweight in case of a collision with the top or bottom of the shaft.

S. Compensation Sheave: The Compensation Sheave is a pulley that redirects the compensation ropes to the counterweight and ensures smooth and efficient operation.

T. Governor Tension Sheave: The Governor Tension Sheave maintains the tension on the governor rope and ensures accurate and reliable operation of the governor system.

SOLUTIONS FOR EXISTING BUILDINGS

We provide maintenance services for all makes of Elevators and Escalators

Atz offers a range of options for building owners who wish to install or modernize a lift system in their existing structures. Atz understands that older buildings often present unique challenges when it comes to lift installations, which is why the company offers a variety of tailored solutions to address these specific needs.

One of the main solutions offered by Atz for existing buildings is the modernization of outdated lift systems. Older lift systems can be prone to breakdowns, malfunctions, and safety issues, which can be both inconvenient and potentially hazardous to occupants.

Atz's team of experts can assess the current state of a building's lift system and offer a range of modernization options to improve its safety, efficiency, and reliability. This can include upgrading control systems, motor and drive systems, and safety features to meet current safety standards.

ATZ provides AMC (Annual Maintenance Contract) services for elevators to ensure smooth and reliable operation of covered elevators and escalators.

The AMC services we provide can be categorized into two types:

COMPREHENSIVE and NON-COMPREHENSIVE



In addition to modernizing and installing lift systems, Atz offers a range of maintenance and repair services for existing lift systems. The company understands that lift systems are critical components of many buildings, and downtime due to maintenance or repairs can be costly and disruptive. As such, Atz offers 24/7 customer service and emergency repair services to ensure that lift systems are always up and running. This includes regular maintenance and inspection services to identify and address potential issues before they turn into major problems.

A TZ clients can choose from two AMC packages:

Comprehensive and Non-Comprehensive.

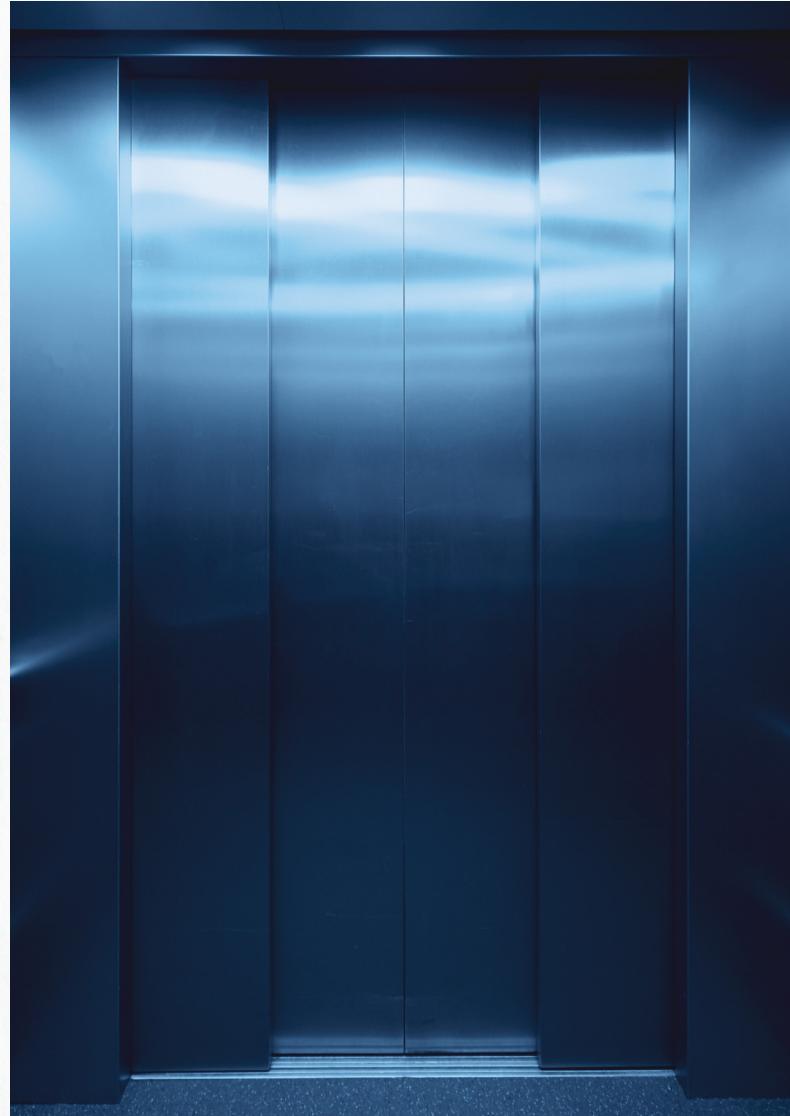
• Comprehensive AMC -

Comprehensive AMC contracts are an all-inclusive solution for clients who want to ensure the reliable and safe operation of their elevator systems. In addition to regular maintenance tasks, this type of contract also covers the replacement of faulty components, except for major components such as VVF drives and motors. Clients can rest easy knowing that unexpected costs are covered under the comprehensive contract. With emergency repair services available 24/7, clients can minimize elevator downtime and ensure the safety of elevator users. A comprehensive AMC contract is an ideal choice for clients who value peace of mind and want to avoid unexpected expenses.

