

# THE ELEVATOR WITH A COMPACT MACHINE ROOM

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KONE MiniSpace<sup>™</sup>

# 100 YEARS OF ELEVATOR EXPERTISE AT YOUR SERVICE

KONE is the industry leader in elevator and escalator innovation. We have a long history of improving our customers' businesses and are Dedicated to People Flow<sup>™</sup>, creating the optimal solution to move people in your buildings efficiently, safely, and in comfort for generations to come.

## KONE MiniSpace $^{\mathrm{M}}$ – a versatile elevator with a compact machine room

KONE elevators continue to set the industry standard. KONE MiniSpace elevators combine the KONE EcoDisc<sup>®</sup> motor with a compact machine room. KONE MiniSpace is ideal for passenger transportation in offices, hotels, and residential buildings of up to 63 stories.

KONE MiniSpace is versatile and reliable. Excellent ride comfort, a power-saving gearless drive, compact size, high efficiency, and low heat loss are the key features that have made this elevator the solution of choice in many of today's most prominent tall buildings. In addition, group control solutions meet the intense traffic demands of modern commercial buildings.

### Less space, faster construction

With KONE MiniSpace, the machine room is simply an extension of the elevator shaft, making it easier and more cost-efficient to install. The compact KONE EcoDisc motor can even be lifted inside the elevator shaft. For more information, turn to page 10.

### **KEY BENEFITS**

- Machine room needs only 40% of the space of a conventional traction elevator's machine room
- Lower construction costs
- Impressive energy savings
- High-quality interior designs
- Full service throughout your building's lifecycle

#### Impressive energy savings

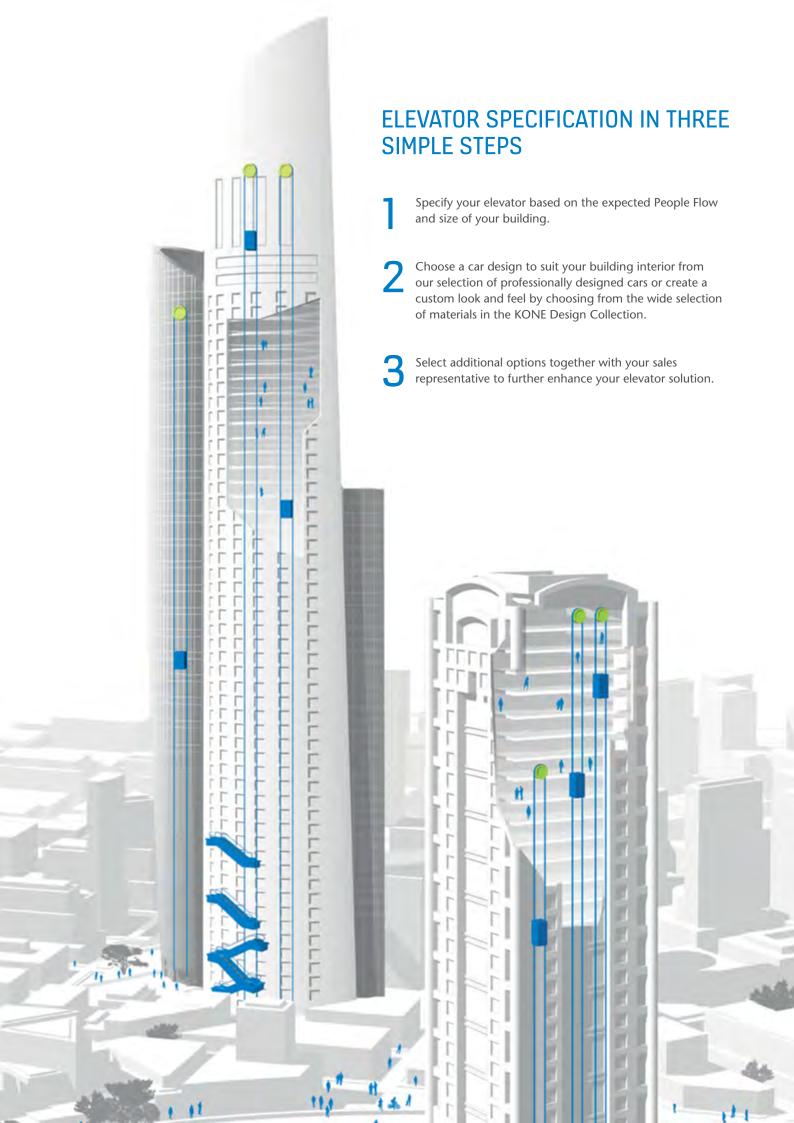
KONE MiniSpace elevators consume less energy and result in lower thermal losses than traditional machines. Find out how on page 6.

#### Attractive interior design

Our elevator design concepts are the work of renowned professionals and designers, who unite attractive interiors with practical durability. See examples on page 8.

