

Dedicated to People Flow™

KONE

THE MACHINE-ROOM-LESS ELEVATOR

KONE N MonoSpace®

Your trusted elevator partner

With over 100 years of experience in the elevator business and a strong track record in safety, KONE is your trusted partner dedicated to ensuring smooth People Flow® in your building. We revolutionized the industry in 1996 with the world's first machine room-less elevator – the KONE N MonoSpace® – and the energy-efficient KONE EcoDisc® hoisting machine. Our proven track record, including nearly half a million KONE EcoDisc installations worldwide, speaks for itself.

We have listened to our customers and carefully analyzed each and every part of our industry-leading elevator solution, and renewed it from top to bottom. Everything we did best, we've made even better.



3 REASONS TO CHOOSE KONE

1 Best in class eco-efficiency that cuts the carbon footprint of your building

28% more energy-efficient than before thanks to the upgraded KONE EcoDisc, centralized hoisting, and more advanced standby solutions

A-class energy certification for the whole elevator range



A STRONG TRACK RECORD

- **9 out of 10** KONE customers recommend us as a partner
- **More than 100** years of experience in the elevator industry
- **Nearly half a million** KONE EcoDisc elevator installations worldwide
- **Over 800,000** elevators and escalators in service
- **34,000** dedicated experts worldwide

2 Industry-leading ride comfort for the best possible passenger experience

Quality guaranteed through ride-comfort testing of all elevators before handover – a service unique to KONE

Quiet and smooth operation, and accurate leveling enabled by:

- The renewed KONE EcoDisc hoisting machine, brakes, and centralized hoisting
- An improved car structure and sound-isolated guide shoes

3 Award-winning design that helps your building stand out

Easy selection of car interiors from a collection of functional and visually appealing designs created by KONE's award-winning design professionals

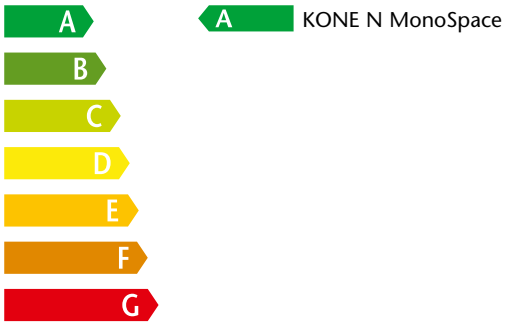
The industry's most flexible and versatile offering, with over 100 materials and accessories, offering millions of possible combinations

The most innovative materials and lighting solutions

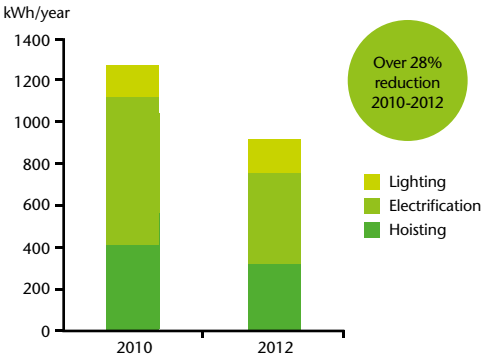
Best-in-class eco-efficiency

THAT CUTS YOUR BUILDING'S CARBON FOOTPRINT

KONE Elevators' energy efficiency performance according to VDI 4707



KONE elevator's energy consumption



The basis for the calculation is an elevator speed of 1 m/s, a load of 1000 kg, 150,000 starts/year, a travel height of 12 m and 5 floors

At KONE we have always been renowned for our revolutionary eco-efficient technology. Our renewed elevator solution improves upon our already industry leading energy consumption levels by an additional 28%.

- Our volume products were the **first in the industry to receive an A-class energy rating** according to the VDI 4707 guideline – the benchmark for elevator energy efficiency. We now offer this A-class energy efficiency for the whole elevator range.
- Installing an eco-efficient KONE elevator solution can also help in achieving green **building accreditations** such as **LEED** or **BREEAM** certification.

SAVE ENERGY, SAVE SPACE

As well offering world-class energy efficiency, because the new KONE N MonoSpace® also helps you save valuable space.

