

Dedicated to People Flow™



EVERY HOME DESERVES AN ELEVATOR

**KONE solutions for buildings
without an elevator**

Raising the residential standard

Installing an elevator in an existing residential building makes the building safer, more convenient and more accessible for residents and visitors of all ages, from babies in prams to elderly people. An elevator makes the building more attractive for new residents, and it enables elderly people to live in their own homes for longer.

For many families with children, or elderly couples, the safety and convenience of an elevator can make the difference between buying an apartment and looking elsewhere. So having an elevator in the building can raise its value – as well as the value of the individual apartments.

You can install a KONE elevator in almost any residential building. To help you get started, KONE provides extensive information about permits, subsidies and regulations. KONE also provides assistance every step of the way, from planning to installation to maintenance.





In the middle of spiral stairs



In the living area



In the middle of stairs



Elevator replaces existing stairs; new stairs placed outside the building

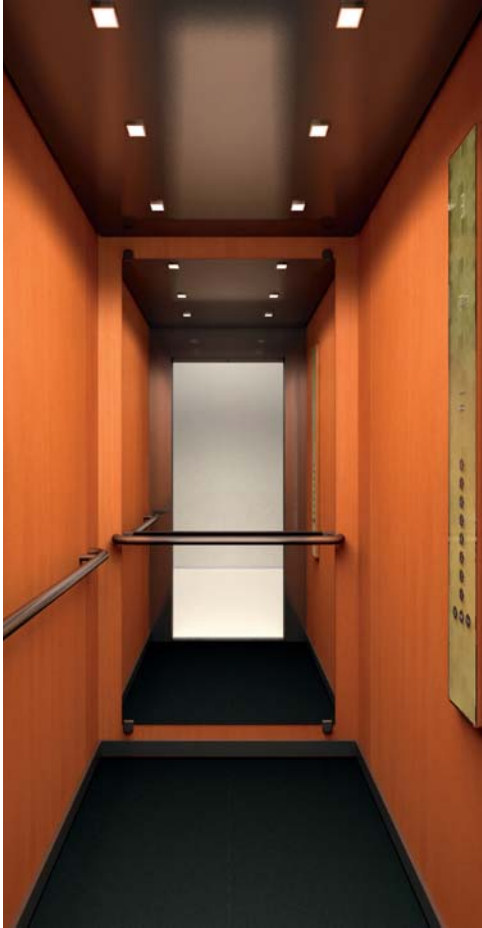
Structural and aesthetic integration

Proper placement

You can install a KONE elevator in just about any residential building. The first consideration is the shape and size of the stairwell.

The elevator can be installed inside the stairwell, with the stairs on both sides of it, or it can be beside the stairs. Another possibility is to extend the stairs outside the building, while the elevator replaces part of the staircase.

You can also install the elevator shaft attached to an outside wall of the building. In many cases the elevator shaft is built as a complete unit and then lifted into place. This can save time during construction, and there is less disturbance to the physical structure of the building.



KONE Design Collection car interiors allow quick and convenient selection.



With the Deluxe option available for KONE MonoSpace, you can choose any materials you like.



KONE Deco allows you to change the appearance of the elevator.

in your building

An aesthetically pleasing solution

A KONE elevator fully integrates with the style and architecture of your building, whether it was built in the 1970s, the 1930s or before that.

In order to make sure that the elevator fits harmoniously into your building, you can choose the shaft material to match your stairwell: concrete, steel, or a steel/glass combination. You can also select from many car interior materials, so that the walls and floor

of the elevator match the walls and floor of the lobby and landings. For example, in an older building, you might select wood laminate walls and a composite stone floor. In a more modern building you might choose stainless steel walls and handrails.

For the height of luxury, you can design a customized cabin. In order to match the materials of the lobby and landing floors and walls, you can choose wall and floor materials for the elevator interior.



Optimizing space and saving energy

KONE offers two elevator solutions for residential buildings without an elevator, the KONE MaxiSpace™ and the KONE MonoSpace®. Saving space is an important consideration, particularly in the stairwell. Both of these solutions are very space-efficient, which can lower construction costs. They also save money in the long run, since they are very energy efficient.

