

Dedicated to People Flow™



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, as a standard



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

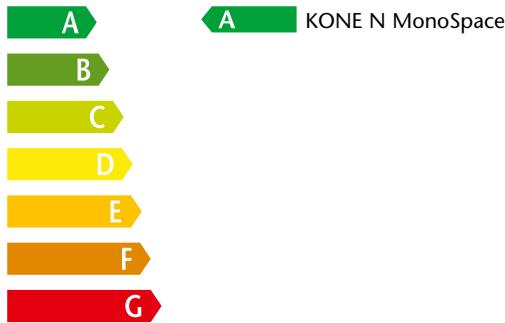
The industry's most flexible and versatile offering, with over 100 materials and accessories, offering millions of possible combinations

The most innovative materials and lighting solutions

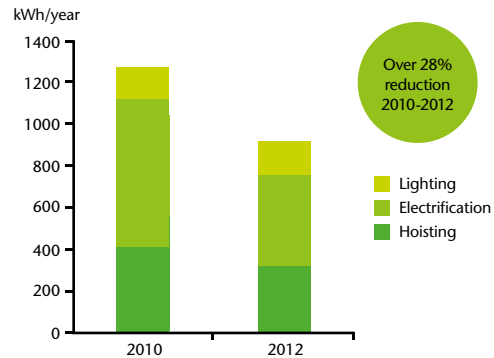
Industry-leading ride comfort

FOR THE BEST POSSIBLE PASSENGER EXPERIENCE

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 as standard.
- 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

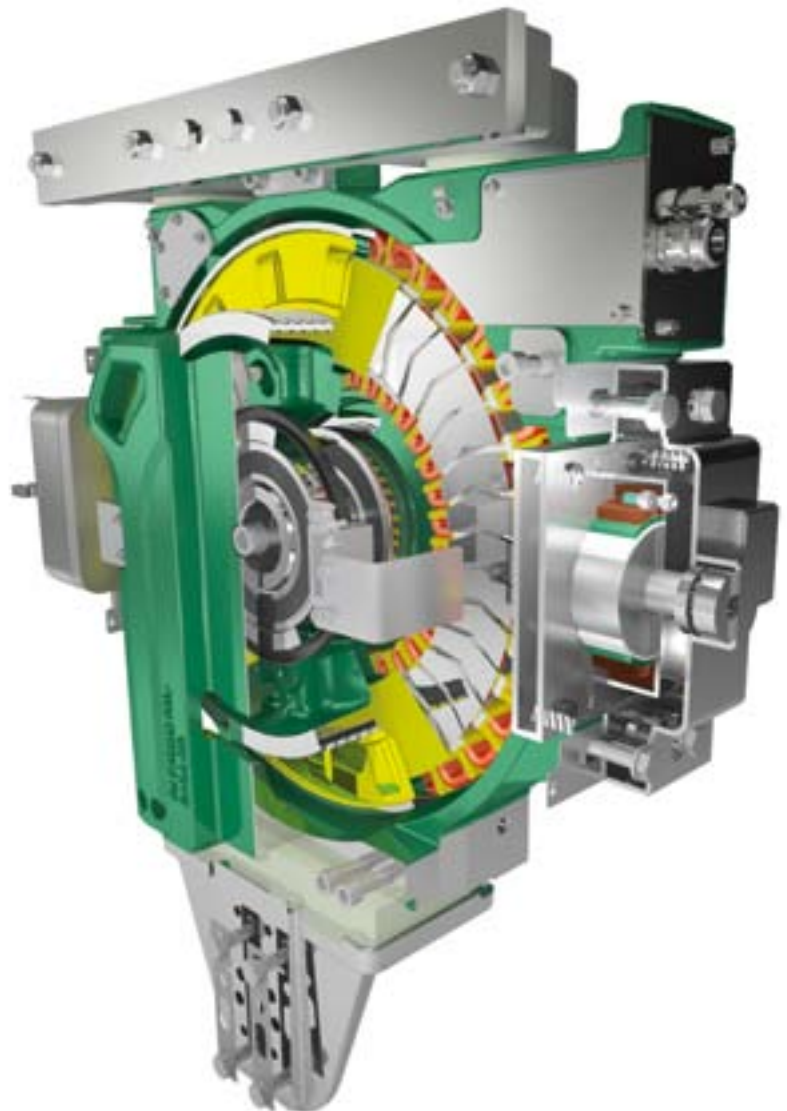
- Centralized, low-friction hoisting cuts noise and vibration, improving comfort for passengers and minimizing disturbance to the surrounding areas.