- The highly compact elevator equipment – including the KONE EcoDisc hoisting machine and other mechanical structures – now requires even less height and width in the shaft.
- This **frees up valuable floor space** or allows for a more spacious, higher-capacity car.
- When replacing an existing elevator, the new KONE N MonoSpace **eliminates the need for a machine room** and **maximizes elevator capacity** within the existing shaft dimensions.

1 More efficient hoisting machinery

The completely renewed KONE EcoDisc® hoisting motor and highly efficient drive system delivers even better energy efficiency, helping to reduce both operating costs and your building's carbon footprint.

2 Eco-efficient regenerative drive

Our latest regenerative drive recycles energy for immediate reuse within the building and cuts consumption by up to 20%.

3 Long-lasting LED lighting

As well as being 80% more efficient than halogen lighting, LED lighting also lasts 10 times longer.

4 More advanced standby solutions

Upgraded standby solutions power down the equipment when it is not in use, providing substantial energy savings.



U.S. based business magazine Forbes has ranked KONE the 39th most innovative company in the world. KONE is also the only elevator and escalator company that has made it to the top 50.

Industry-leading ride comfort

FOR THE BEST POSSIBLE PASSENGER EXPERIENCE

Every aspect of the upgraded KONE MonoSpace® is designed to add real value to your building and maximize comfort, safety, and convenience for passengers. The renewed KONE EcoDisc® hoisting machine is complemented by a wide range of other upgrades that are designed to deliver industry-leading ride comfort year after year.

1 Renewed machinery and brakes

- The new, highly reliable motor control system further improves ride comfort, with smooth acceleration and deceleration, and highly accurate car leveling.
- The renewed braking system ensures a comfortable, safe, quiet ride, while also minimizing noise transfer to the surrounding areas.
- The new brake test functionality automatically checks brake condition daily. This helps to further improve safety and reliability.

2 Redesigned hoisting system for minimized vibration and noise

- Centralized, low-friction hoisting cuts noise and vibration, improving comfort for passengers and minimizing disturbance to the surrounding areas.

3 Improved car structure with even better noise isolation

- The rigid structure and superb noise isolation of the renewed elevator car ensure a smooth, quiet ride.
- Isolated guide shoes, constructed using low-noise sliding material, further help to reduce noise.



ALL ELEVATORS TESTED FOR RIDE QUALITY – A SERVICE UNIQUE TO KONE

- KONE provides a comprehensive ride quality testing service 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 quality and reliability testing prior to handover further reduces the need for unplanned maintenance callouts.

Award-winning design

THAT HELPS YOUR BUILDING STAND OUT



WHAT SETS KONE DESIGN APART

1 Easy selection of car interiors

A collection of 52 functional and visually appealing designs created by KONE's award-winning design professionals.

2 The most flexible and versatile offering

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

3 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 signalization design concepts have received both Red Dot and Good Design awards.







KONE DESIGN COLLECTION

Regardless of the type of building you are developing, the elevator you choose should complement your building's look and feel, create a lasting impression on passengers, and make your building attractive to potential tenants. Your elevator also needs to be functional – it should be accessible for all, well lit, user-friendly, easy to clean, and resistant to wear and tear.

The new KONE Design Collection – created by our award-winning 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.

GOOD DESIGN

reddot design award
winner 2012

2 Good Design awards
4 Red Dot design awards

ACCESSORIES DESIGNED TO IMPROVE USER EXPERIENCE



1



2



3



4

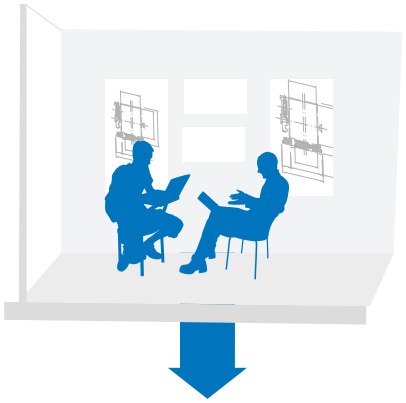
Our wide range of accessories is designed to give passengers a great elevator experience with every trip.

As well as adding the finishing touches to your elevator's interior, they make using the elevator even easier and more convenient for passengers.