• Non-comprehensive AMC -

Non-comprehensive AMC are a cost-effective option for clients who want to pay only for maintenance services and cover the cost of any repairs needed on a case-by-case basis. This type of contract covers regular maintenance tasks such as inspections, cleaning, lubrication, and minor adjustments. However, any additional repairs required will be billed separately, and the cost can quickly add up. Non-comprehensive AMC contracts are suitable for clients who are willing to take on the risk of unexpected expenses and prioritize cost savings over peace of mind. Ultimately, the choice between comprehensive and non-comprehensive AMC contracts depends on the client's priorities, budget, and risk tolerance.

DIFFERENT TYPES OF ELEVATORS SERVICED BY ATZ



AUTOMATIC DOOR ELEVATORS:

ATZ's installation service for automatic door elevators provides clients with a high-quality and efficient lift system that is perfect for medium to high-rise buildings. These elevators are ideal for buildings with high traffic volume, as they provide easy and safe access between floors while maximizing space utilization.

ATZ's team of experts work closely with clients to design and install automatic door elevator systems that meet their specific needs. The company offers a range of elevator technologies, including gearless, machine room-less, and hydraulic systems, to ensure that each client receives a customized solution that suits their unique building requirements.

- ATZ's automatic door elevators are high-quality and efficient lift systems that are perfect for medium to high-rise buildings.
- These elevators are ideal for buildings with high traffic volume, as they provide easy and safe access between floors while maximizing space utilization.



MACHINE ROOM LESS (MRL)

ELEVATORS:

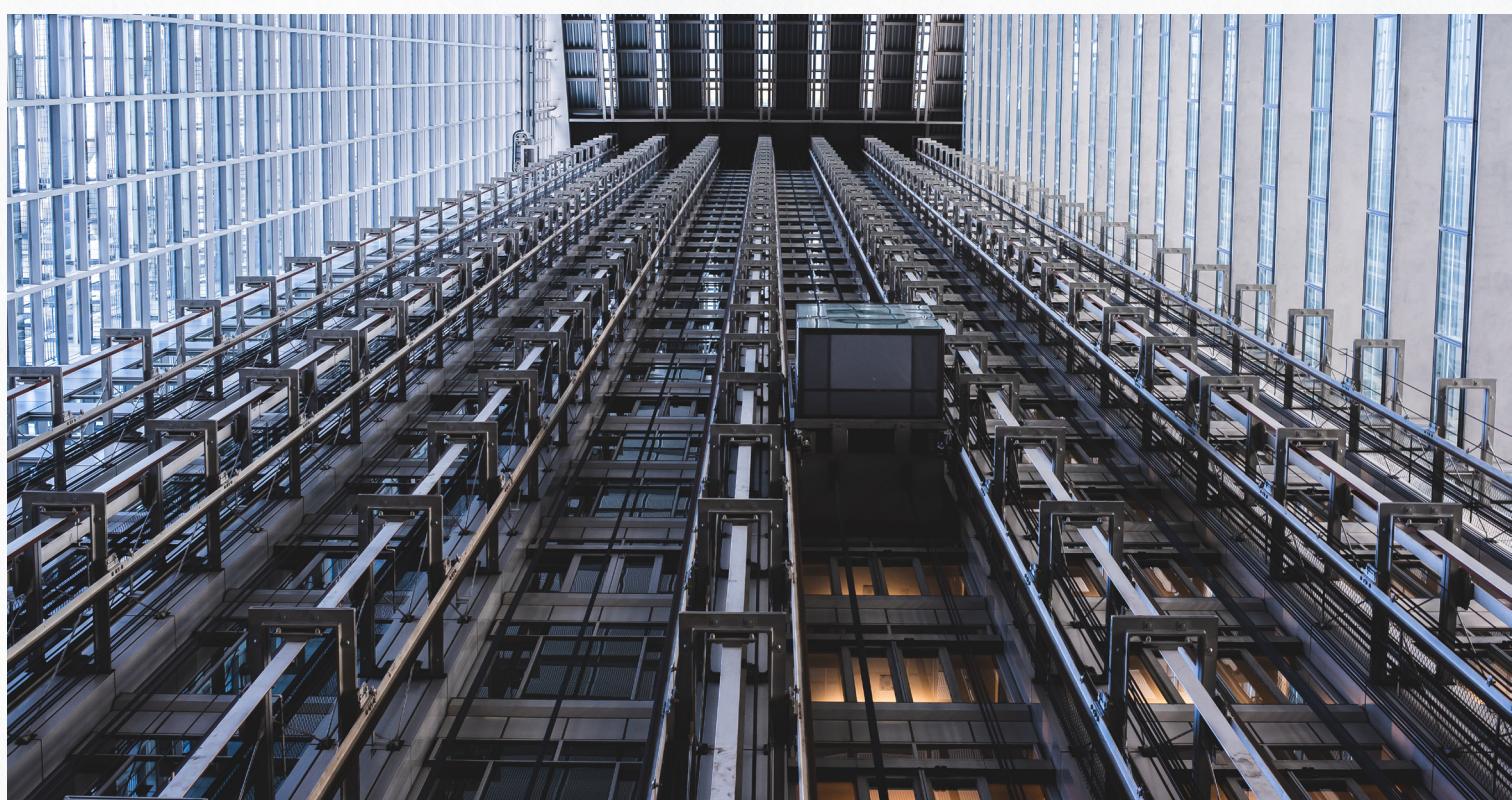
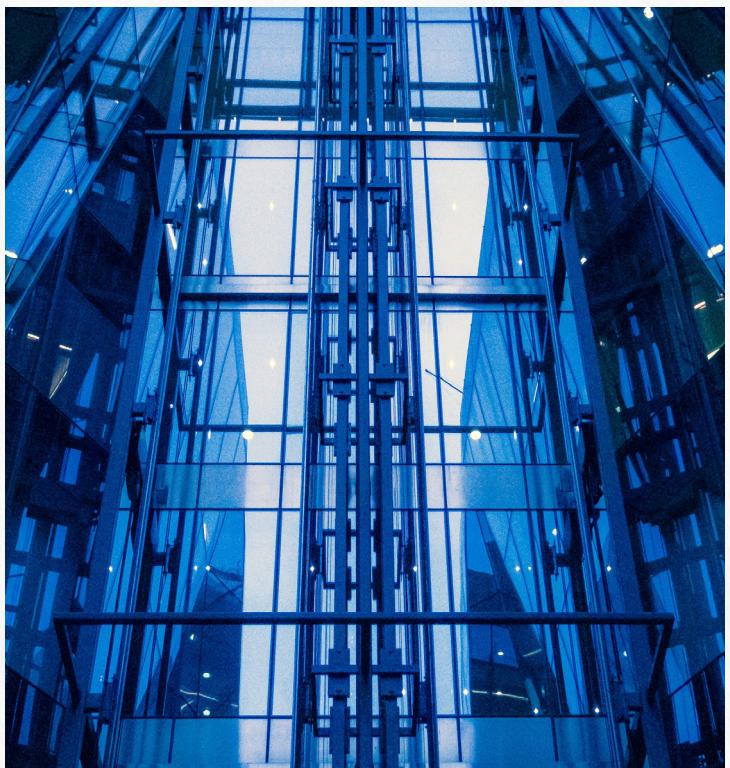
ATZ's installation service for MRL elevators provides clients with a modern and efficient lift system that is designed to save space and reduce energy consumption. These elevators are ideal for buildings with limited space for elevator equipment, as they eliminate the need for a separate machine room.