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.



reddot design award
winner 2012

2 Good Design awards
4 Red Dot design awards

ACCESSORIES DESIGNED TO IMPROVE USER EXPERIENCE



1



2



3



4

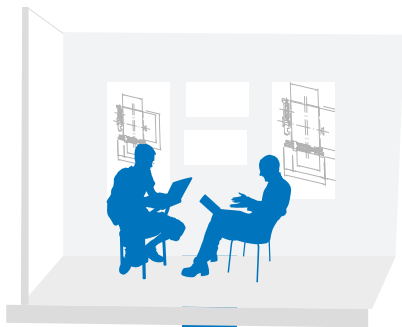
Our wide range of accessories is designed to give passengers a great elevator experience with every trip.

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.



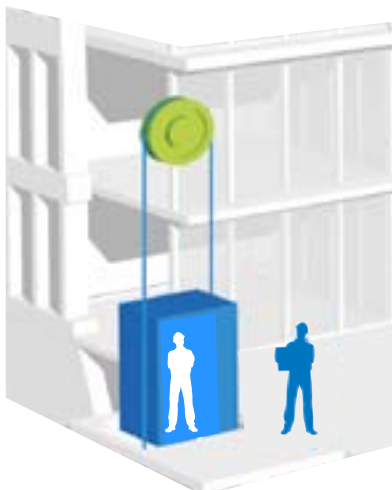
1 Expert design and planning services

- 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.



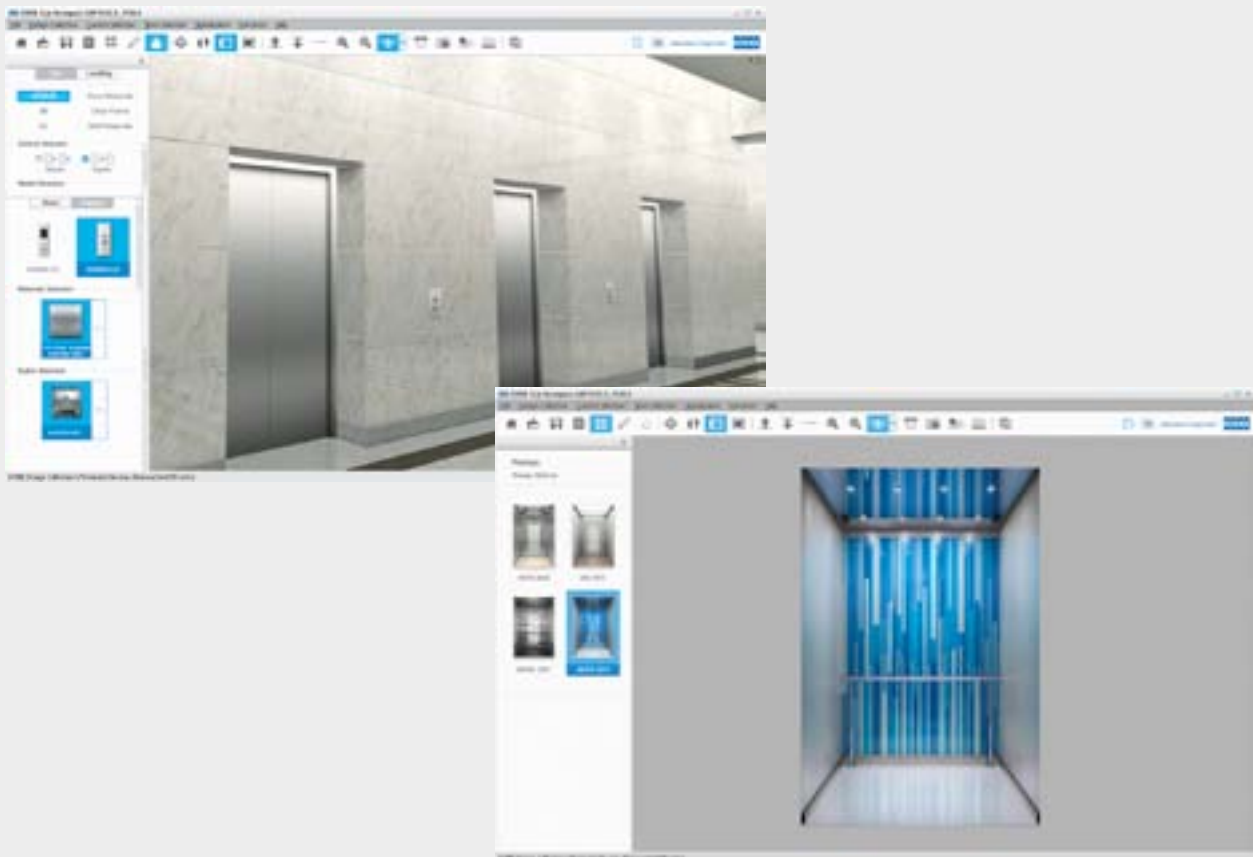
3 Quality assurance at handover and professional maintenance

