



FOR EFFICIENT AND SAFE FLOW OF PEOPLE DURING CONSTRUCTION

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KONE JumpLift

Jump ahead of schedule with KONE JumpLift

Do you want to improve construction efficiency and speed, and say goodbye to the inefficiencies, costs, and safety concerns associated with exterior hoists? With KONE JumpLift, you can do all of this by making efficient use of the elevator shaft during the construction phase.

For builders KONE JumpLift speeds up the construction process considerably. It can be used to complement, or even replace entirely, external hoisting systems. As well as being faster and safer, it can also operate in all weather conditions.

For building owners, KONE JumpLift accelerates the whole construction schedule. The building can be completed faster and opened earlier, enabling a faster return on investment, lower interest payments, and other indirect cost savings.

For workers there's considerably less time spent waiting, and they no longer need to compete for space with building materials, greatly improving on-site logistics. As a fully functioning elevator compliant with the same safety standards as the completed elevator, it also significantly improves site safety.

Once construction is completed, changing over to the permanent elevator is quick and straightforward. The JumpLift machinery is replaced by the permanent elevator machinery, the car and landing door materials are finished, and the permanent signalization is installed.

HOW IT WORKS

When construction has reached the floor set in the jump plan, usually between the fifth and tenth floors, the mobile machine room is installed and the elevator can begin to serve the first few floors. As the building grows higher, KONE JumpLift follows, with new floors being served after each jump.





The Shard LONDON, UK Tallest building in western Europe (310 m) 5 KONE JumpLifts

"One of the biggest logistical challenges during any construction project is getting building workers, materials, and goods to the right place at the right time – with maximum safety and efficiency.

The Shard faced these typical challenges and more. The size and design of the building, combined with a small footprint in an already congested area of central London, equaled a challenging construction schedule from the very beginning.

This is where KONE truly delivered with its innovative KONE JumpLift solution, maximizing efficiency, productivity, and safety on site. "

Michael Williams, Managing Director of KONE Great Britain.

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Faster, safer construction

Whether you're looking to speed up construction schedules, avoid redundant work, or improve logistics, KONE JumpLift gives you a genuine advantage over traditional means of hoisting.

Faster construction

Because it uses the permanent elevator hoistway, KONE JumpLift brings advantages in terms of both vertical transportation speed and load capacity. Workers, their tools, and materials reach their destination floor faster, saving hours per worker every day.

Lower overall costs

When workers can spend more time wprking, instead of traveling or waiting for materials to arrive, you can make significant savings in daily labor costs. What's more, the building can be finished and handed over sooner, allowing the owner to capitalize on their investment faster.

All-weather operation

All transportation with KONE JumpLift takes place in the permanent elevator shaft inside the building, which means construction can proceed unhindered, regardless of external weather conditions..

Improved safety

KONE JumpLift is compliant with all local regulations and elevator codes. It is fitted with automated doors, meaning it is as safe as any standard elevator. Furthermore, unlike external hoists, there is no risk of it becoming detached from the building, which can result in significant property damage and personal injury.

Less waiting

Vastly superior transportation capacity compared to traditional exterior hoists thanks to higher elevator speed and automatic doors.

Earlier closing of the façade

Exterior hoists can be removed, the façade closed sooner to weatherproof the building, and the interior finished more quickly.

Reduced downtime

The jumps follow a meticulous plan to minimize downtime during jumps. KONE JumpLift is not subject to downtime caused by poor external weather conditions.

Earlier availability of permanent elevator

Once construction is completed, changing over to the permanent elevator is quick and straightforward.

Less site space required

No valuable site space wasted – a significant advantage on cramped city-center sites.

Better site organization

Having a dedicated means of transportation for people, materials, and goods improves on-site logistics.

Planning makes perfect

The KONE Jump Plan ensures a meticulously controlled and timed operation, with minimum disturbance to other site operations. Everything happens in pre-planned stages aligned with builders' needs and the progress of the construction work.

1 The deflection deck is attached to the slip form very close to the formwork position, deflecting any objects or possible wet concrete that may fall to the shaft.

2 The double protection deck provides effective protection against any possible falling objects and is locked to pockets in the shaft walls. The topmost deck is sealed to the shaft walls to make it watertight. The lower deck contains the plumbing template and a material hoists that are used during installation.

3 The installation platform is used to install the guide rails and other elevator shaft components.

4 The separation deck isolates the working area from the operating elevator below it. It prevents any objects from falling into the operational section of the elevator shaft. The deck is integrated with the lifting beams, which are used to pull the heavy mobile machine room up with the aid of a rope hoist. The whole process is self powered and does not require a site crane.