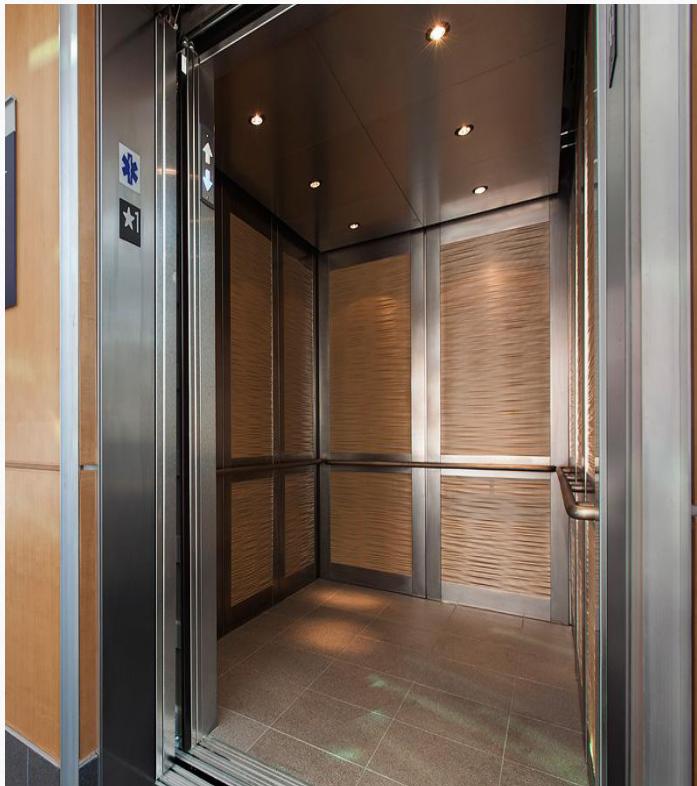
ATZ's team of experts work closely with clients to design and install MRL elevator systems that meet their unique needs. The company offers a range of elevator technologies, including gearless and traction systems, to ensure that each client receives a customized solution that is efficient, reliable, and safe.

ATZ's MRL elevators are designed to be energy-efficient, with advanced features such as regenerative drives that use energy generated during operation to power other building systems. The elevators are also designed to be compact, with smaller hoistways and control systems that save valuable space in buildings.

- MRL elevators provides clients with a modern and efficient lift system that is designed to save space and reduce energy consumption.

- The company offers a range of elevator technologies, including gearless and traction systems, to ensure client satisfaction.





- ATZ's automatic door elevators are high-quality and efficient lift systems that are perfect for medium to high-rise buildings.
- These elevators are ideal for buildings with high traffic volume, as they provide easy and safe access between floors while maximizing space utilization.

HOSPITAL ELEVATORS

ATZ's installation service for hospital elevators provides clients with a customized and reliable lift system that is designed to meet the specific needs of healthcare facilities. These elevators are ideal for safely transporting patients, medical equipment, and supplies between floors, with a range of features and options available to ensure maximum efficiency and safety.

