# MORE COMFORT IN LESS TIME

KONE

KONE NanoSpace<sup>™</sup> elevator

# EVERYTHING IMPROVED IN AS LITTLE AS TWO WEEKS

Modernizing an elevator by replacing the entire system is one of the most time and cost-efficient ways of increasing the value of your building while simultaneously improving its convenience, safety, and accessibility. A modern, ecoefficient elevator with a larger car improves quality of life for all tenants.

With the groundbreaking KONE NanoSpace<sup>™</sup> solution, replacing your existing elevator is quicker and easier than ever before. Our highly efficient four-step replacement process and new technological innovations mean that your elevator can be up and running in as little as two weeks\* – by far the quickest elevator replacement process on the market. In addition to being very quick to install, the KONE NanoSpace delivers industry-leading space efficiency, best-in-class comfort, and excellent eco-efficiency – everything your building needs to meet and exceed standards for years to come.

\*KONE professionals will perform a site survey to estimate the actual time needed for individual elevator replacements.

# **KEY BENEFITS**



### MINIMIZED TIME

Your new elevator can be installed and operational in as little as two weeks.



# MAXIMIZED SPACE

Up to 50% more space inside the elevator with no changes to the shaft.



# **OPTIMIZED COMFORT**

A smooth, quiet ride, accurate leveling, and no disturbance to surrounding residences.



# **ELEVATED ECO-EFFICIENCY**

Can bring significant improvements in energyefficiency compared to your current solution.



# **ENHANCED SAFETY**

KONE NanoSpace<sup>™</sup> fulfills the requirements for the European elevator standards EN81-20 and EN81-50, bringing you all the benefits in safety and comfort, that these codes stand for.







## KEEPING TENANTS INFORMED DURING MODERNIZATION PROJECTS

- Improved on-site communication during installation via a bulletin board and informative letters
- Tenants are kept up to date about schedule, contact details, safety, and the type of work being carried out
- Better information availability adds value and allows tenants to plan ahead
- Fewer enquiries about progress as information is displayed on the board

# A COMPLETELY NEW APPROACH TO ELEVATOR REPLACEMENT

The KONE NanoSpace<sup>™</sup> is a completely new approach to machine room-less (MRL) elevator design for fullreplacement situations. Both the equipment and the processes we follow to install it have been completely rethought in order to deliver maximum benefit in the shortest possible time.

#### What makes the KONE NanoSpace so special?

This groundbreaking new replacement solution introduces a completely new way of managing the friction needed for hoisting, and replaces the traditional large counterweight with thin balancing weights. We have also separated the hoisting function from the elevator suspension. The highly compact design and leading-edge technology enable up to 50% more space inside the elevator with no changes to the shaft, as well as excellent leveling, ride comfort, and eco-efficiency.

# A CLOSER LOOK AT THIS GROUNDBREAKING SOLUTION

#### New hybrid hoisting technology

Th revolutionary KONE HybridHoisting<sup>TM</sup> system combines belt and rope technologies in a completely new way – the belt moves the elevator and the ropes suspend the car in the shaft.

#### Space-saving design

2

Two thin balancing weights, which allow adaptive balancing and optimization of energy consumption, are located next to the guide rails – allowing more space for a larger car in the same shaft.

#### 3 Proven motor technology

The KONE NanoSpace is powered by the KONE EcoReel<sup>™</sup> motor, which uses the same energyefficient technology as the highly successful KONE EcoDisc<sup>®</sup>, but with an even more compact design.



#### **TECHNICAL SPECIFICATION**

Max. speed	
Max. load	
Max. floors	
Max. travel	
Group size	

1.0 m/s 240-630 kg 16 stops 40 m Simplex/Duplex

KONE NanoSpace elevator fulfills the requirements of the European elevator standards: EN81-20 EN81-50 Code-compliancy brings an enhanced standard for safety and comfort.

### DID YOU KNOW?



The KONE NanoSpace<sup>™</sup> is code-compliant from the day one. This equals to a reduced risk in incidents and a better value for your investment. You can feel at ease -knowing your elevator is in line with the latest codes and standards.

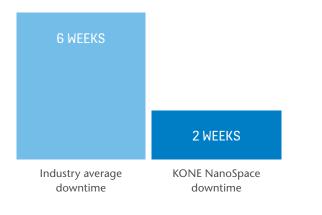
# QUICK AND EASY ELEVATOR REPLACEMENT

Every step of our installation process has been designed to make full-replacement projects run as smoothly as possible for both you and the building's tenants. Your new space-efficient KONE NanoSpace™ elevator will be ready to receive its first passengers in as little as two weeks, minimizing the inconvenience caused by elevator downtime.