1. Car operating panel with memorable animal patterns to help children find their floor (KDS D).
2. Designed for senior housing, this car operating panel uses clear, highly visible numbers (KDS D).
3. Our new KSS 280 signalization series is durable, easy to use, and cost competitive.
4. KONE InfoScreen makes it easy to communicate important building information to tenants and visitors.

Supporting you every step of the way

Choose a partner with over a century of experience in delivering pioneering elevator solutions. Get expert advice from professionals and enjoy the peace of mind that comes with comprehensive support. KONE is with you every step of the way – from planning and design through installation and maintenance to modernization – for the entire life cycle of your building.



1 Expert design and planning services

- Expert planning advice helps you specify the optimal elevator solution for your building requirements.
- Easy-to-use online design tools save you time and effort during the design process by allowing you to create CAD drawings, 3D BIM models, and custom car interiors.
- Energy consumption calculations for every individual elevator solution.



2 Safe and efficient installation

- Highly efficient scaffoldless installation methods result in considerable cost savings for our customers and minimize disruptions to other construction work.
- Strict quality criteria for each phase of installation – ensuring “first time right every time”.
- Continuous training, site audits, safety passports, and proven methods ensure maximum site safety.
- Eco-efficient installation processes maximize waste recycling and minimize the use of solvents.



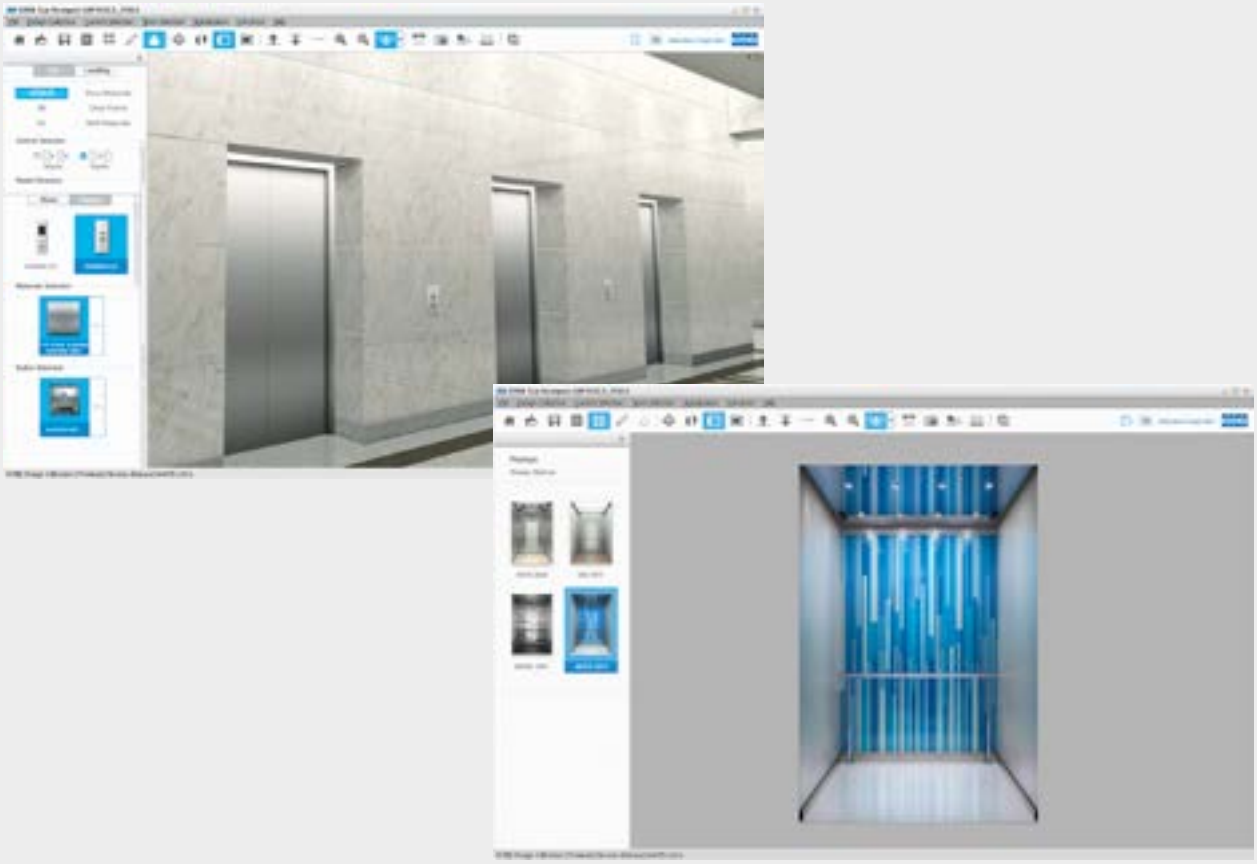
3 Quality assurance at handover and professional maintenance