5 The mobile machine room contains the hoisting machine and elevator controls. It moves upwards (jumps) as the building work progresses. The mobile machine room is locked into place in the new location and the elevator can then serve the additional floors covered by the jump.

6 The permanent elevator is installed in construction time use (CTU) service below the mobile machine room. The elevator car, without its final interior decor, is the same cabin that will be used when the building is finished.

The landing doors are installed installed by KONE engineers in accordance with the jump plan as each floor becomes available for finishing. This prevents unsafe access to the shaft and provides better protection for the architraves.

8 **The rope reels** are used during construction to feed the rising elevator the exact amount of rope it needs to travel safely. The reels are located in a locked space to prevent unauthorized access.

When the core construction is complete, the permanent elevator machinery is installed and the final surfaces of the car, doors, and signalization are finished.



Proven technology, trouble-free operation

We have continuously developed and refined the KONE JumpLift concept to ensure fast, trouble-free implementation and operation.

KONE JumpLift is protected by over 20 patent families extended to over 100 granted patents or patent applications globally. It has proven its value in dozens of successful implementations around the world and received praise from many satisfied customers. Read more on the following pages.

A fully code-compliant solution

All KONE JumpLift installations comply with all local elevator codes and safety requirements covering machinery, workplace and equipment use, including personal protective equipment. And just like any regular elevator, it is thoroughly inspected prior to being put into operation.







The mobile machine room is anchored in place after each jump.

In high-capacity JumpLift models the mobile machine room and locking beams are anchored to the landing door opening and to pockets in the back wall of the shaft.

In lower-capacity models the mobile machine room can be anchored to the quide rails.

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KONE JumpLift references

KONE JumpLifts have been used to enable faster, safer construction in many landmark buildings around the world.



De Rotterdam, Rotterdam 3 KONE JumpLifts

An advanced 194 meter mixed-use building with dedicated spaces for residency, labor and leisure, De Rotterdam was completed in 2013.

Marina Bay Sands, Singapore 13 KONE JumpLifts

"As an integral part of the Hotel Towers' vertical transportation strategy the KONE JumpLifts provide higher speed access for personnel and small tools/ materials to the higher floors, in concert with the traditional external hoists. Now that the first jumps have been executed the full benefit of the KONE JumpLifts is being recognized in terms of greater efficiency and time saving."

Martin C Conisbee Senior Project Manager Marina Bay Sands Pte Ltd





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One Bloor, Toronto 2 KONE JumpLifts

> "We're getting much higher speeds than we get on the outside hoist. So we had more efficiency, more productivity. It's a safer interior environment. We don't have to worry about the outside elements. And at the end of the day this made our construction time shorter. So we were faster on construction, with fewer incidences, and at the end of the day, saved money on the overall budget."

Christopher Wein President Great Gulf Residential



Red Apple, Rotterdam 2 KONE JumpLifts

"The JumpLift is a safer way for us to transport our equipment and workers during construction and the fitting-out phases. We can use it in any kind of weather too, which considerably improves progress of the construction."

Herman Knoop Executive Vice President, Aannemings Maatschappij J.P. van Eesteren B.V.

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The MET, Bangkok 3 KONE JumpLifts and 2 Construction Time Use (CTU) elevators

"Due to the high level of these three residential towers (70 floors) to be built in a fast track program, it was critical to look for efficient vertical transportation during the construction stage on the MET project in Bangkok. In addition to standard hoist equipment located on the external facade of the buildings, we decided to use the three service lifts as JumpLifts, allowing us to bring up a large amount of materials and passengers in a very quick way. We have been impressed by the technology provided by KONE: the JumpLifts have been set up in a very professional manner, KONE managed then to jump up three floors every five days, and the feeling inside the JumpLifts in operation was very good, as if we were using permanent service lifts! These JumpLifts definitely played a key role in the progress of the following trades, and therefore in the success of the construction."

Julien Esch Project Manager - The MET Bouygues Thai









Rui Hong Xin Cheng project 4 KONE JumpLifts

"The JumpLift solution is an innovative technology that provides flexible service in China. This solution requires less labor and improves safety, and it enhances vertical transportation and efficiency during the construction of the building."

Mr. David Chen Manager, E&M Engineering Rui Hong Xin Cheng Project Shui On Development Limited Shanghai, People's Republic of China



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 47,000 dedicated experts to serve you globally and locally.

KONE Corporation www.kone.com

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