#### What makes installation so quick?

Every detail of the innovative new technology and streamlined process has been optimized to make full replacement as fast as possible. There are fewer components, and because the large, heavy parts are installed at the bottom of the shaft, they don't need to be transported upwards inside the building. Our proven scaffoldless installation method is extremely efficient and ensures the highest standards of safety.

\*KONE professionals will perform a site survey to estimate the actual time needed for individual elevator replacements.



### FULL-REPLACEMENT DOWNTIME





### IN-DEPTH PLANNING AND EXPERT SUPPORT

- We provide information about the relevant regulations, permits, and possible subsidies. A KONE representative can also participate in residents' meetings to explain the process.
- We carry out a detailed site survey to ensure that the proposed modernization solution meets the needs of your building exactly and to assess the potential for shortest possible downtime.
- Your KONE representative will help you select an elevator car design that matches your building's architecture and interior design.
- An experienced KONE project manager provides quality checks and supervision throughout the process.

# 2 EFFICIENT INSTALLATION AND COMMUNICATION

- Robust planning and project management ensure that dismantling and installation are as fast and smooth as possible, and cause minimal disturbance.
- KONE technicians install protection for floors and walls to prevent any damage to the building and to increase safety for tenants.
- Tenants are kept fully informed about the schedule and progress of the work via KONE InfoMod information boards in the lobby.
- Continuous training, site audits, installation safety passports, and proven methods ensure maximum safety. We also provide guidance for tenants on safe routes through the building.

# **3** QUALITY-ASSURED COMPLETION AND HANDOVER

- All our elevators undergo rigorous safety, performance, and ride-comfort tests before they are handed over.
- We provide clear user guidelines for your new elevator. We also offer ongoing support after handover to answer any questions.
- We ensure that all components from existing elevators are removed and recycled or, where this is not possible, properly disposed of.

# WORLD-CLASS MAINTENANCE SERVICES

- With KONE Modular Based Maintenance<sup>™</sup> we create a unique maintenance plan for your elevator, ensuring that the right components are maintained at the right time.
  - Our service technicians are part of a global team of over 15,000 dedicated professionals with world-class technical skills, always close by and ready to respond quickly to your maintenance needs.









# MORE SPACE MAKES A BIG DIFFERENCE

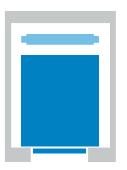
KONE NanoSpace<sup>™</sup> is the most space-efficient full-replacement elevator solution available. When you replace your existing elevator with KONE NanoSpace, the size of the elevator car can be increased by as much as 50%. If your current elevator can only carry four passengers, your replacement KONE NanoSpace could carry six.

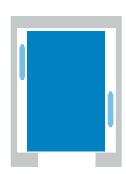
As well as carrying more people, a bigger car with a wider doorway also improves accessibility and makes it easier to transport baby strollers, wheelchairs, furniture, and other large objects. And because there's no need for a machine room, the elevator can also serve penthouse apartments that have been added to the top floor – or you can use the space for an extra storage room.

### SPACE-EFFICIENT TECHNOLOGY

- Innovative hoisting system with compact components, such as thinner balancing weights and smaller pulleys, requires less space in the shaft
- Compact safety devices further improve pit and headroom space efficiency
- Automatic 4-panel slim doors allow for a wider door opening
- Automatic 4-panel folding car door for the most narrow shafts and cars

### **ELEVATOR CAR SIZE**





Your old car

KONE NanoSpace





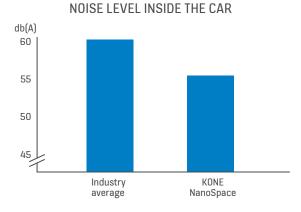


# ENJOY NEW LEVELS OF COMFORT

The KONE NanoSpace<sup>™</sup> incorporates a range of innovations that are designed to deliver excellent comfort, with a bigger car, wide-opening automatic doors, smooth leveling, and silent operation.

