



# Working Platform Practices of Bamboo Scaffolding



## **Industry Practice**

1. Main contractors responsible to construct bamboo scaffolding.
2. Main contractors provide suitable and adequate quantities of planks and toe - boards.

# Industry Practice



External wall scaffolding at a maintenance project

# Industry Practice





## **Industry Practice**

3. Subcontractors will be responsible for planks laying and subsequent removal of the working platforms on their work completion.
4. Main contractor to supervise the planks laying work are carried out safely and properly by the subcontractors.



## Industry Practice



The 25mm thick, 2.0 to 4.0m long and hard wood planks weigh 11~22kg each. It is risky for the workers to move the long and heavy wooden planks for working at different working locations or levels.



## **Industry Practice**

5. The workers are liable to fall to the lower floors when moving on the runs, laying the planks and platform construction.
6. Difficult and risky to move wooden planks from internal to the external scaffolding.
7. Difficult and risky to move and lay wooden planks as working platform at the external wall scaffolding .

# Industry Practice







## Industry Practice

8. Separate groups ( 3 consecutive layers) of platforms need to be provided for trade workers working at different levels or locations.
9. Some minor work trades subcontractors or workers may take risk to lay a percentage of the required planks only.
10. The additional loading of fully boarded wooden platforms to the scaffolding and supporting brackets is high.