ATZ's hospital elevators are designed to be durable and long-lasting, with advanced features such as automatic opening and closing doors, spacious interiors, and customizable finishes to create a calming and comfortable environment for patients. The company also provides a range of safety features, including emergency backup power, interlocks, and alarms to ensure the safety of patients and staff.

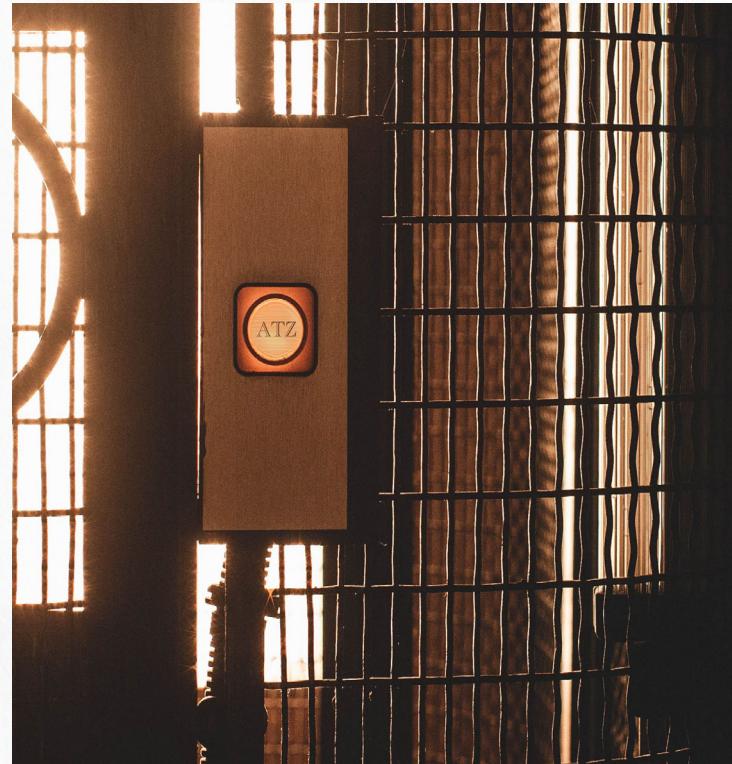


GOODS/FREIGHT ELEVATORS

ATZ's installation service for freight elevators provides clients with a customized and reliable lift system that is designed to meet the specific needs of commercial and industrial spaces. These elevators are ideal for transporting heavy goods and materials between floors, with a range of sizes and weight capacities available to suit different requirements.

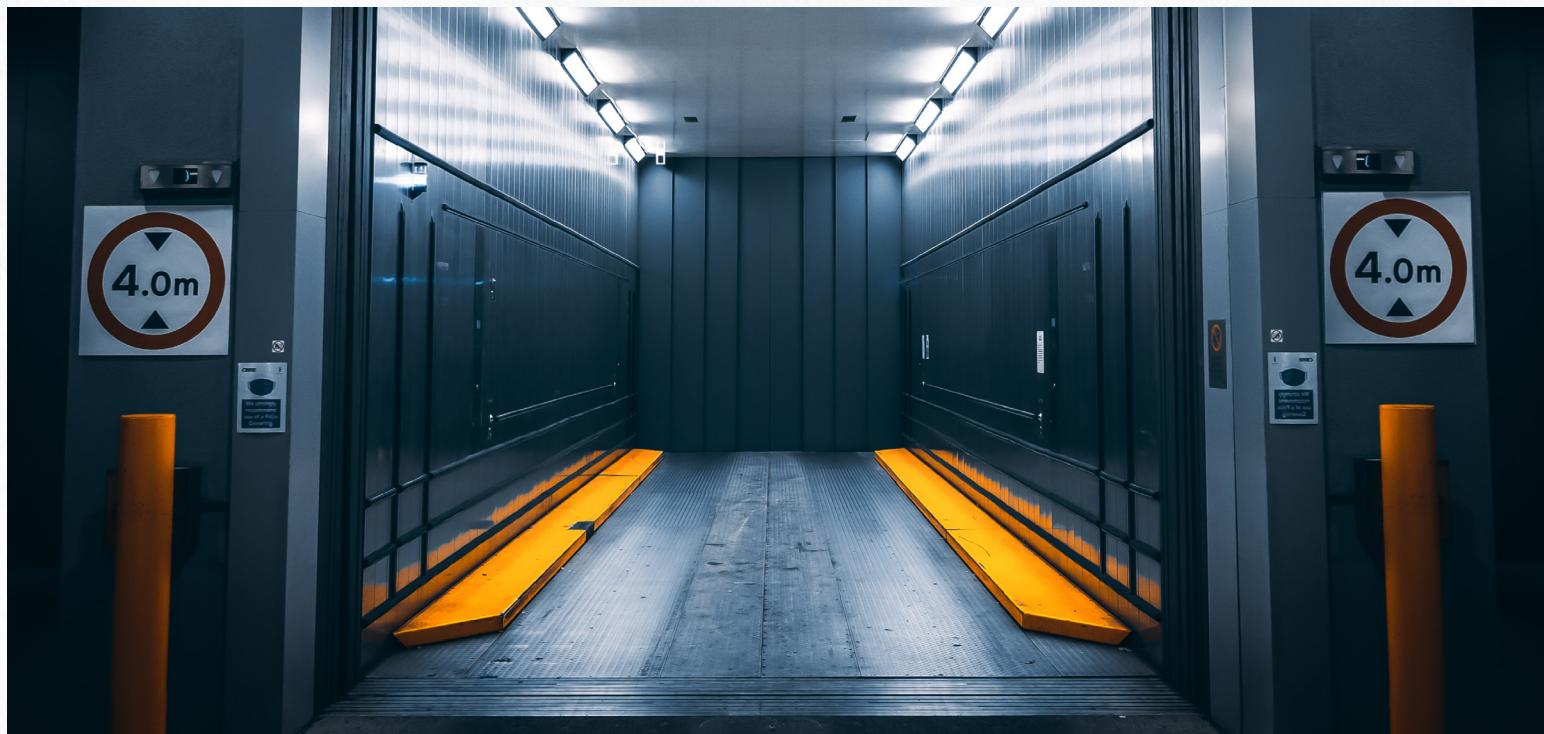
ATZ's team of experts work closely with clients to design and install freight elevator systems that meet their unique needs. The company offers a range of elevator technologies, including hydraulic and traction systems, to ensure that each client receives a customized solution that is efficient, reliable, and safe.

