

Here is the footage of "Site Safety Forum for Works Contracts and Property Services Contracts 2017" which was held on 6th July 2017.

The speaker is

General Manager of Building Renovation and Maintenance Department of Yau Lee Construction Co. Ltd.,

Mr Ho Chi-fai.

His presentation topic is

the aluminium working platforms for bamboo scaffolds

Thank you, it is my honour to have this opportunity to share with the industry stakeholders for preventing accidents via the design work.

Today, we are focusing on the working platform equipment for bamboo scaffolds.

How to prevent accidents through the design work?

Three pictures were shown on the screen. First, the common external wall scaffolding on a construction site; second, the scaffolding was not provided with gangway plank and the toe-board properly; third, the gap in the plank on the scaffolding

The photo on the left hand side shows the common external wall scaffolding nowadays.

The photo at the centre shows the risk of a worker falling down from the scaffolding during his work.

On the right hand side, the photo showed another angle.

When the scaffold was not provided with plank and the toe-board properly, there are potential risks for the workers to fall from height.

In addition, there are now discussions about closely spaced bamboo scaffold.

It allows scaffolding workers to reduce the number of planks and finally minimize the working hours in working at height.

In the meantime, it will consume more time for the workers to build bamboo scaffolding and finally increase the potential risks as well.

From the result of the research, we found out that the general plank is relatively long.

For example during construction period, no matter it is a wooden or metal plank, they are easy for transportation and installation.

it is because no door or window was installed at that time. The space was relatively large.

Sometimes, the tower crane will be used to lift the planks to the designated working position.

But when the plastering process is completed,

for example, when the installation of the doors and windows is completed.

it will be more difficult

to remove the long planks or metal planks.

It is difficult to deliver the long planks to the ground

because the lift installation has been completed and

the material hoists are removed completely,

It is difficult to transfer the working platforms and planks to the ground.

Therefore, we need to consider following issues.

First, how to reduce the duration when the workers are exposed to working at height?

Second, how to reduce the chance of injuries due to manual handling?

Third, are there any better means to transfer the planks?

Finally, we have to consider the possibilities of recycling the planks material.

Apart from safety issue, environmental protection is also our main consideration.

This is the common situation of truss-out-scaffold for maintenance works.

For maintenance and repair works, we require more truss-out scaffolds.

We can consider from different perspectives.

On the truss-out scaffold, this is the first generation of metal working platform,

which is consisted of three different sized components.

The general truss-out scaffold is not very long,

therefore, it is more suitable to use the joint type.

It is also more convenient in terms of transport and installation.

On the other hand, apart from the truss-out scaffold,

we also consider the possibilities of using metal planks on the main scaffold.

This is our project

located in the redevelopment of Chai Wan Industrial Building,
It has a large amount of scaffolds.

We tried to use the truss-out scaffold to handle.

First, we improved the design of the plank and placed bamboo tightly
and placed metal plates on top of it which can
reduce the chance of workers fell down from the height.

After completing the work, it is convenient to dismantle the parts and deliver them back to indoor
before transporting them via the passenger lift.

This is the design of the third generation.

For the first generation, the metal working platform was installed on the truss-out scaffold.

For the second generation, it is used to place the bamboo tightly on the truss-out scaffold.

For the third generation, we tried to use metal slotted angle and placed in the middle of the hinge part
to form a chassis.

On top of the chassis, we have combined two to three working platforms,
depending on the length of the truss-out scaffold.

The picture shows an installation situation which is not required to build a closely spaced bamboo
scaffold.

It needs to combine the designed parts simply
and we can placed and used safely.

We can view the installation from the another angle.

Hooks are available on the chassis with the tail of the bamboo for fixing easily.

This is the construction process,

the worker stands on the first working platform plank and then he can
place the second working platform plank

till the last one.

This is the construction situation.

The inspection will be done from the bottom to the top.

There is a drainage point on the surface of the working platform so as to prevent accumulation.

Small holes are available on the toe board for connecting to the bamboo scaffold for reinforcement in
future.

From another point of view,

the working platform is designed with tread plate surface to achieve anti-slipping effect.

According to the statistical analysis, the main advantages of the aluminium work platform include its little
weight,

recyclable and easy installation and transportation.

Manual handling is relatively lesser along with merits in various aspects.

This is the end of my introduction and thank you for your attention.

The following part is the questioning time from the guest to the audience.

Thank you, Mr. Ho, please raise up a question for audience.

The question is relatively easy,

do the workers require to wear safety equipment when installing metal working platform?

Many friends raised up their hands, the one over there, please.

Audience is answering the question

Need to wear a life safety belt.

Guest response:

Yes, it is correct.

Congratulations and thank you Mr. Ho.

Disclaimer

Safe Work· Zero Incident

Site Safety Forum 2017 for Works Contracts and Property Services Contracts

"Careful design can reduce accidents and ensure smooth and safe execution of works"

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