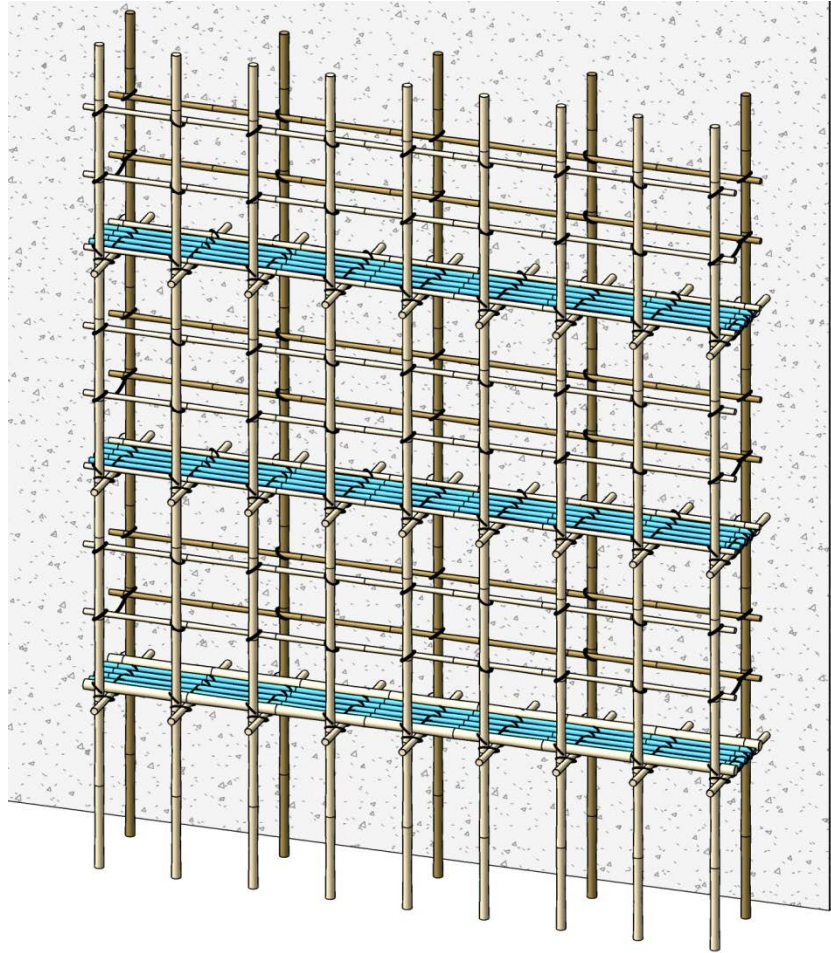


## Industry Practice

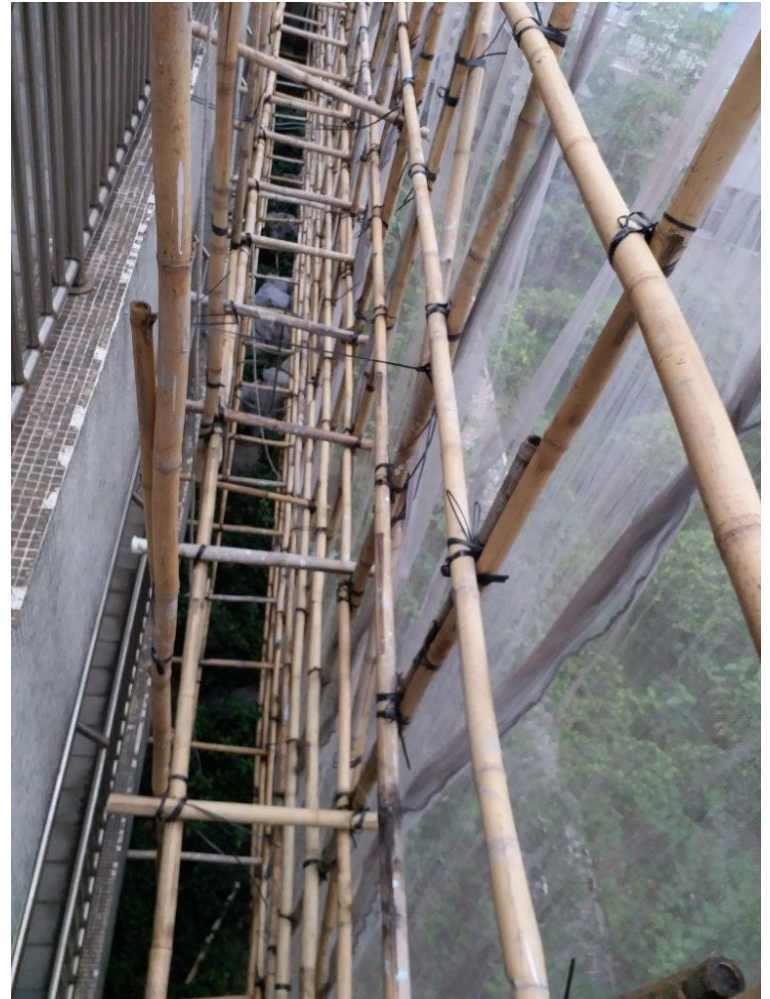
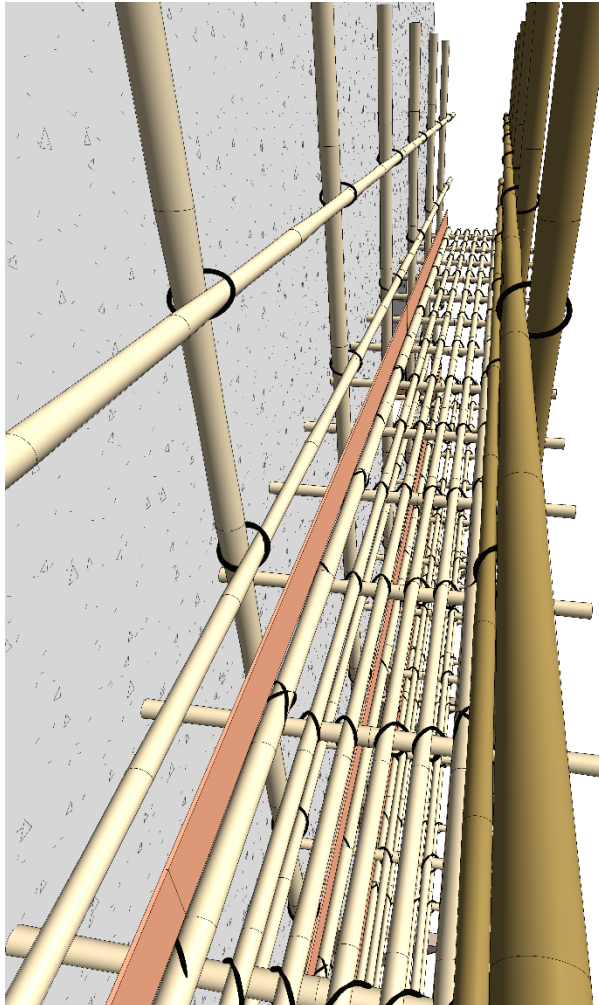
11. Risk of tipping when steps on a wooden plank which protrudes its end support more than 150mm.
12. Workers are reluctant to comply and do the physical hard work of planks laying and moving.
13. Main contractors unable to ensure their subcontractors or workers fully comply with the regulation on laying the wooden planks for the working platforms.

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- How to improve the planking work safety and provide safe working platforms ?

## Closely placed bamboo gangway/platform method



## Closely placed bamboo gangway/platform method



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Industry Practice





## **Closely placed bamboo gangway/platform method**

1. Provide safe gangways for walking or movement at external wall scaffolding.
2. Closely placed bamboo platforms are completed at the same time of scaffolding work.
3. The workers are prevented from falling to the lower floors when walking or planking at the gangway.



## Closely placed bamboo gangway/platform method

4. The number of ledgers at the platform level is increased from 2 to 6.
5. The clear gaps between two closely layed bamboo rods are less than 100 mm.
6. The rigidity of the external wall scaffolding is increased.



## Closely placed bamboo gangway/platform method

7. The loading capacity and safety factor of the platforms are trebled.
8. Use lighter and shorter planking( wooden or metallic) materials will be sufficient as a working platform.
9. Need to provide access between different working platform levels.

## Closely placed bamboo gangway/platform method



Photo on completed bamboo platform

## Closely placed bamboo gangway/platform method



⇒ Access to Scaffolding gangway/ platform from internal of building.





## **Closely placed bamboo gangway/platform method**

10. Comparatively higher work efficiency when working or movement on a closely placed bamboo gangway or platform.
11. Greatly reduce the planking hard work and the risk of injury.
12. Avoid tipping and falling when step on a protruded end of a planking .
13. No overlapping of planks required.

## Closely placed bamboo gangway/platform method



Closely placed bamboo scaffolding with metallic planking



Thank you.