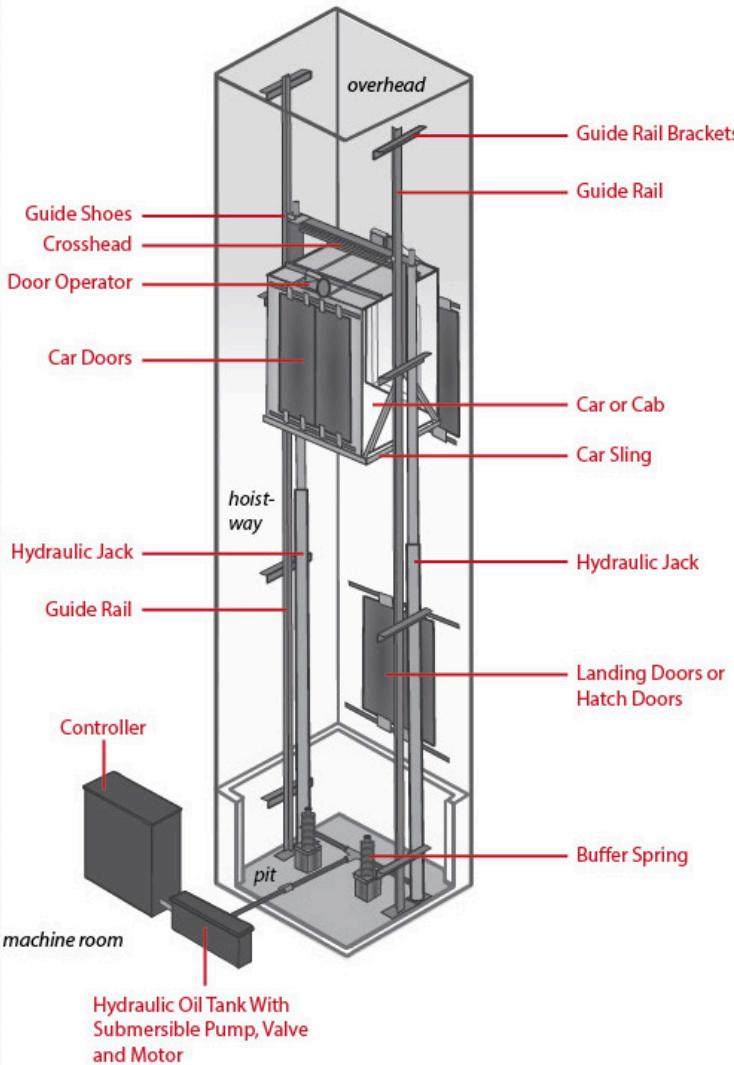
ATZ provides ongoing maintenance and support services for freight elevators, ensuring that they continue to operate efficiently and safely over time.



• ATZ's goods elevators are ideal for transporting heavy goods and materials between floors, with a range of sizes and weight capacities available to suit different requirements

• ATZ's freight/goods elevators are designed with durability in mind. They are built with sturdy materials and have reinforced walls and doors to withstand the wear and tear of frequent heavy use.





HYDRAULIC ELEVATORS

ATZ's installation service for hydraulic elevators provides clients with a reliable and efficient lift system that is designed to offer smooth and safe transportation between floors. These elevators are ideal for low to mid-rise buildings and have a range of applications including commercial, residential, and industrial.

ATZ's team of experts work closely with clients to design and install hydraulic elevator systems that meet their unique needs. The company offers a range of elevator technologies, including roped and holeless systems, to ensure that each client receives a customized solution that is efficient, reliable, and safe.

ATZ provides ongoing maintenance and support services for hydraulic elevators, ensuring that they continue to operate efficiently and safely over time. These services include regular inspections, cleaning, and repairs, as well as upgrades to keep the elevator system up-to-date with the latest technology.



- ATZ's hydraulic elevators are ideal for low to mid-rise buildings and provides clients with a reliable and efficient lift system.

- ATZ's hydraulic elevators are designed with a high-quality hydraulic system that ensures smooth and quiet operation. This makes them an ideal choice for buildings where noise levels need to be kept to a minimum.

