



TRANSFORMING HIGH-RISE CONSTRUCTION

## HIGH-RISE CONSTRUCTION AROUND WORLD CITIES

The trend in urbanisation is changing the skylines of major cities across the world, with a growing number of impressive high-rise buildings populating our skyline. The increasing urbanization has led to an upturn in high-rise construction projects. As a contractor, you create buildings in which hundreds of people can live on a postage stamp. And on this postage stamp, you have to do the construction work. Challenging, we understand.



## LOGISTICAL CHALLENGES IN HIGH-RISE CONSTRUCTION

Are you being swamped by deliveries on your construction site? When you are building on a postage stamp, your site logistics need to be on point. Instead of storing building materials on the ground floor, you need them up to the designated floors as soon as possible. Crane hook time is a precious commodity. Therefore it is imperative to find efficient, alternative means of vertical transportation.



### **FAÇADE CHALLENGES**

In an ideal world you would like to close the façade entirely as soon as possible and make it dry and watertight to start finishing the floors. However, when you have multiple, large façade openings for your hoists, closing the façade is difficult.

Architectural façade jump ins are beautiful when the construction job is finished, but challenging to build. During the construction, you might need to fit your hoists against a façade with a changing profile.

#### TRANSPORTATION OF PERSONEL

On large construction sites are a lot of construction workers doing their jobs. From plumbing to formwork and from carpeting to electrics: to do the job efficiently, workers need to be able to change floors fast. When they are waiting for a hoist, you are losing valuable working hours.

### SAFETY ON HIGH RISE CONSTRUCTION PROJECTS

Ensuring safety, when you are working with large tower cranes hoisting all of your materials in the middle of a city centre, is a demanding task.

# COMMON TOWER vertical construction highway



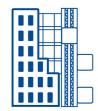
This revolutionary structure saves you from a lot of headaches. It tackles your high-rise construction challenges with the use of one simple tower. The RECO Common Tower is a temporary construction, tied to a small façade opening, where up to a maximum of six large hoists can be installed.



One tower can fit up to 6 hoists



Minimal façade opening

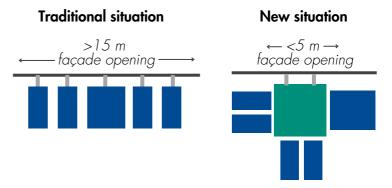


Suited for complex buildings with setbacks



### MINIMAL FAÇADE OPENING

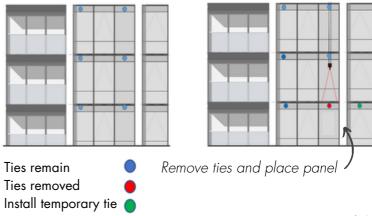
Installing 6 hoists normally means a façade opening of 18 metres. With a common tower you reduce this to only 2 or 3. Tied to a small façade opening it can accommodate up to six large construction hoists, while taking up very little ground space. This offers you exceptional logistical efficiency to enhance your building speed. No surprise people call it the 'vertical construction highway'.



### IMPROVE CLADDING SPEED FOR FASTER COMPLETION

The flexible tie system of the Common Tower allows you to place cladding panels with your construction hoists still operational. Our engineers developed a system that allows the ties to be removed, the cladding panels to be installed and the ties to be put back in again. This solution allows you to make rooms and even entire building floors dry and watertight, so the fit-out program can not only start, but can be completed entirely.

### Flexible tie system





### **OPTIMAL USE OF SPACE AND TIME**

For contractors who are looking for ways to improve building speed, a RECO Common Tower is the way to go.

### Centralised loading and unloading

The centralised loading and unloading of hoists ensures an optimal transportation route for waste, materials and personnel.