## Excellent service throughout your building's lifecycle

KONE offers full service throughout your building's lifecycle. Our expertise in traffic analysis means your building will have the right elevator capacity to ensure smooth People Flow. We also offer flexible KONE Care<sup>™</sup> maintenance solutions and modernisation services to keep things running smoothly. Read more on page 12.



# THE KONE MINISPACE<sup>™</sup> ADVANTAGE

The secret behind the KONE MiniSpace solution is the permanent magnet, gearless KONE EcoDisc® motor. KONE EcoDisc weighs less than half of a conventional geared traction machine and is approximately twice as efficient. The compact KONE EcoDisc hoisting motor needs only 40% of the space compared with a conventional traction elevator machine room.

### A smooth and quiet ride

With the low rotational motor speed of KONE MiniSpace you get smooth ride quality and comfort. The V3F variable-frequency drive ensures a superior acceleration/ deceleration profile, better floor-to-floor travel times, and precision leveling. The end result is a ride experience that will set your building apart.

### A focus on quality and safety

Quality is one of the key drivers at KONE. High quality people flow solutions enable people to move smoothly, safely, comfortably, and efficiently. Reliable products maximise the performance of our customers' buildings. Our commitment to quality covers the entire product lifespan, from manufacturing and installation to ongoing maintenance.

### Industry standards and requirements

All KONE manufacturing units are ISO 14001 certified and meet all elevator industry standards and requirements, including:

- GB7588-2003 (EN81-1:1998)
- Singapore CP2 Code
- EN81-20
- EN81-72
- ISO 25745
- GOST codes



#### KONE MINISPACE ELEVATOR RANGE

Maximum travel	Up to 63 floors and 210 meters of travel
Maximum load	Up to 2000 kg transport
Maximum speed	Up to 4.0 m/s
Group size	Up to 8 cars in one elevator group

# TAKING ECO-EFFICIENCY TO NEW HEIGHTS

Save energy and costs. It is a simple calculation with impressive results. KONE MiniSpace<sup>™</sup> elevators, powered by the KONE EcoDisc<sup>®</sup> hoisting motor, consume less energy than other gearless elevators. KONE EcoDisc also creates less thermal losses than traditional machines, which brings direct savings in cooling and ventilation costs.

But the hoisting motor is not the only thing that can reduce the total energy consumption of an elevator. KONE has analysed every function and option in order to reduce the total energy consumption.



The eco-efficient KONE EcoDisc hoisting system

### A green hoisting system

The KONE EcoDisc<sup>®</sup> hoisting machine made DC gearless and energy-hungry geared hoisting machines obsolete. The KONE EcoDisc permanent magnet synchronous machine, together with a vector-controlled drive system and energy regeneration options, provides the highest total efficiency and minimises both mechanical and electrical losses.

### Further energy savings with standby mode

Lights, signalisation and ventilation can consume a considerable amount of energy even when the elevator is not moving. In a residential elevator this can represent a considerable portion of yearly energy costs. KONE offers the following options to minimise energy consumption:

- 1. Automatic car light operation turns off the lights when the car is not in use and on again when the car is called.
- 2. Corridor illumination control automatically controls the light on the destination floor.
- 3. The power stage of the drive is set to sleep mode when not in use.
- 4. Signalisation displays are dimmed when not juse.
- 5. The car fan is turned off when the elevator is not in use.

### **Regenerative drive**

When the car is descending with a heavy load (or ascending with a light load), it contains potential energy. The regenerative drive recovers this energy, saving up to 30% of the total energy consumed by a typical 13-person KONE elevator.

### Eco-efficient car lighting

Surprisingly, the car lighting can account for up to 40% (1100 kWh) of an elevator's energy consumption. Halogen spots have been replaced with eco-efficient, long-lasting LED and modern fluorescent lighting technology. The lights are optimised for maximum efficiency and natural color saturation. LED lights last up to 10 times longer than traditional halogen bulbs and use up to 80% less energy.

# AWARD-WINNING DESIGN

THAT HELPS YOUR BUILDING **STAND OUT** 

## WHAT SETS KONE DESIGN **APART**

Easy selection of car interiors A collection of 28 functional and visually appealing designs created by KONE's award winning design professionals.

# 2 The most flexible and versatile offering

80 different materials and accessories that can be combined freely and used in all elevator products, for both new buildings and modernisation projects.

The most innovative materials The combination of unique textured, patterned, and 3D-effect wall materials with novel lighting solutions creates a stunning visual effect.

4 Award-winning design KONE's elevator and signalisation design concepts have received both Red Dot and Good Design awards.



### **KONE DESIGN COLLECTION**

When you're designing a building that people will call home, the elevator you choose should complement your building's look and feel, and make your building attractive to potential residents. Your elevator also needs to be functional - it should be accessible for all, well lit, userfriendly, easy to clean, and resistant to wear and tear.