- We are the only company to provide in-depth ride quality testing of each elevator before hand over.
- Our elevators are known for their reliability, and have an average availability rate of 99%.
- Our global spares center stocks over 150,000 parts and offers 24-hour delivery for the most commonly requested parts.
- Preventive KONE Care™ maintenance solutions – including a comprehensive new online service-reporting system – make it easier to monitor and budget for elevator maintenance.

Take advantage of our easy-to-use tools for planning your elevators and designing a car that will fit your building's look and feel perfectly.

KONE Elevator toolbox – now including BIM models

- With the **KONE Elevator Toolbox** you can create a detailed elevator specification online and create customized CAD drawings for preliminary planning.
- **KONE Building Information Modeling (BIM) models** make it easier and quicker for architects to prepare digital elevator designs. Included in the elevator toolbox, these models are compatible with most common project documentation systems and include the latest KONE elevator specifications. Once your elevator design is ready, you can **send the specifications direct to a KONE sales representative** ready for tendering or ordering.



KONE Car Designer – now including new designs, materials, and accessories

- Create your own elevator car design together with a KONE sales representative with the **KONE Car Designer**.
- **Choose a theme** from the KONE Design Collection, or **mix and match** your choice of materials, lighting, and accessories **to create a totally new look**.
- Once your design is ready, the KONE sales representative will send it to you as a PDF so you can share it with colleagues.

No compromises on safety

When you choose KONE, you choose peace of mind. Safety is the starting point for every KONE solution, and all our solutions include the latest innovations in safety technology as standard.

Our completely renewed KONE MonoSpace elevator solution includes a wide range of features that are designed to both maximize safety for passengers and make it easy for you to inspect the condition of your equipment to ensure that it operates safely at all times.

- Daily **automatic brake testing**
- **Proven rope technology** that is easy to inspect
- A curtain of light to ensure **safe entry and exit**
- **Accurate landing** that eliminates risk of tripping
- **24/7 contact** with the **KONE service center** in case of emergency

KONE also demonstrates its strong commitment to safety by working closely with the people who rely on our products to provide a safe, comfortable experience in their daily lives. Our annual safety events give people the opportunity to familiarize themselves with how elevators operate and how to use an elevator safely.

STANDARDS-COMPLIANT MANUFACTURING

Standards-compliant manufacturing

- All KONE manufacturing units are ISO 14001 certified and meet all relevant elevator industry standards and requirements





Awards and certifications

10/2011 KONE features for the first time in the Carbon Disclosure Project's (CDP) Nordic Carbon Disclosure Leadership Index.

08/2011 KONE is the only elevator and escalator company to make the top 50 of US-based business magazine Forbes global list of the 100 most innovative companies in the world.

07/2010 KONE becomes the first company in the elevator and escalator industry to achieve an A-class energy rating according to the VDI 4707 standard, for the KONE MonoSpace® elevator.

06/2009 KONE awarded a Prime Award for Eco-Business by Prime Magazine. Co-organized by Prime Magazine and the Business Environment Council, the award is given to companies who demonstrate outstanding achievements in environmental protection.

