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 approximately 34,000 dedicated experts to serve you globally and locally in over 50 countries.

KONE Corporation
www.kone.com

Dedicated to People Flow™

EFFICIENT PEOPLE AND GOODS FLOW DURING CONSTRUCTION

KONE JumpLift

Courtesy of the Gold Coast Bulletin

KONE JumpLift

Exterior hoists have been used for over 40 years at construction sites around the world. Yet concerns continue to grow about the safety and efficiency of these systems. How often have you thought, 'There must be a better way'? Now there is – the KONE JumpLift solution.

KONE has introduced an advanced elevatoring solution for use during construction. This technology largely replaces the traditional exterior hoisting system and brings real value to the construction phase of the project. The KONE JumpLift solution increases the safety of the job site, improves efficiency, and speeds up the construction work. It gives builders a competitive advantage when tendering for projects by providing lower costs and faster delivery.

The KONE JumpLift uses the building's permanent hoistway for construction time use, putting completed floors into action while allowing the installation to continue above. The KONE JumpLift has a temporary fixed machine-room that moves upwards ('jumps') in the hoistway as the construction work progresses.

When the building structure is finished, changing over to the permanent elevator is a straightforward matter of installing the final machinery and finishing the material surfaces of the elevator car, landing doors and signalization.

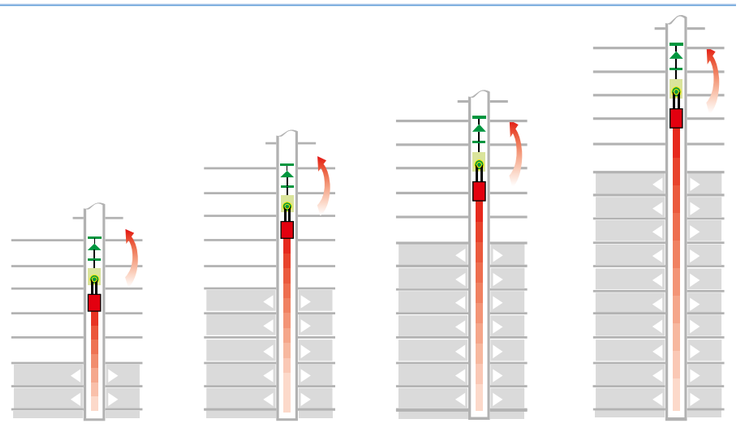
The benefits generated by the KONE JumpLift can be seen by every member of the construction site team. The increased productivity helps every trade and service partner to complete their work in the safest and most efficient way. The building owner can choose to put completed floors into active use, offering the option to generate business faster. With the KONE JumpLift, today's innovative builder enhances their value and brings a new, competitive advantage to the table.

'The JumpLift System 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 the progress of the construction site.'

Mr. Herman Knoop
Executive Vice-president,
Aannemings Maatschappij J.P. van Eesteren B.V.
The Netherlands

How it works

As soon as the building has reached the 7th floor, a temporary machine-room is installed inside the shaft and the elevator can begin service for the first two floors. The KONE JumpLift follows the rise of the building, adding new floors into service (three recommended, maximum of five) as the building requires.



Enabling a faster, safer construction process

Less waiting time
Since the KONE JumpLift travels at faster speeds with automated door openings and closings, traffic capacity can increase to three times that of a traditional exterior hoist.

Earlier closing of the façade
With all vertical transportation taking place inside the building, lower floors are completely closed up and ready for finishing much earlier, saving the cost of finishing the façade at a later stage, as required by traditional exterior hoists.

Smoother CTU traffic
An elevator attendant appointed by the builder ensures that the installation is used properly, and that any damage is logged.

Safer transportation
The KONE JumpLift operates under the standard EN81-1 elevator code, ensuring that traffic is as safe as with a standard elevator. The use of standard elevator doors with their protective equipment provides a great advantage over manual doors.