The new KONE Design Collection – created by our awardwinning design team - offers you a versatile set of contemporary, themed interiors to choose from.

You can also create your own unique look and feel by mixing and matching our wide range of materials and accessories.

For more design inspiration take a look at the complete KONE Design Collection and use the KONE Car Designer tool together with a KONE sales representative.





## SIGNALISATION DESIGNED TO IMPROVE USER EXPERIENCE IN BUILDINGS



Info screen



Media screen

Our wide range of signalisations are designed to give passengers a great elevator experience with every trip. As well as adding the finishing touches to your elevator's interior, they make using the elevator even easier and more convenient for passengers.

KONE signalisations available for KONE MiniSpace are KDS 50, KDS 330 and KDS D.

# FASTER INSTALLATION WITH LOWER COSTS

The KONE MiniSpace<sup>™</sup> solution not only saves space and energy throughout its lifetime, but it also saves money during construction.

### Easy and eco-efficient installation

The whole installation process is both safer and faster than with a traditional elevator installation. KONE has devised scaffold-less installation methods using special tools to erect the elevator. KONE has defined 5 Site Absolutes for what needs to be done on the building site before elevator installation can begin. When these requirements are met, the installation is uninterrupted and requires minimal or no assistance from the builder.

### **Construction Time Use elevators**

KONE's Construction T ime Use elevators (CTUs) enable safer, more weatherproof, and faster transportation of people and goods on building sites during the construction phase compared with an exterior hoist. CTU elevators are simply the permanent elevators equipped with temporary signalisation and protective materials so they can be used during construction. They can save hundreds of manhours every day. After completion of your project, KONE CTU elevators can be quickly converted into the building's permanent elevators.

### Groundbreaking KONE JumpLift concept

Exterior hoists have been used for over 40 years on construction sites, but there are growing concerns about their safety and efficiency. To overcome these concerns, KONE has developed an advanced elevator, the KONE JumpLift, which increases safety on the construction site, improves cost-efficiency, and speeds up construction work.

The KONE JumpLift uses the building's permanent shaft during construction as soon as the first floors have been completed. It has a temporary machine room that moves upwards in the shaft as construction work progresses.

When the building's structure is finished, the switch over to use as the permanent elevator can be done quickly by installing the final machinery, signalisation, and the material surfaces of the elevator car and landing doors.

## HOW KONE MINISPACE SPEEDS UP CONSTRUCTION

- Minimal or no support required from builder during lift installation (this is subject to completion of the Site Absolutes)
- Scaffold-less installation
- Construction Time Use elevators and the KONE JumpLift provide fast and safe weatherproof transportation



# SEAMLESS EXPERIENCES FOR SMARTER BUILDINGS

KONE'S ADVANCED PEOPLE FLOW INTEGRATES EQUIPMENT AND DEVICES INTO ONE HOLISTIC SMART BUILDING SOLUTION. THE RESULT IS A SEAMLESS USER EXPERIENCE FROM FRONT DOOR TO FINAL DESTINATION WITH LESS WAITING, AND INCREASED COMFORT, CONVENIENCE, AND SECURITY.

### ACCESS

- Smooth people flow and improved security with KONE Access – our access control system for elevators, turnstiles and building doors
- Easy to adapt if your needs change, with flexible, modular solutions
- Simplified planning, installation, and operation with one system from one partner
- Freedom of choice with possibility to integrate KONE Access for elevators with any third party access control system in the building

### DESTINATION

- Increased industry-leading traffic handling performance with KONE Destination
- Increased comfort and convenience with clear guidance and intelligent passenger grouping
- User-friendly and attractive user interfaces including innovative touchscreens and a new smartphone application
- Smooth, non-disruptive modernisation of existing elevators with immediate performance and efficiency gains

### INFORMATION

- Information and advertisements displayed in lobby and/ or cars on the stylish KONE Media Screen, with quick, convenient content management and remote updating
- Rapid information channel for facility managers and service providers to communicate safety and other buildingrelated information to tenants and visitors
- Improved passenger guidance during building changes or construction work
- Stylish design matches KONE signalisation equipment for a consistent look and feel

### MONITORING

- Easy remote monitoring, configuration, and management of elevators and escalators from a single location through KONE E-Link<sup>™</sup>
- Accurate real-time data available instantly on transportation demand, traffic performance, and elevator capacity
- Comprehensive reporting, including archiving of performance data for analysis and troubleshooting
- Remote shutdown of equipment enables energy savings during low-demand periods

# ALL NEW SERVICES TAILORED TO YOUR NEEDS

We will work with you to build a customised solution and provide an exceptional customer experience from day one.