01/2008 KONE chosen as one of the 2007 Annual Top 10 International Brands for China Energy-Efficient Buildings by the China Ministry of Construction

12/2007 KONE awarded 2007 Best Real Estate Supplier at the China International Real Estate & Architect Fair (CIHA F). KONE MonoSpace® recommended as one of the 2007 Recommended Components & Products for Energy-Saving Construction

12/2005 KONE MonoSpace cited by Legambiente Lombardia (Environmental Coalition of Lombardy), the government of the Region of Lombardy, the Technical University of Milan, and Bocconi University for environmental friendliness at the fifth annual Friend of the Environment Awards for Innovation. These awards are given for Efficiency in Consumption and Eco-design: solutions for sustainable development.

06/2005 100,000th KONE MonoSpace elevator installed in the National Grand Theater, Beijing, China

07/2003 KONE wins Premio Quartrium Award for originality, Spain

03/2000 KONE solutions chosen for Thermo-Staete, the most energy-efficient office building in the Netherlands

04/1999 KONE wins Construmat 1999 Prize for Innovative Technology, Barcelona, Spain

02/1999 KONE solutions chosen for "Eyecatcher", a Swissbau showcase green building, Switzerland

03/1998 KONE wins Electrical Industry's (SE T) Annual Award, Finland

10/1997 KONE wins Top Prize for Innovation at the SAIE '97 Fair, Bologna

06/1997 KONE wins the Grand Prix '97 at the CONECO fair, Bratislava, Slovakia

09/1996 KONE wins the Grand Prix at the Building Fair, Prague

References



Beijing Olympic village, China



The River, Bangkok, Thailand



Blue Ridge, Pune, India



Sunrise Point, Kolkata, India



Royal Children's Hospital, Melbourne, Australia



Hongqiao International Airport and Transportation Junction, Shanghai, China



Somerset@313, Singapore



Celebrity Eclipse

Planning data

Car and wall dimensions									
	Car		Landing doors					NOM	
Load kg	BB x DD mm	Car type	Door type	Door width LL	Door raw opening LR	BB mm	DD mm	Shaft width WW	Shaft depth WD
320	900 x 1000	SEC	SO	700	900	900	1000	1450	1390
320	900 x 1000	SEC	SO	800	1000	900	1000	1500	1390
400	950 x 1100	SEC	SO	700	900	950	1100	1500	1490
400	950 x 1100	SEC	SO	800	1000	950	1100	1500	1490
450	1100 x 1150	SEC	SO	700	900	1100	1150	1650	1540
450	1100 x 1150	SEC	CO	800	1000	1100	1150	1750	1440
450	1150 x 1100	SEC	CO	800	1000	1150	1100	1750	1390
450	1200 x 1100	SEC	CO	800	1000	1200	1100	1750	1390
630	1400 x 1100	SEC	CO	800	1000	1400	1100	1980	1430
630	1400 x 1100	SEC	CO	900	1100	1400	1100	1950	1430
630	1100 x 1400	SEC	CO	800	1000	1100	1400	1750	1690
630	1100 x 1400	SEC	CO	900	1100	1100	1400	1950	1690
800	1400 x 1200	SEC	CO	800	1000	1400	1200	1950	1560
800	1200 x 1450	SEC	CO	800	1000	1200	1450	1750	1740
800	1350 x 1400	SEC	CO	800	1000	1350	1400	1900	1690
800	1350 x 1400	SEC	CO	900	1100	1350	1400	1950	1690
800	1100 x 1650	SEC	CO	800	1000	1100	1650	1750	1940
800	1100 x 1650	SEC	CO	900	1100	1300	1650	1950	1940
900	1300 x 1500	SEC	CO	800	1000	1350	1500	1840	1790
900	1350 x 1600	SEC	CO	800	1000	1350	1600	1890	1890
900	1350 x 1600	SEC	CO	900	1100	1350	1600	1950	1890
900	1350 x 1600	TTC	CO	800	1000	1350	1600	1890	2010
900	1350 x 1600	TTC	CO	900	1100	1350	1600	1950	2010
900	1400 x 1500	SEC	CO	800	1000	1400	1500	1940	1790
900	1500 x 1400	SEC	CO	800	1000	1500	1400	2040	1690
900	1500 x 1400	SEC	CO	900	1100	1500	1400	2040	1690
900	1500 x 1400	TTC	CO	800	1000	1500	1400	2040	1810
1000	1600 x 1500	SEC	CO	900	1100	1600	1500	2140	1830
1000	1100 x 2100	SEC	CO	900	1100	1100	2100	1950	2390
1000	1100 x 2100	TTC	CO	900	1100	1100	2100	1950	2510
1000	1600 x 1400	SEC	CO	900	1100	1600	1400	2140	1780
1000	1600 x 1400	TTC	CO	900	1100	1600	1400	2140	1810
1000	1400 x 1600	SEC	CO	900	1100	1400	1600	1950	1890
1000	1400 x 1600	TTC	CO	900	1100	1400	1600	1950	2010
1000	1450 x 1500	SEC	CO	900	1100	1450	1500	2000	1830
1000	1100 x 2000	SEC	CO	900	1100	1100	2000	1950	2290
1000	1200 x 2000	SEC	CO	900	1100	1200	2000	1950	2290
1000	1500 x 1600	SEC	CO	900	1100	1500	1600	2050	1890
1000	1500 x 1600	SEC	CO	1000	1200	1500	1600	2150	1890
1150	1800 x 1450	SEC	CO	1000	1200	1800	1450	2340	1800
1150	1800 x 1450	SEC	CO	1100	1300	1800	1450	2350	1800
1150	1700 x 1500	SEC	CO	1000	1200	1700	1500	2240	1830
1150	1300 x 2100	SEC	CO	1000	1200	1300	2100	2150	2390
1150	1500 x 1800	SEC	CO	900	1100	1500	1800	2040	2090