CAPSULE ELEVATORS

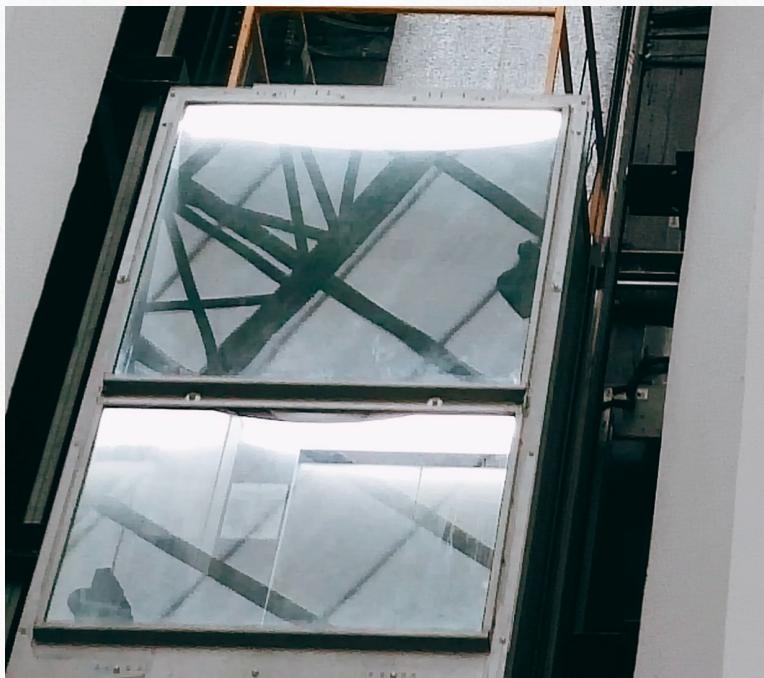
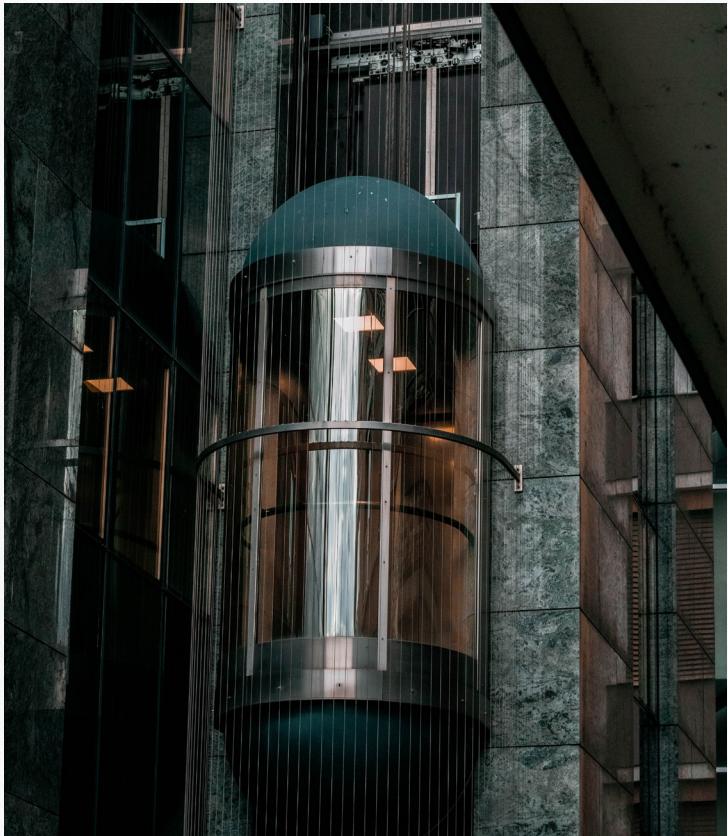
ATZ's installation service for capsule elevators provides clients with a unique and stylish lift system that is designed to offer smooth and safe transportation between floors. These elevators are commonly used in luxury hotels, high-end residential buildings, and other exclusive properties.

ATZ's team of experts works closely with clients to design and install capsule elevator systems that meet their unique needs. The company offers a range of capsule sizes and finishes, ensuring that each client receives a customized solution that is efficient, reliable, and aesthetically pleasing.

ATZ provides ongoing maintenance and support services for capsule elevators, ensuring that they continue to operate efficiently and safely over time. These services include regular inspections, cleaning, and repairs, as well as upgrades to keep the elevator system up-to-date with the latest technology..

- ATZ's capsule elevators are designed with a sleek and modern look, making them a perfect fit for high-end buildings such as hotels, shopping malls, and corporate offices

- With advanced technologies such as VVVF drive and microprocessor-based control system, ATZ's capsule elevators offer a smooth and comfortable ride.,



MANUAL DOOR ELEVATORS

ATZ offers expert installation services for manual door elevators, which are a reliable and cost-effective option for low-rise buildings. These elevators are particularly suited for residential and small commercial spaces, as they offer simple and easy access between floors.