## ESSENTIALS

Are there essential activities that need to be carried out to comply with legislation? We can cover all basic maintenance tasks to ensure compliance and increase the lifecycle of your equipment.

Service visits based on usage

- Choose when we come
- Advance booking of visits and more



### REPAIRS AND BREAKDOWNS

Do you want to increase the uptime of your equipment? Our offering covers a range of options designed to provide peace of mind.



Callout coverage

Varied levels of repair coverage

Response times and service hours and more

### PERFORMANCE

Is optimising performance a key requirement for your building? We have options to ensure you get the most out of your equipment.

vailability guarantees

24/7 Connected Services

Asset management and more



## COMMUNICATION AND INTERACTIONS

Do you need to stay up to date on the status of your equipment? We have a range of online tools to keep you informed, no matter where you are.

management

Contra	ct

KONE Online™

- ] KONE Mobile™
- and more

KONE CARE<sup>™</sup> 24/7 CONNECT

With KONE Care 24/7 Connect, we can now better predict, maintain and take action before equipment breakage. For you, this means improved safety, full transparency and ease of mind. Because if something were to happen, we'd already know.

## ADDED INTELLIGENCE – IT'S PREDICTIVE

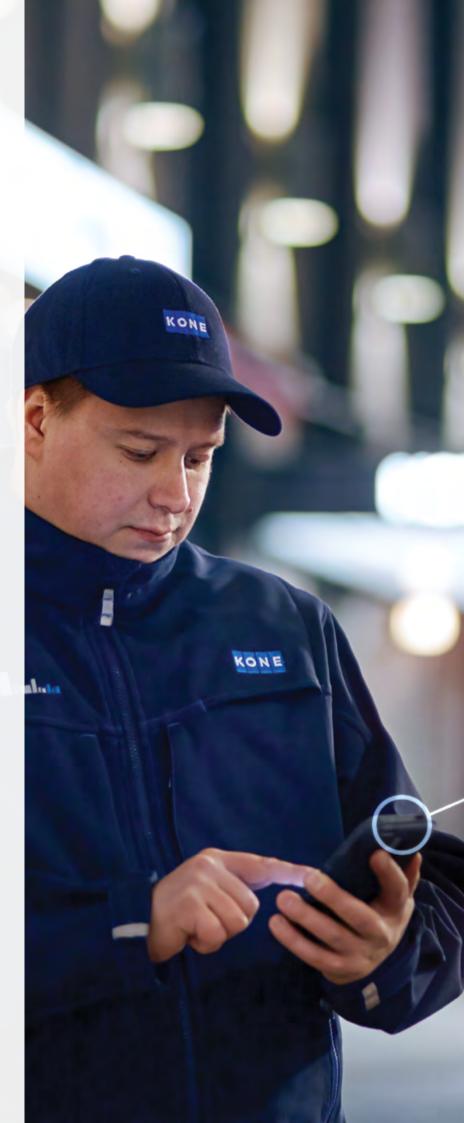
Using the latest technology, the elevators can now speak their minds and keep technicians one step ahead of what's happening. The result? Fewer malfunctions, faster repairs and greater peace of mind for you.

## ADDED SAFETY – KEEPING WATCH 24/7

Elevators are on duty 24/7, and so are we. If a problem occurs, detailed information tells us what's causing the issue and how urgent the matter is. By keeping watch round-the-clock, we can respond quickly in case of sudden malfunctions.

## ADDED TRANSPARENCY – YOU'LL STAY IN THE KNOW

If critical faults are detected and a technician is alerted, you'll be informed immediately. When you're fully aware of what's going on, you can plan ahead and budget for future maintenance needs.



# WHAT DO I GET WITH KONE CARE™ 24/7 CONNECT?

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### INSIGHTS INTO THE HEALTH OF YOUR ASSETS

Trustworthy, real-time data and insights on your asset health and maintenance needs.

### TARGETED AND TAILORED MAINTENANCE

More targeted and tailored maintenance service based on the actual condition of your equipment.

# NOTIFICATIONS AND REPORTS

Summary of your connected equipment portfolio and equipment status, and information on any urgent issues.

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# **KONE REFERENCES**



Millennium Residence, Bangkok, Thailand



Ashok Towers, Mumbai, India



Interchange 21, Bangkok, Thailand



Capital Plaza, Abu Dhabi, UAE



Princess Tower, Dubai



The MET, Bangkok, Thailand



Shanghai IFC, Shanghai, China



Skyline Mansion, Shanghai, China



Nokia Headquarters Business Building, Beijing, China



Financial Street, Beijing, China



Shanghai Golden Landmark, Shanghai, China



National Grand Theatre, Beijing, China



Al Dar Headquarters, Abu Dhabi, UAE





## Contact us to discuss your project needs.

# Our engineers and sales consultants are always available to answer questions and provide speedy quotations no matter the job.

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