



**Make sure bamboo scaffolds are safe
against strong winds**

1 Putlogs securely fixed
Bamboo scaffolds will be safe

2 Inspections frequently made
No fear of strong winds

3 When work is completed
Scaffolds should be removed immediately



Introduction

From time to time, there were occasions of collapse of bamboo scaffold, especially during periods of strong winds or tropical cyclone. These incidents may result in serious injuries, deaths and economic loss that the community cannot afford. To enhance the safety of bamboo scaffolds, the Buildings Department (BD) has published the "Guidelines on the Design and Construction of Bamboo Scaffolds" (the Guidelines), setting out the technical requirements for the design, construction and use of bamboo scaffolds as reference of good practices for the practitioners. Building owners, property management companies and owners corporations should also familiarize themselves with the Guidelines to help ensuring the safety of bamboo scaffolds.

Common forms of bamboo scaffolds

There are three main types of bamboo scaffolds commonly used in Hong Kong, the "double-layered bamboo scaffold", "truss-out bamboo scaffold" and "bamboo scaffold for signboards".



Double-layered bamboo scaffold

For building construction, building repairs and renovation works.



Truss-out bamboo scaffold

For minor works such as repair of external drainpipes, spalling concrete and external rendering, removal of external unauthorized building works, etc. The height should not be more than 6m.



Bamboo scaffold for signboards

The maximum length to height ratio is 4:3.



Design

Detailed technical requirements of these common forms of bamboo scaffolds are provided in the Guidelines.

Maintenance and Inspection

Building owners, property management companies and owners corporations have an important role in helping to ensure the safety of bamboo scaffolds by advising the scaffolders to pay rigorous attention to the bamboo scaffolds. Bamboo scaffolds must be under regular maintenance and inspection with a view to making good any defects once they are found.

The frequency of inspection of bamboo scaffolds should be:

- (i) at an interval of not more than 14 days ; and
- (ii) more frequent inspections before the arrival of strong winds or tropical cyclone.

Special attention should be given to the following items during the inspection:

- Putlogs
- Nylon net and plastic sheeting
- Steel brackets
- Knottings

Materials

Bamboo

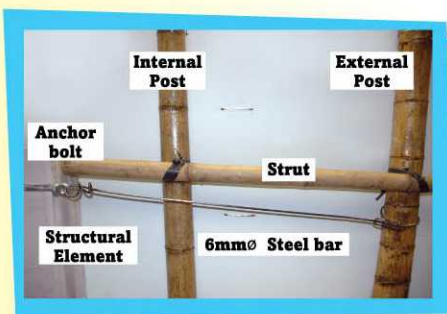
In Hong Kong, the two main types of bamboo used in scaffolding works are the Mao Jue and Kao Jue. They should be dried and free from defects such as cracks or rot when used.

Mao Jue

- Used as main posts
- At least 75mm nominal external diameter

Kao Jue

- Used as ledgers / struts / standards
- At least 40mm nominal external diameter



Putlog

A system, as shown on the left, composed of one 6mm diameter mild steel bar, a short bamboo strut and an anchor bolt for tying the bamboo scaffold to prevent it from falling onto the street. It should be securely wound to the main posts and the structural member of a building.

Securely stay the outer layer of a bamboo scaffold by means of a bamboo strut to prevent the scaffold from leaning onto the building.

Putlogs should be provided at a horizontal spacing of not greater than 3m and a vertical spacing of not greater than 6.3m for bamboo scaffolds less than 100m high (about 30 storeys). Putlogs should be placed at a closer vertical spacing at a level higher than 100m from the ground.



Steel bracket

A structural steel support for truss-out bamboo scaffolds or used for supporting the posts of a doubled-layered bamboo scaffold when the posts are not rested on solid ground.



Anchor bolts

Use high quality drilled-in anchor bolts to fix the steel bracket or putlog onto the structural element of the building. Each bracket should have at least three anchor bolts.

Speedy Removal

Bamboo scaffolds should be removed immediately after the completion of works.

Notification

Building owners, property management companies or owners corporations should notify BD whenever bamboo scaffolds are to be erected.

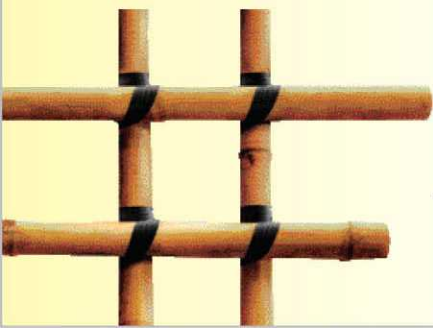
Building owners, property management companies or owners corporations commissioning building works and building repairs involving the use of bamboo scaffolds should remind the scaffolders to follow the recommendations made in this leaflet and the technical requirements in the guidelines for safeguarding the stability of bamboo scaffolds.


The Buildings Department has issued the "Guidelines on the Design and Construction of Bamboo Scaffolds" which is uploaded on BD website (www.bd.gov.hk) for public viewing.

For enquiries, please call BD's hotline


2626 1616

This hotline is handled by "1823 Citizen's Easy Link" of the Government







Labour safety in using bamboo scaffolds - Please refer to the "Code of Practice for Bamboo Scaffolding Safety" issued by the Labour Department (LD) in 2001.



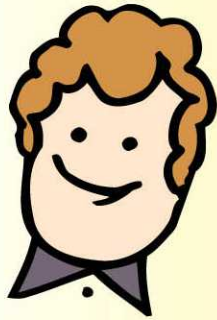
Building owners, property management companies, owners corporations, scaffolders or contractors should notify BD whenever bamboo scaffold is to be erected.



Remember to remove bamboo scaffolds immediately after the completion of works.



For details of the "Guidelines on the Design and Construction of Bamboo Scaffolds", please visit BD website : www.bd.gov.hk



Liability in case of collapse - Please see Buildings Ordinance s40(2B) - a maximum fine of \$1,000,000 and imprisonment of three years on conviction.