- We are the only company to provide in-depth ride quality testing of each elevator before handover.
- 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
- **24/7contact** 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 VVW | Shaft depth WD |
| 320 | 900 x 1000 | SEC | SO | 700 | 900 | 900 | 1000 | 1450 | 1380 |
| 320 | 900 x 1000 | SEC | SO | 800 | 1000 | 900 | 1000 | 1500 | 1380 |
| 400 | 950 x 1100 | SEC | SO | 700 | 900 | 950 | 1100 | 1500 | 1480 |
| 400 | 950 x 1100 | SEC | SO | 800 | 1000 | 950 | 1100 | 1500 | 1480 |
| 450 | 1100 x 1150 | SEC | SO | 700 | 900 | 1100 | 1150 | 1650 | 1530 |
| 450 | 1100 x 1150 | SEC | CO | 800 | 1000 | 1100 | 1150 | 1750 | 1430 |
| 450 | 1150 x 1100 | SEC | CO | 800 | 1000 | 1150 | 1100 | 1750 | 1380 |
| 450 | 1200 x 1100 | SEC | CO | 800 | 1000 | 1200 | 1100 | 1750 | 1380 |
| 630 | 1400 x 1100 | SEC | CO | 800 | 1000 | 1400 | 1100 | 1950 | 1430 |
| 630 | 1400 x 1100 | SEC | CO | 900 | 1100 | 1400 | 1100 | 1950 | 1430 |
| 630 | 1400 x 1100 | TTC | CO | 800 | 1000 | 1400 | 1100 | 1950 | 1510 |
| 630 | 1400 x 1100 | TTC | CO | 900 | 1100 | 1400 | 1100 | 1950 | 1510 |
| 630 | 1100 x 1400 | SEC | CO | 800 | 1000 | 1100 | 1400 | 1750 | 1680 |
| 630 | 1100 x 1400 | SEC | CO | 900 | 1100 | 1100 | 1400 | 1950 | 1680 |
| 630 | 1100 x 1400 | TTC | CO | 800 | 1000 | 1100 | 1400 | 1750 | 1810 |
| 630 | 1100 x 1400 | TTC | CO | 900 | 1100 | 1100 | 1400 | 1950 | 1810 |
| 800 | 1400 x 1200 | SEC | CO | 800 | 1000 | 1400 | 1200 | 1950 | 1560 |
| 800 | 1200 x 1450 | SEC | CO | 800 | 1000 | 1200 | 1450 | 1750 | 1730 |
| 800 | 1350 x 1400 | SEC | CO | 800 | 1000 | 1350 | 1400 | 1900 | 1680 |
| 800 | 1350 x 1400 | SEC | CO | 900 | 1100 | 1350 | 1400 | 1950 | 1680 |
| 800 | 1100 x 1650 | SEC | CO | 800 | 1000 | 1100 | 1650 | 1750 | 1930 |
| 800 | 1100 x 1650 | SEC | CO | 900 | 1100 | 1300 | 1650 | 1950 | 1930 |
| 900 | 1300 x 1500 | SEC | CO | 800 | 1000 | 1350 | 1500 | 1900 | 1780 |
| 900 | 1350 x 1600 | SEC | CO | 800 | 1000 | 1350 | 1600 | 1900 | 1880 |