### Maximised hoist capacity

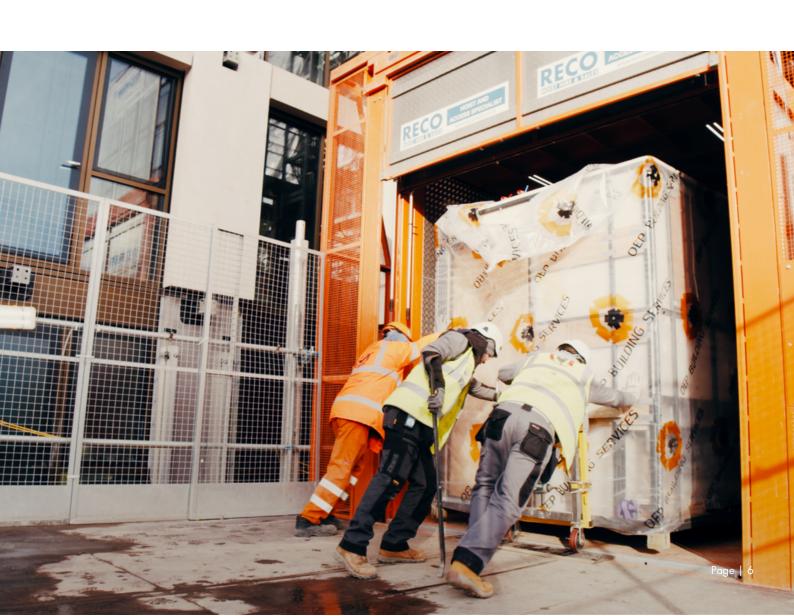
While using little ground space, the Common Tower can accomodate up to six hoists and reach heights of up to 300 metres.

### **Decreased waiting times**

Lift complete bathroom pods without waiting on a tower crane and reduce waiting time of personnel with one vertical highway

### **Enhanced safety**

Enhance safety transportation of goods by transporting them with hoists rather than with the tower crane. In this way you reduce the risk of falling objects to the absolute minimum. Furthermore, the common tower is invulnerable to wind, which makes it even more safe.

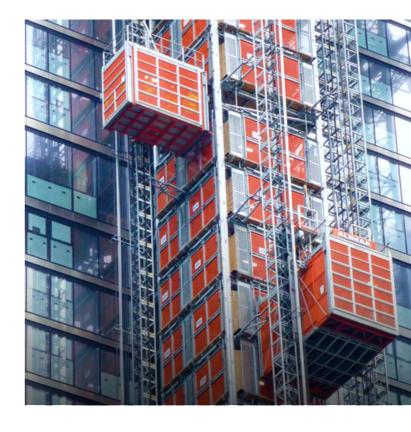


## FLEXIBILITY OF THE COMMON TOWER SYSTEM

The flexibility of the Common Tower System allows for multiple standard and bespoke configurations, tailored to your project its specifications.

### **5 X 5 M COMMON TOWER**

The 5x5 metre-variant is the standard configuration of the RECO Common Tower. This configuration supports up to 6 large construction hoists. It can be erected to heights in excess of 300 metres, utilizing precious ground space to the maximum. Instead of 6 hoists taking up to 18 metres worth in width to both ground space and the building façade, the Common Tower can accommodate 6 large passenger goods hoists around its perimetre. This requires no more than a vertical rip to the building façade of approximately 3 metres.





#### **BESPOKE COMMON TOWER**

Our bespoke Common Tower configurations have supported many construction companies in projects where building profiles commonly change. Due to the common tower being of a modular construction it can be designed and installed to accommodate the specifics of any building shape or size. Whilst the tower is designed to follow the contours of the building, the installation of the hoists can conventional and quick. possibilities to the advantages and uses of this fantastic system are endless.



### **5 X 3 M COMMON TOWER**

The 5x3 metre RECO Common Tower is our smaller version of the conventional 5x5 tower system. It supports up to 4 construction hoists. One of the main advantages of the 3x5 metre floors is that the individual floors can be preconstructed prior to delivery. This allows the completed floors to be transported to site, ready to lift directly into position to the next designated floor level.