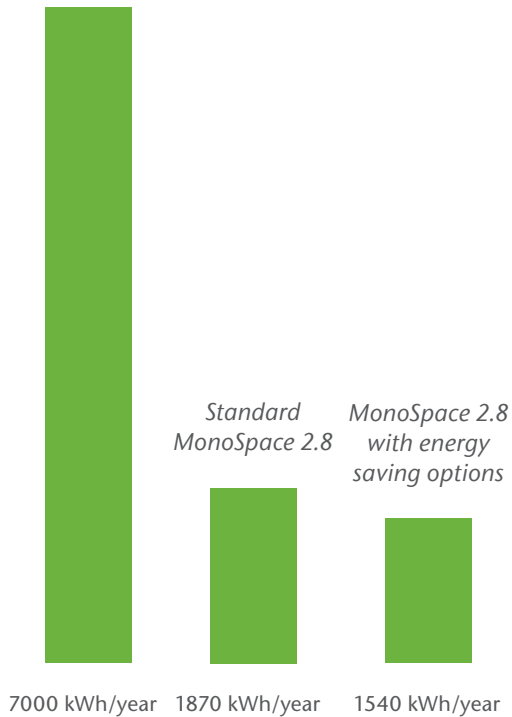
The **KONE MaxiSpace™** elevator solution saves space where it really matters – in the stairwell. It needs a very small pit (just 25 cm), very low headroom, and no machine room. Most importantly, because it is based on a KONE innovation that eliminates the need for a counterweight, it needs a smaller shaft. For a

standard-sized elevator car, the KONE MaxiSpace™ requires a shaft one-third smaller than for a conventional solution. This can be a very important consideration when space in the stairwell is limited.

The **KONE MonoSpace®** elevator is the solution that is usually used when the elevator is installed outside the building, though it can also be installed in the stairwell. Here space saving is not so critical, but the KONE MonoSpace® requires no machine room, so it can serve the top floor of the building without having a machine room above the roof.

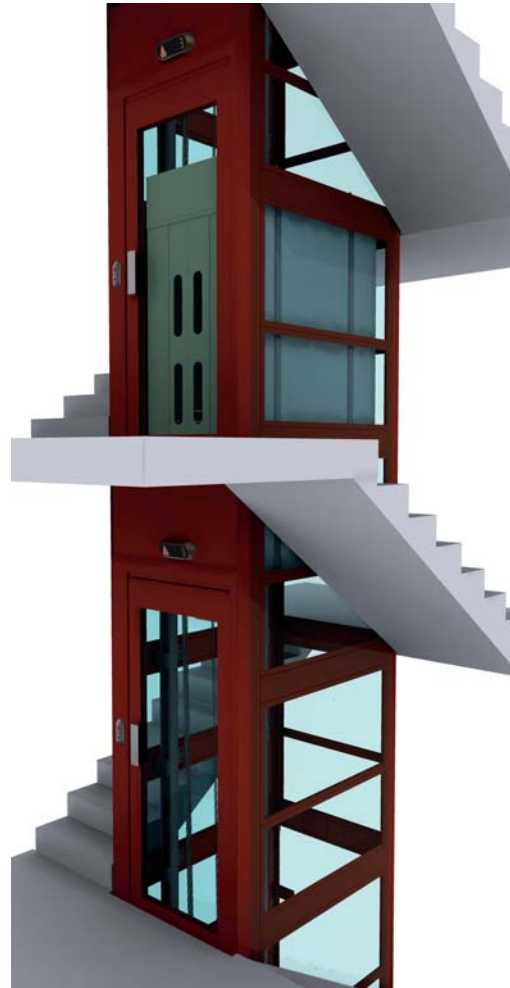
Average Energy Consumption

Hydraulic



Elevator speed of 1.0 m/s (0.63 for hydraulic), a load of 630 kg (8 persons) and 200,000 starts/year. Energy-saving options include energy regeneration, standby lighting and ventilation, modern LED lights, and Vector control drive.

MaxiSpace RS in a glass shaft



Saving money in the long run

In the long run, the biggest cost of an elevator is for the energy needed to run it. KONE MonoSpace® and MaxiSpace™ solutions are very economical in this respect. They are powered by the eco-efficient KONE EcoDisc® or the KONE PowerDisc™, which consume less than half as much energy as a conventional solution. You can save even more energy with additional eco-efficient solutions, such as LED lights, power regenerating systems and standby solutions that turn off the lights and ventilation when the elevator is not in use.

A typical hydraulic elevator in a residential building* uses about 4300 kWh a year. A KONE MaxiSpace™ elevator with 10:1 roping uses 2100 kWh a year. With the KONE MaxiSpace RS™, this can be reduced still further, to 1750 kWh a year. The carbon footprint is reduced by a similar amount.

*70,000 starts/year, 0.63 m/s, 10m average travel.