| 900 | 1350 x 1600 | SEC | CO | 900 | 1100 | 1350 | 1600 | 1950 | 1880 |
| 900 | 1350 x 1600 | TTC | CO | 800 | 1000 | 1350 | 1600 | 1900 | 2010 |
| 900 | 1350 x 1600 | TTC | CO | 900 | 1100 | 1350 | 1600 | 1950 | 2010 |
| 900 | 1400 x 1500 | SEC | CO | 800 | 1000 | 1400 | 1500 | 1950 | 1780 |
| 900 | 1500 x 1400 | SEC | CO | 800 | 1000 | 1500 | 1400 | 2050 | 1680 |
| 900 | 1500 x 1400 | SEC | CO | 900 | 1100 | 1500 | 1400 | 2050 | 1680 |
| 900 | 1500 x 1400 | TTC | CO | 800 | 1000 | 1500 | 1400 | 2050 | 1810 |
| 900 | 1500 x 1400 | TTC | CO | 900 | 1100 | 1500 | 1400 | 2050 | 1810 |
| 1000 | 1600 x 1500 | SEC | CO | 900 | 1100 | 1600 | 1500 | 2150 | 1810 |
| 1000 | 1600 x 1500 | TTC | CO | 900 | 1100 | 1600 | 1500 | 2150 | 1910 |
| 1000 | 1100 x 2100 | SEC | CO | 900 | 1100 | 1100 | 2100 | 1950 | 2380 |
| 1000 | 1100 x 2100 | TTC | CO | 900 | 1100 | 1100 | 2100 | 1950 | 2510 |
| 1000 | 1600 x 1400 | SEC | CO | 900 | 1100 | 1600 | 1400 | 2150 | 1760 |
| 1000 | 1600 x 1400 | TTC | CO | 900 | 1100 | 1600 | 1400 | 2150 | 1810 |
| 1000 | 1400 x 1600 | SEC | CO | 900 | 1100 | 1400 | 1600 | 1950 | 1880 |
| 1000 | 1400 x 1600 | TTC | CO | 900 | 1100 | 1400 | 1600 | 1950 | 2010 |
| 1000 | 1450 x 1500 | SEC | CO | 900 | 1100 | 1450 | 1500 | 2000 | 1810 |
| 1000 | 1100 x 2000 | SEC | CO | 900 | 1100 | 1100 | 2000 | 1950 | 2280 |
| 1000 | 1200 x 2000 | SEC | CO | 900 | 1100 | 1200 | 2000 | 1950 | 2280 |
| 1000 | 1500 x 1600 | SEC | CO | 900 | 1100 | 1500 | 1600 | 2050 | 1880 |
| 1000 | 1500 x 1600 | SEC | CO | 1000 | 1200 | 1500 | 1600 | 2150 | 1880 |
| 1150 | 1800 x 1450 | SEC | CO | 1000 | 1200 | 1800 | 1450 | 2430 | 1810 |
| 1150 | 1800 x 1450 | SEC | CO | 1100 | 1300 | 1800 | 1450 | 2430 | 1810 |
| 1150 | 1700 x 1500 | SEC | CO | 1000 | 1200 | 1700 | 1500 | 2330 | 1840 |
| 1150 | 1300 x 2100 | SEC | CO | 1000 | 1200 | 1300 | 2100 | 2150 | 2380 |
| 1150 | 1300 x 2100 | TTC | CO | 1000 | 1200 | 1300 | 2100 | 2150 | 2510 |
| 1150 | 1500 x 1800 | SEC | CO | 900 | 1100 | 1500 | 1800 | 2130 | 2080 |