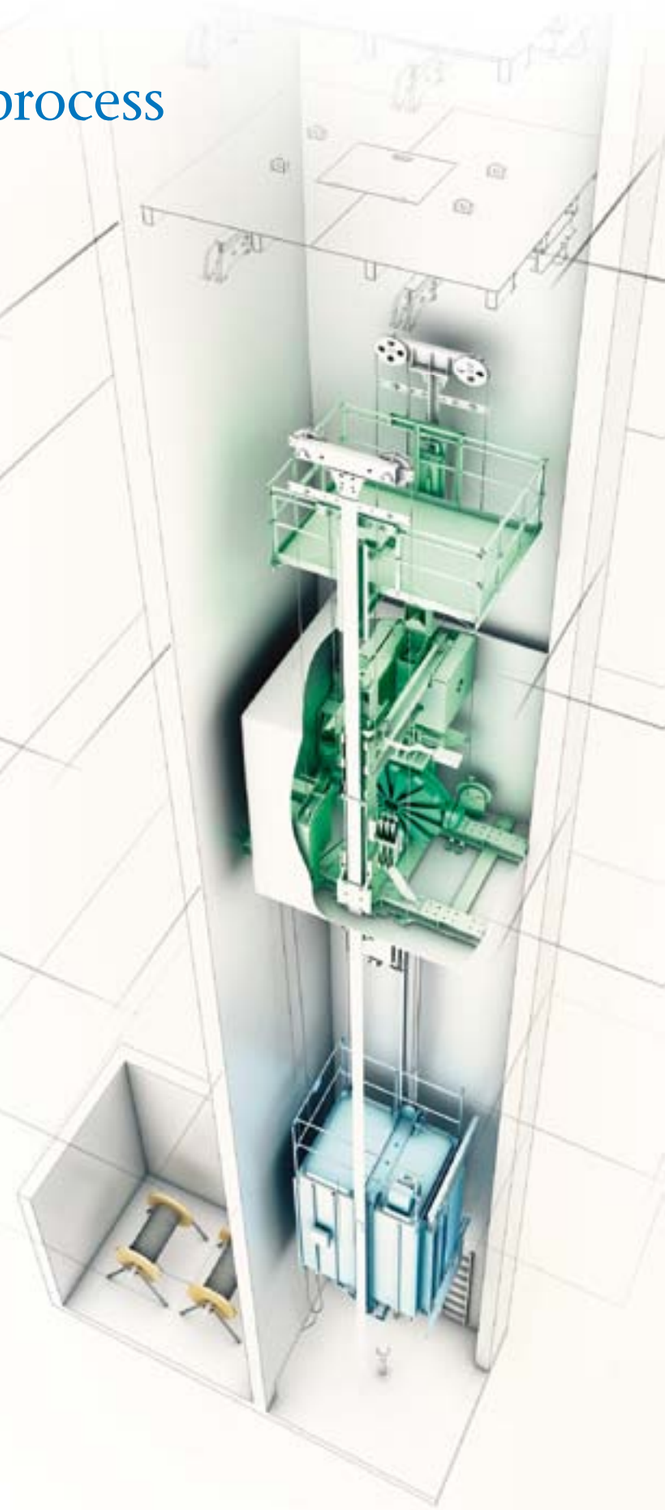
All-weather operation
With all transportation activities taking place inside, in a dry and windproof shaft, construction activities can proceed unhindered, even in the worst of conditions.

Reduced down-time
As the jumps are executed following the meticulously drawn jump plan, downtime of the elevator installation is reduced to a minimum.

Earlier availability of permanent elevator
At the end of the construction stage, preparing the elevator for normal operation requires considerably less time.

Less construction space required
Since the KONE JumpLift operates in its own designated area, no extra space is needed for a temporary elevator.

Better organized construction site
Having a smoothly running elevator system makes the construction site a more convenient place to work.



KONE JumpLift configurations

	Max travel (m)	Max load (kg)	Max speed (m/s)
KONE JumpLift 1000	120	1600	2.5
KONE JumpLift 2000	400	4000	4.0

A planned step-by-step method

1 As soon as the permanent elevator shaft has reached the height that it can be waterproofed, the builder installs a **Deflection Crash Deck**.

2 KONE engineers start installing the guide rails for the KONE JumpLift elevator from the elevator pit upwards. The permanent guide rails are installed in step with the core structure.