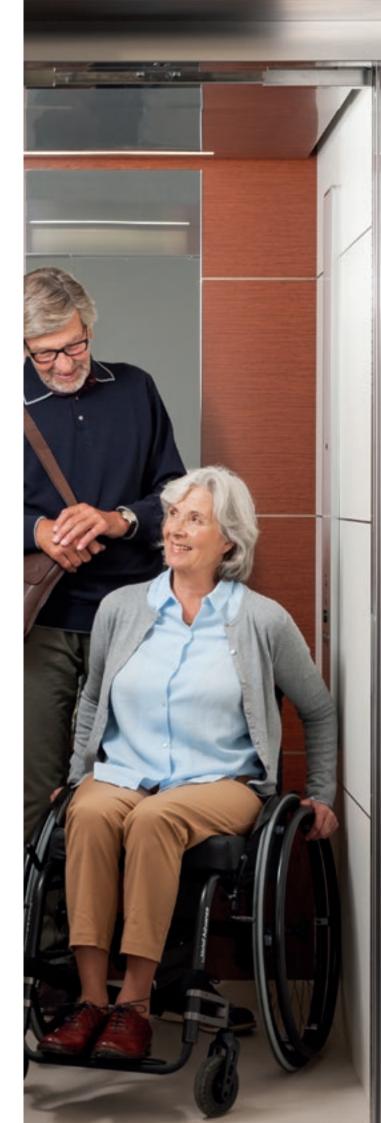
#### Unique ride-quality testing service

KONE provides a comprehensive ride-quality testing service prior to handover as standard for all its elevator installations. Your elevator will not be handed over for use before it passes this test, which measures noise and vibration levels inside the car. This thorough testing ensures optimal passenger comfort and further reduces unplanned maintenance callouts.



# THE INNOVATIONS BEHIND THE SMOOTH, COMFORTABLE RIDE

- **Centralized hoisting** reduces vibrations inside the car and minimizes disturbance to surrounding residences.
- Innovative load-weighing device ensures an easy, steady elevator start.
- Pit-based machinery means that noise-producing components, such as the elevator's hoisting motor, are located far away from residences, further minimizing disturbance in the building.
- Two-way communication system puts passengers in direct contact with the KONE Customer Care Center, which operates 24 hours a day, seven days a week.



# THE ECO-EFFICIENT CHOICE

The biggest environmental impact of an elevator over its lifetime relates to the electricity used to power it. KONE NanoSpace delivers excellent performance and reliability while minimizing energy consumption. Everything from the hoisting system and motor to the lighting inside the car is designed to reduce the amount of energy the elevator consumes, which translates into significantly lower running costs.

### **ECO-EFFICIENT INNOVATIONS**

- Energy-efficient hoisting system with separate suspension and driving functions helps to achieve absolute traction, meaning less energy is required to move the elevator.
- KONE EcoReel<sup>™</sup> permanent magnet synchronous motor powers the elevator to maximize energy efficiency.
- Low-energy LED lighting cuts power consumption and has a much longer lifetime than traditional lighting solutions.
- Energy-efficient solutions reduce the equipment power consumption when it is not in use, providing substantial energy savings.



# MODERN, VERSATILE DESIGNS

Choose an elevator interior from our Modern Simplicity, Classic Chic, or Industrial Chic range and give your building a whole new look. These fresh, clean design themes from our awardwinning in-house design team will complement residential buildings of all ages and styles. Pick your favorite, or mix and match materials, lighting, and accessories for a unique design.

#### **Modern Simplicity**

These cars combine laminate with durable floor materials, modern, welcoming lighting, and user-friendly signalization for a design that adds a fresh touch to your building.

#### **Classic Chic**

Classic Chic designs combine stainless steel or laminate wall materials with rubber floors to create a classic yet modern interior that perfectly complements stylish residential buildings.

#### **Industrial Chic**

A chic, functional car that blends clean stainless steel with stylish lighting to create the perfect match for sleek, modern residential buildings.