Overhead and Pit dimensions

| Persons/load (kg) | Door height (mm) | Pit depth PH (mm) | | | Overhead SH (mm) | | | | | | | | |
|----------------------|---------------------|-------------------|---------|----------|--------------------------------|---------|----------|--------------------------------|--------|---------|--------------------------------|--------|---------|
| | | | | | Car interior height 2200 mm | | | Car interior height 2300 mm | | | Car interior height 2400 mm | | |
| | | 1.0 m/s | 1.6 m/s | 1.75 m/s | 1.0 m/s | 1.6 m/s | 1.7 5m/s | 1.0m/s | 1.6m/s | 1.75m/s | 1.0m/s | 1.6m/s | 1.75m/s |
| 04/320 to 08/630 | 2100 | 1220 | 1350 | 1350 | 3650 | 3850 | 3850 | 3750 | 3950 | 3950 | 3850 | 4050 | 4050 |
| 08/680 to 13/1000 | 2100 | 1220 | 1350 | 1350 | 3650 | 3850 | 3850 | 3750 | 3950 | 3950 | 3850 | 4050 | 4050 |
| 15/1150 | 2100 | 1220 | 1350 | 1350 | 3650 | 3850 | 3850 | 3750 | 3950 | 3950 | 3850 | 4050 | 4050 |

Pit height (PH) and headroom height (SH)

| | | |
|----|------------------|----------------|
| SH | Headroom height | 3650 - 5000 mm |
| CH | Car clear height | 2100 - 2400 mm |
| PH | Pit height | 1150 - 2500 mm |

Technical data

| Persons/load kg | Rated speed m/s | Riser fusers (w/o lighting(A)) | Riser fusers for separate lighting (A) | Nmonial light current (w/o lighting (A)) | Max RMS acceleration light current (w/o lighting (A)) | Standy power generator (KVA) | Thermal losser (KW) |
|--------------------|--------------------|-----------------------------------|--|--|---|------------------------------------|---------------------------|
| 8/630 | 1.0 | 3 x 16 | 3 x 16 | 11 | 12.7 | 8 | |
| 8/630 | 1.75 | 3 x 20 | 3 x 16 | 15 | 21 | 14 | |
| 10/800 | 1.0 | 3 x 20 | 3 x 16 | 13 | 16 | 11 | |
| 10/800 | 1.75 | 3 x 25 | 3 x 16 | 20 | 28 | 18 | |
| 13/1000 | 1.0 | 3 x 20 | 3 x 16 | 15 | 18 | 12 | |
| 13/1000 | 1.75 | 3 x 25 | 3 x 16 | 21 | 29 | 19 | |
| 15/1150 | 1.0 | 3 x 25 | 3 x 16 | 17 | 22 | 14 | |
| 15/1150 | 1.75 | 3 x 32 | 3 x 16 | 26 | 36 | 24 | |



KONE provides innovative and eco-efficient solutions for elevators, escalators and automatic building doors. 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 MaxiSpace™, and KONE InnoTrack™. You can experience these innovations in architectural landmarks such as Capital City in Moscow, Hongqiao Transport Hub in Shanghai, North LaSalle in Chicago and Tour First in Paris.

KONE employs on average 35,000 dedicated experts to serve you globally and locally in over 50 countries.

KONE Corporation
www.kone.com

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