How to get started: A step-by-step guide

Decision making

Once you have made the decision to install an elevator in your building, KONE can coordinate the entire process from planning, permits and construction to installation and final inspections. This ensures that the project will be completed on time and on budget. No surprises and no unexpected costs. And you'll always know who to call if you have any questions.

To help you make an informed decision, we have collected information about regulations, permits and subsidies, both in the European Union and in individual European countries, on the KONE website. If you need more information, do not hesitate to ask.

Financing

Many European countries provide subsidies for buildings that invest in an elevator. In many cases these may be augmented by subsidies from municipal councils and the EU. These subsidies can amount to up to 70% of the total cost of the elevator.

Financing the project is usually done by getting bank loans which are paid back by the residents, often as part of their monthly service fee.



Planning

The project begins with a site survey by KONE, to determine what is the best solution and what is the best way to implement it. The process will be quite different depending on the solution chosen, for example if the elevator is in the stairwell or outside the building.

An architect and a structural engineer may be needed to design and plan the elevator shaft and the modifications to the building. This planning also includes possible structural supports and making sure the access ways are wide enough to provide for firefighters in case of an emergency.

This step also includes processing of permits, so that plans, calculations and designs are checked and approved by the relevant authorities.

Construction

KONE can adapt to various contractual arrangements, including taking responsibility for the entire project, from site preparation to removal of construction

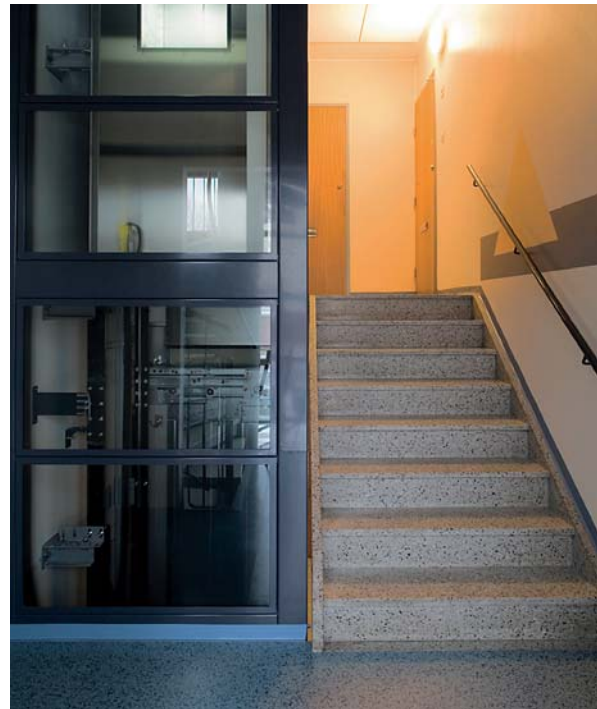
debris. During the project, everything possible is done to minimize disturbance to residents and make sure that no damage is done to the building.

Construction work includes all structural modifications that need to be done. When the elevator shaft has been prepared, either inside or outside the building frame, technicians install the elevator itself, with all necessary machinery, control systems and wiring. Some rewiring may need to be done in the building to ensure a proper power supply to the elevator. In most cases, however, this will not be necessary or will be very minor. When the project is complete, KONE does the final safety and performance inspections before handover to the customer.

Maintenance

In order to keep your new elevator running reliably and safely for decades, it needs regular maintenance. KONE Care™ maintenance is based on preventive maintenance, in order to detect and fix potential problems before they can lead to stoppage of the equipment.

True stories about real buildings



Vatro 14, Harakkamäki 1, Hämeenlinna, Finland

The challenge

This three-story building in Finland had several families with children living there, and it was difficult for the residents to carry baby carriages up the stairs.

The KONE solution

The KONE MaxiSpace™ solution was placed in the stairwell, replacing one side of the flight of stairs. This elevator requires little space for the shaft, but provides plenty of space in the elevator car. The interior is brightened up with replaceable KONE Deco designs.

The benefits

Thanks to the space efficiency of the KONE MaxiSpace™ solution, there is room in the elevator for baby carriages and people in wheelchairs. The automatic doors make access easier and more convenient.

What a resident says

“Coming home from work with groceries and two small children, it used to be a real struggle climbing the stairs. Now everyone, including the stroller and shopping bags, gets in the elevator. The only problem is deciding which of the kids gets to press the button for our floor.”

- Anna





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 the Trump Tower in Chicago, the 30 St Mary Axe building in London, the Schiphol Airport in Amsterdam and the Beijing National Grand Theatre in China.

KONE employs over 32,000 dedicated experts to serve you in over 50 countries.

KONE Corporation
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