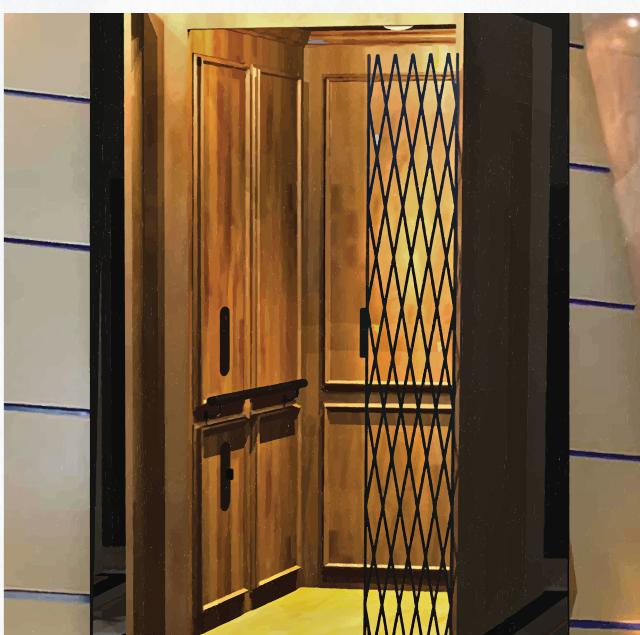
ATZ's manual door elevators are designed to be durable and long-lasting, with a range of finishes available to ensure the elevator matches the building's aesthetic. Furthermore, these elevators are energy-efficient, which translates to lower operational costs over time.



Telescopic Door



Swing Doors



Collapsible Door

- ATZ's manual door elevators are a great option for those looking for an economical lift system. They are generally less expensive than automatic door elevators and require less maintenance, making them a popular choice for low-rise buildings.

- ATZ's manual door elevators can be customized to fit specific building requirements. From size and capacity to cabin finishes and door options, the lift can be tailored to suit the client's needs and preferences.

HOME ELEVATORS

ATZ's installation service for home elevators provides clients with a luxurious and convenient lift system that is designed to enhance the accessibility and value of their homes. These elevators are ideal for homeowners who want to improve mobility and add value to their properties.

ATZ's home elevators are designed to be stylish and luxurious, with a range of finishes and options available to complement any home décor. The elevators are also designed to be space-saving, with compact hoistways that save valuable space in homes.

- ATZ's home elevators are designed to fit comfortably in smaller spaces, making them perfect for homes or apartments with limited space while still offering all the safety and comfort features of larger elevators.

- ATZ's home elevators come in a variety of customizable designs to match any home decor. Customers can choose from a range of materials and finishes to create a unique elevator that complements the style of their home.



DUMBWAITER ELEVATORS

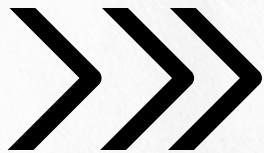
ATZ's installation service for dumbwaiters provides clients with a reliable and efficient lift system that is designed to transport goods and supplies between floors. These elevators are commonly used in restaurants, hotels, hospitals, and other commercial and residential buildings.

ATZ's dumbwaiters are designed to be energy-efficient, with advanced features such as regenerative drives that use energy generated during operation to power other building systems. The elevators are also designed to be low-maintenance, with minimal downtime and long service life.

- ATZ's dumbwaiter elevators are designed to occupy minimal space while providing efficient vertical transportation of goods.

- ATZ's dumbwaiter elevators can be customized to suit the specific needs of the user. They are available in various sizes, load capacities, and finishes.

SMART ELEVATORS



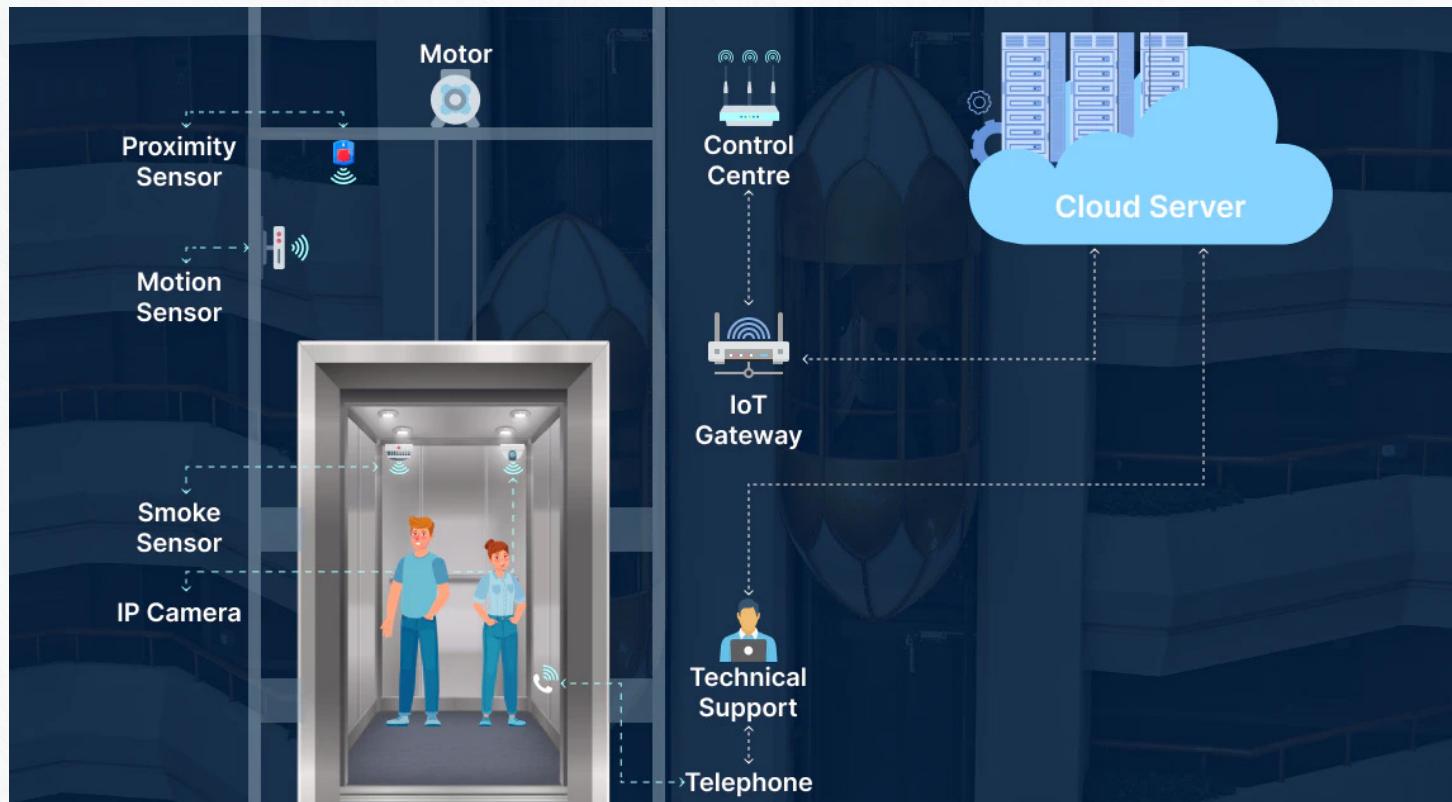
ATZ's installation service for Smart Elevators offers advanced features that provide a seamless, efficient and personalized experience for passengers. These elevators are equipped with the latest technology to improve safety, energy efficiency and convenience.