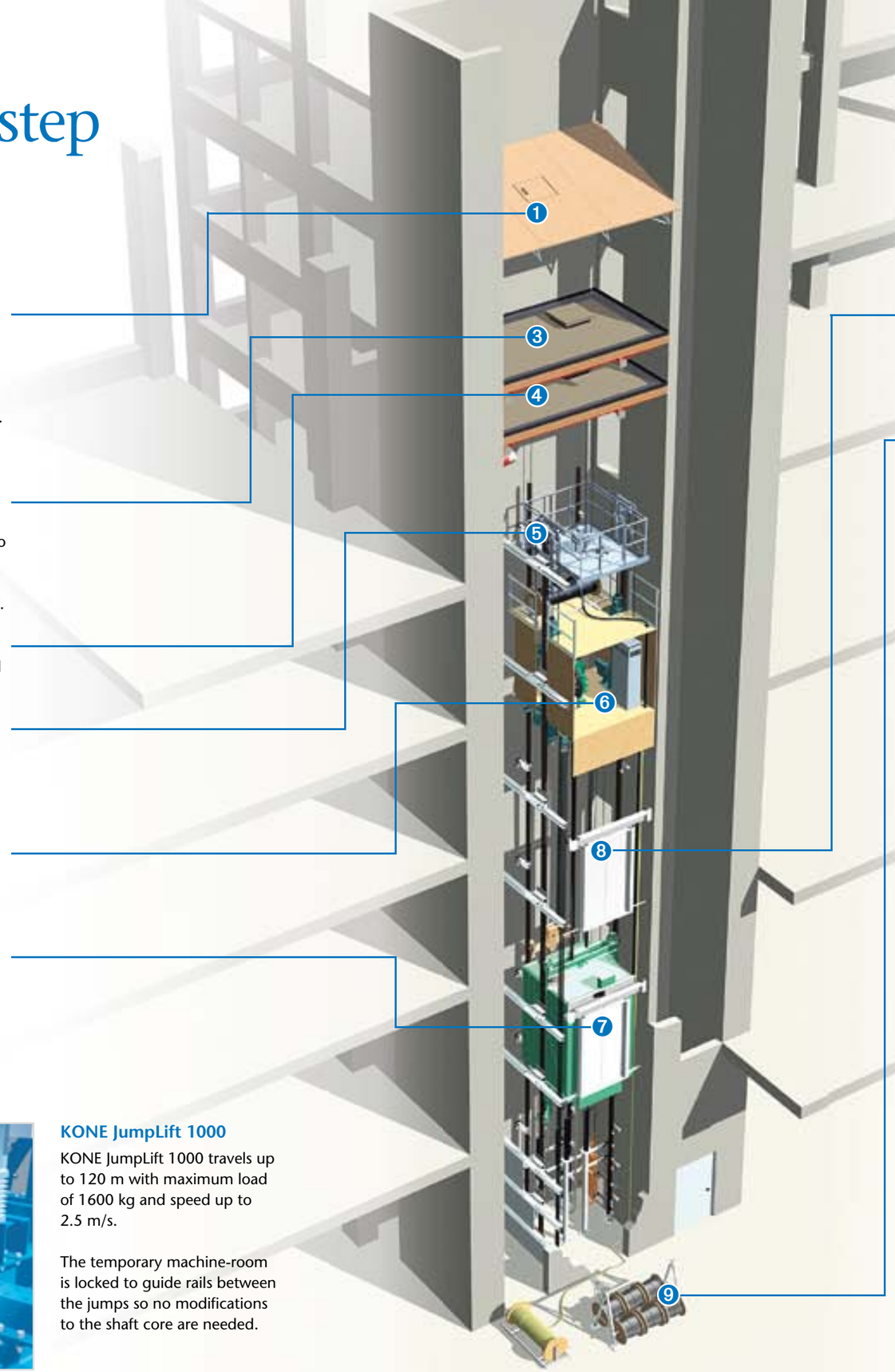
3 A **second Crash Deck** needs to be available to be installed in line with the jump plan when the shaft has risen a sufficient number of floors for the KONE JumpLift to move up. This waterproof protection deck needs to be in place before the elevator can rise in the newly built hoist-way section, which has been made water- and wind-proof.

4 The **Working Deck,** which contains the plumbing template and a material hoist, is located below the second Crash Deck.

5 The **Installation Platform** is used to drive up the installation of the guide rails and other elevator shaft components. Once these guide rails are in place, the KONE JumpLift machine-room can move higher up the shaft to its new location.

6 The **Cathead** is a temporary fixed machine-room that moves upwards ('jumps') as the building work progresses. The Cathead contains the elevator controls and the traction machine.

7 Below the Cathead, the **permanent elevator** is installed in CTU service. The elevator cabin, without its final interior decor, is the actual cabin that will be used when the building is finished.



KONE JumpLift 1000

KONE JumpLift 1000 travels up to 120 m with maximum load of 1600 kg and speed up to 2.5 m/s.

The temporary machine-room is locked to guide rails between the jumps so no modifications to the shaft core are needed.

8 As each floor becomes available for finishing, KONE engineers install the **landing doors** in accordance with the jump plan, so inadvertent shaft access is avoided and the architraves are better protected against damage.

9 On the ground floor, the **rope drums** are installed. These rope reels are used throughout the construction project to 'feed' the exact amount of roping to the rising elevator so that it can travel correctly and safely.

10 As the core of the building moves upwards, the crash deck is installed by the builder a few floors up. The working deck is prepared and the installation platform moves up to install the necessary shaft equipment. Then the Cathead propels itself upwards and extends the range of floors served until the building is finished.

When the core construction is complete, all that remains to finish the elevator installation is to install the permanent machine-room and the final aesthetics for the elevator car, doors and signalization.

Local legislation, CE marking
All KONE JumpLift installations comply with the requirements of the Lift Institute, covering machinery, workplace and equipment use, including personal protective equipment.

KONE JumpLift 2000

KONE JumpLift 2000 travels up to 400 m with maximum load of 4000 kg and speed up to 4.0 m/s. The temporary machine-room is locked to the landing levels and the shaft wall pockets between the jumps.