Overhead and Pit dimensions																						
		Pit depth PH (mm)			Overhead SH* (mm)																	
Persons/ load (kg)	Door height (mm)				Car interior height 2200 mm			Car interior height 2300 mm			Car interior height 2400 mm			Car interior height 2500 mm			Car interior height 2600 mm			Car interior height 2700 mm		
		1.0 m/s	1.6 m/s	1.75 m/s	1.0 m/s	1.6 m/s	1.7 5 m/s	1.0 m/s	1.6 m/s	1.75 m/s	1.0 m/s	1.6 m/s	1.75 m/s	1.0 m/s	1.6 m/s	1.75 m/s	1.0 m/s	1.6 m/s	1.75 m/s	1.0 m/s	1.6 m/s	1.75 m/s
04/320 to 08/630	2100	1220	1350	1350	3580	3770	3790	3680	3870	3890	3780	3970	3990	3880	4070	4090	3980	4170	4190	4080	4270	4290
08/680 to 13/1000	2100	1220	1350	1350	3580	3770	3790	3680	3870	3890	3780	3970	3990	3880	4070	4090	3980	4170	4190	4080	4270	4290
15/1150	2100	1220	1350	1350	3580	3770	3790	3680	3870	3890	3780	3970	3990	3880	4070	4090	3980	4170	4190	4080	4270	4290

* With ceiling height 70 mm

Pit height (PH) and headroom height (SH)		
SH	Headroom height	3580 - 5000 mm
CH	Car clear height	2100 - 2700 mm
PH	Pit height	1150 - 2500 mm

Technical data							
Persons/load kg	Rated speed m/s	Riser fuses (w/o lighting(A))	Riser fuses for separate lighting (A)	Nominal line current (w/o lighting (A))	Max RMS acceleration line current (w/o lighting (A))	Standby power generator (KVA)	Thermal losses (KW)
8/630	1.0	3 x 16	3 x 16	10	13	9	0.52
8/630	1.75	3 x 20	3 x 16	15	23	15	0.56
10/800	1.0	3 x 20	3 x 16	12	16	11	0.56
10/800	1.75	3 x 25	3 x 16	19	28	18	0.6
13/1000	1.0	3 x 20	3 x 16	14	19	12	0.68
13/1000	1.75	3 x 25	3 x 16	22	31	20	0.73
15/1150	1.0	3 x 20	3 x 16	15	21	13	0.72
15/1150	1.75	3 x 32	3 x 16	26	36	24	0.46

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®, KONE EcoMod™ and KONE UltraRope™.

KONE employs on average 40,000 dedicated experts to serve you globally and locally.

KONE Corporation
www.kone.com

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