### **5 X 1,6 M COMMON TOWER**

The  $5 \times 1.6$  metre RECO Common Tower is our smallest version of the more conventional size tower systems. The  $5 \times 1.6$  version offers an alternative to traditional scaffold runoff towers, supporting up to 2 construction hoists. Just as the  $5 \times 3$  metre version of the common tower, one of the main advantages of the  $5 \times 1.6$  metre floors is that the individual floors can be pre-constructed prior to delivery and transported to site as a completed floor.

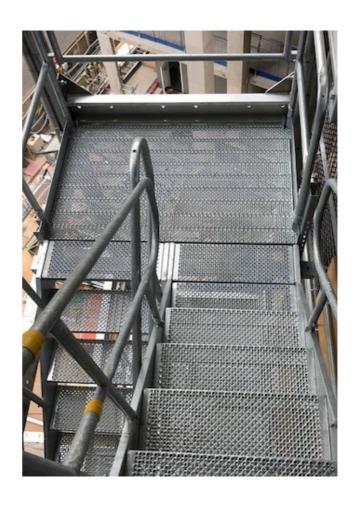


### **COMMON TOWER ADD-ONS**

By integrating several add-ons to the Common Tower at your construction site, you are able to use the tower even more efficiently.

#### **STAIRCASES**

To further increase safety and accessibility, temporary stairs can be integrated into the Common Tower. This solution makes for a primary or secondary means of access and egress. Adding emergency-staircases to your high-rise construction site has never been so easy. And because it's integrated into the common tower, these stairs require far less tie-ins than regular scaffold staircases, resulting in less damage to the façade and quicker installation times.



### **LOADING DOCKS**

To improve horizontal transportation on construction **RECO** Hoist sites. the specialists developed the modular Loading Dock system. These customised transportation platforms are built at ground level to allow freight to be loaded onto the hoists directly from the lorry. The barrier-free access has many uses, and if often constructed to the same height as a standard lorry bed to form a safe and level passage between the lorry and the hoist. Materials can then be loaded safely and efficiently prior to transporting to the desired floor levels. This system can reduce waiting times tremendously and decrease movements by forklifts at the construction site.

### COMMON TOWER AT ONE CROWN PLACE IN LONDON

Near the city centre of Londen, Mace Group has built One Crown Place. The construction of this magnificent project required vertical access to 33 floors. Space and time for goods handling are of a premium at inner-city construction sites like these. Mace allowed us to provide efficient means of vertical transportation to both personnel and materials to all floors independently. We installed 6 hoists to the building with only a minimal opening in the façade. The combination of our Common Tower and the construction hoists proved to be a big win for Mace Group. Watch the video to see for yourself!



### **DON COOKE**

CONSTRUCTION MANAGER, MACE

"The Common Tower allowed us to have a smaller scar in the building, which means less apartmentes not fitted out. Also, the profile of the building changed. We needed to get a hoist running in a straight line so we didn't have any change-overs. And then we used the Common Tower to, whenever the profile changed, step in and bridge in from the hoist, into the actual building!"



### BESPOKE COMMON TOWER AT THE STAGE PROJECT

Contractor O'Shea has asked RECO Hoist to provide a fitting construction hoist and access system quotation for The Stage Project in Shoreditch. The development will consist of a 37 storey tower, shops, restaurants and office buildings. Due to the size of the project, it was important to place construction hoists that could match the height of the tower and can transport large building materials.



#### **COMMON TOWER WITH PASSENGER GOODS HOISTS**

We installed a Common Tower, which can be erected to heights in excess of 300 metres, utilizing precious ground space to the maximum. We equipped the Common Tower with two Alimak Scando 650 passenger goods hoists. This twin set configuration is mounted on a single mast to save space. In addition we have installed the Mammoth construction hoist by Stros, the largest type of passenger goods hoist for hire in the UK. It has a payload capacity of 4,000 kg, transporting both materials and personnel combined. Due to its large cage dimensions, it is ideal for transporting large cladding panels or bathroom pods to the desired floor levels. A perfect passenger goods hoist for this project.



Request a quote online >

Or call us at <u>+44 (0) 1480 475 377</u>