KONE JumpLift references

Examples of some of the hundreds of sites around the world with KONE JumpLifts in operation.

MET, Bangkok, Thailand
High-class residential building with 3 KONE JumpLifts and 2 Construction Time Use (CTU) elevators.

Rui Hong Xin Cheng Project, Shanghai, People's Republic of China
4 KONE JumpLifts.

Red Apple, Rotterdam, the Netherlands
High-rise residential building with 2 KONE JumpLifts.

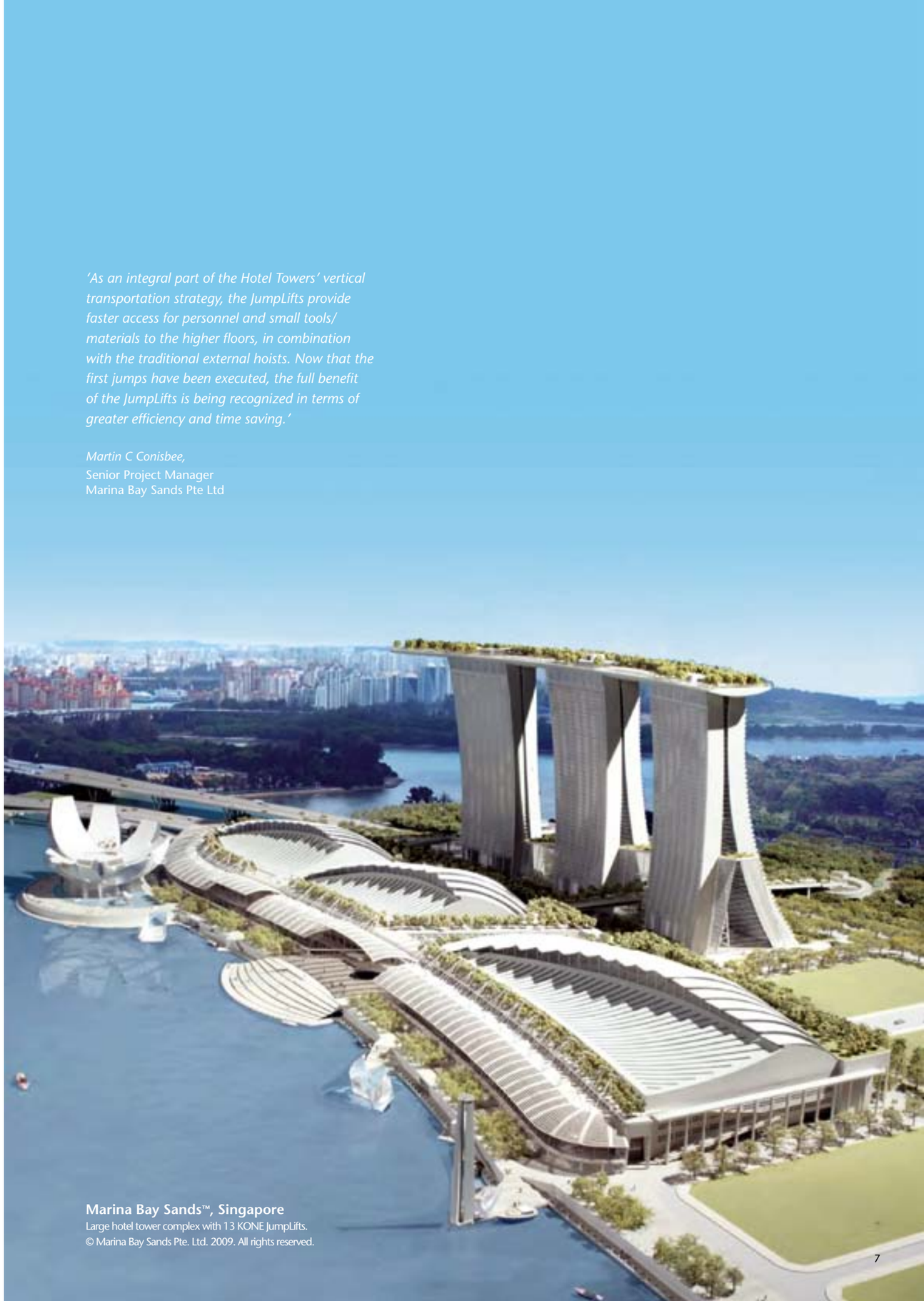
The KONE JumpLift System is an advanced technique that was developed by KONE to improve the efficiency and safety of a building's construction. Read what a KONE JumpLift customer has to say about this innovative approach.

'The JumpLift solution is an innovative technology that provides flexible service in China. This solution requires less labour 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

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

Martin C Conisbee,
Senior Project Manager
Marina Bay Sands Pte Ltd



Marina Bay Sands™, Singapore
Large hotel tower complex with 13 KONE JumpLifts.