ATZ's Smart Elevators use advanced technology, such as machine learning and artificial intelligence, to optimize elevator performance and efficiency. This includes features such as predictive maintenance, which can detect issues before they become problems and prevent downtime, as well as destination control, which groups passengers based on their destination floor to reduce wait times and improve traffic flow.

- ATZ's Smart Elevators are equipped with advanced destination dispatch system. This system uses real-time information about passenger traffic and elevator capacity to calculate the most efficient elevator route and assign the appropriate elevator to each passenger. This results in reduced wait times, increased passenger throughput and improved energy efficiency.

- ATZ's Smart Elevators are also designed to be user-friendly and easy to operate, with intuitive controls and clear signage that make it easy for passengers to navigate the elevator system. This can improve the overall passenger experience and help to build a positive reputation for the building or facility.

The Smart Elevators are equipped with high-speed, energy-efficient motors and regenerative braking systems, which can convert the kinetic energy generated during braking into usable electricity. This not only reduces energy consumption but also helps to lower operating costs.



TRACTION ELEVATORS VS. HYDRAULIC VS. MRL ELEVATORS

Traction elevators are powered by an electric motor that drives cables and pulleys, allowing them to move at high speeds and handle large loads. They are typically found in high-rise buildings, where they can efficiently transport people and goods between floors.

However, the installation of traction elevators requires a dedicated machine room to house the motor and control equipment, which can take up a considerable amount of space. Additionally, they tend to be more expensive than other types of elevators due to their complex mechanical systems.

Hydraulic elevators, on the other hand, use a hydraulic pump to move the elevator cab. This makes them ideal for low-rise buildings, where their relatively slower speed and lower weight capacity are less of an issue.

Hydraulic elevators do not require a separate machine room, which can make them more space-efficient and cost-effective than traction elevators. However, they can be noisier due to the hydraulic pump's operation, and their maintenance costs can be higher.

Machine room-less (MRL) elevators combine the best features of both traction and hydraulic elevators. They are powered by a gearless motor, similar to traction elevators, but do not require a separate machine room. This makes them more space-efficient and cost-effective than traction elevators while also being quieter than hydraulic elevators.

MRL elevators are typically found in mid-rise buildings, where their medium speed range is well-suited to handle moderate traffic. However, their weight capacity may not be as high as that of traction elevators, making them less suitable for very heavy loads.

In conclusion, the choice between traction, hydraulic, and MRL elevators depends on the building's height, usage, and space limitations. Traction elevators are ideal for high-rise buildings, while hydraulic elevators are more suitable for low-rise buildings. MRL elevators provide a compromise between the two and are ideal for mid-rise buildings. ATZ Elevators offers a wide range of elevator solutions to cater to the diverse needs of its clients, ensuring high-quality products and exceptional service.

ELEVATOR TYPE	DRIVE SYSTEM	MACHINE ROOM	SPEED RANGE	TRAVEL HEIGHT	SPACE REQUIRED	ENERGY EFFICIENCY	NOISE LEVEL	COST
TRACTION	GEARLESS	REQUIRED	1-10 m/s	UP TO 300M	LARGE	HIGH	LOW	EXPENSIVE
HYDRAULIC	HYDRAULIC	OPTIONAL	1 m/s	UP TO 25M	SMALL TO MEDIUM	MEDIUM	MEDIUM	AFFORDABLE
MRL	GEARLESS	NOT REQUIRED	1-10 m/s	UP TO 100M	SMALL	HIGH	LOW	AFFORDABLE