KONE car interiors and signalization have won both red dot and GOOD DESIGN awards.



reddot design award winner 2012





#### MODERN SIMPLICITY 10001

CEILING: RL20, Snowberry White (L209) | WALL B and D: Snowberry White (L209) | WALL C: L207 Lime Green (L207) | FLOOR: Smoke Gray (RC20) | HANDRAIL: HR64 Brushed stainless steel



#### MODERN SIMPLICITY 10002

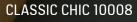
CEILING: CL94, Cloud White (P50) | WALL B & D: Snowberry White (L209) | WALL C: Cherry Oak (L204) | FLOOR: Shell Gray (RC22) | HANDRAIL: HR64 Brushed stainless steel





### **CLASSIC CHIC 10007**

CEILING: CL88, Cloud White (P50) | WALL B,C,D: Hazel Oak (L202) | FLOOR: Chalk White (SF30) | SKIRTING: Asturias Satin (F) | HANDRAIL: HR61 Brushed stainless steel



CEILING: CL88, Cloud White (P50) | WALL B,C,D: Shangri-La Gold (SS1) | FLOOR: Diorite Black (SF32) | HANDRAIL: HR64 Golden brushed stainless steel





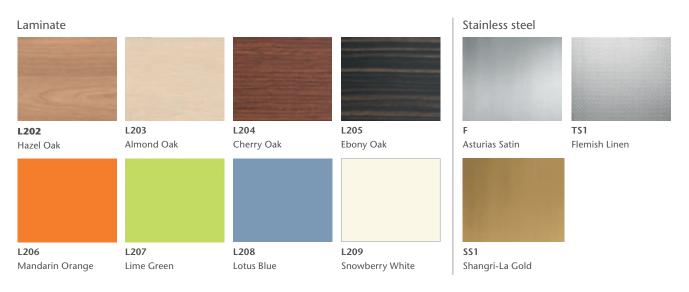
#### **INDUSTRIAL CHIC 10005**

CEILING: RL20, Snowberry White (L209) | WALL B, C and D: Ebony Oak (L205) | FLOOR: Shell Gray (RC22) | HANDRAIL: HR61 Brushed stainless steel

CEILING: RL20, Snowberry White (L209) | WALL B,C,D: Flemish Linen (TS1) | FLOOR: Coral Red (RC23) | HANDRAIL: (HR64) Brushed stainless steel

# **MIX AND MATCH**

## WALL MATERIALS

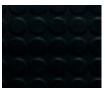


# **FLOOR MATERIALS**

#### Rubber



RC20 Smoke Gray



RC22 Shell Gray



#### Stone

RC6



Chalk White

#### Vinyl



VF25 Flakey Gray



SF31

Grainy Sand



SF32 Diorite Black

RC23

Coral Red

#### Local flooring



# CEILINGS\*



#### **CL88** Light source: LED Finishes: F Asturias Satin P50 Cloud White







RL20 Light source: LED Finishes: L209 Snowberry White

#### \*Please note, that the amount and positioning of led lights is subjected to the car dimensions.

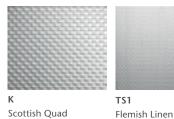
## DOOR AND FRONT WALL MATERIALS

KONE Renova™ Slim car and landing doors. 4-panels, centre opening. KONE ReNova flat folding car door with an interface for existing swing landing door.

#### Stainless steel



Asturias Satin Other







Shangri-La Gold



Aqua Weave

TW1\*/\*\*

- Not available for ReNova flat folding door
- \*\* Not available for elevator front wall

**Z**\* Zinc coated steel



R30\*\*

Nordic Gray, coated steel





HR61 Finish: F Asturias Satin

#### SKIRTING

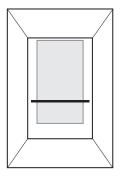


SK2 Asturias Satin



HR64 Finish: F Asturias Satin EN81-70 compliant

### **MIRROR**



Partial width, medium height Fixed dimensions EN81-70 compliant



HR64 Finish: SS1 Shangri-La Gold EN81-70 compliant

## **IN-CAR TENANT DIRECTORY**



TD1 A4 size Frame finishes: Satin, Mirror





KSS D20 Multiple color options

KSS 280

#### 15



KONE provides innovative and eco-efficient solutions for elevators, escalators, automatic building doors and the systems that integrate them with today's intelligent buildings.

We support our customers every step of the way; from design, manufacturing and installation to maintenance and modernization. KONE is a global leader in helping our customers manage the smooth flow of people and goods throughout their buildings.

Our commitment to customers is present in all KONE solutions. This makes us a reliable partner throughout the life cycle of the building. We challenge the conventional wisdom of the industry. We are fast, flexible, and we have a well-deserved reputation as a technology leader, with such innovations as KONE MonoSpace<sup>®</sup>, KONE NanoSpace<sup>™</sup> and KONE UltraRope<sup>®</sup>.

KONE employs close to 52,000 dedicated experts to serve you globally and locally.

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